

**Initial Study-Mitigated Negative Declaration  
For the proposed  
Redwoods to the Sea Corridor Forest Resilience Project  
Humboldt County, California  
State Clearinghouse Number **XXXXXXXXXX****



Prepared by:

The California Department of Forestry and Fire Protection

P.O. Box 944246  
Sacramento, CA 94244-2460  
(916) 263-3370

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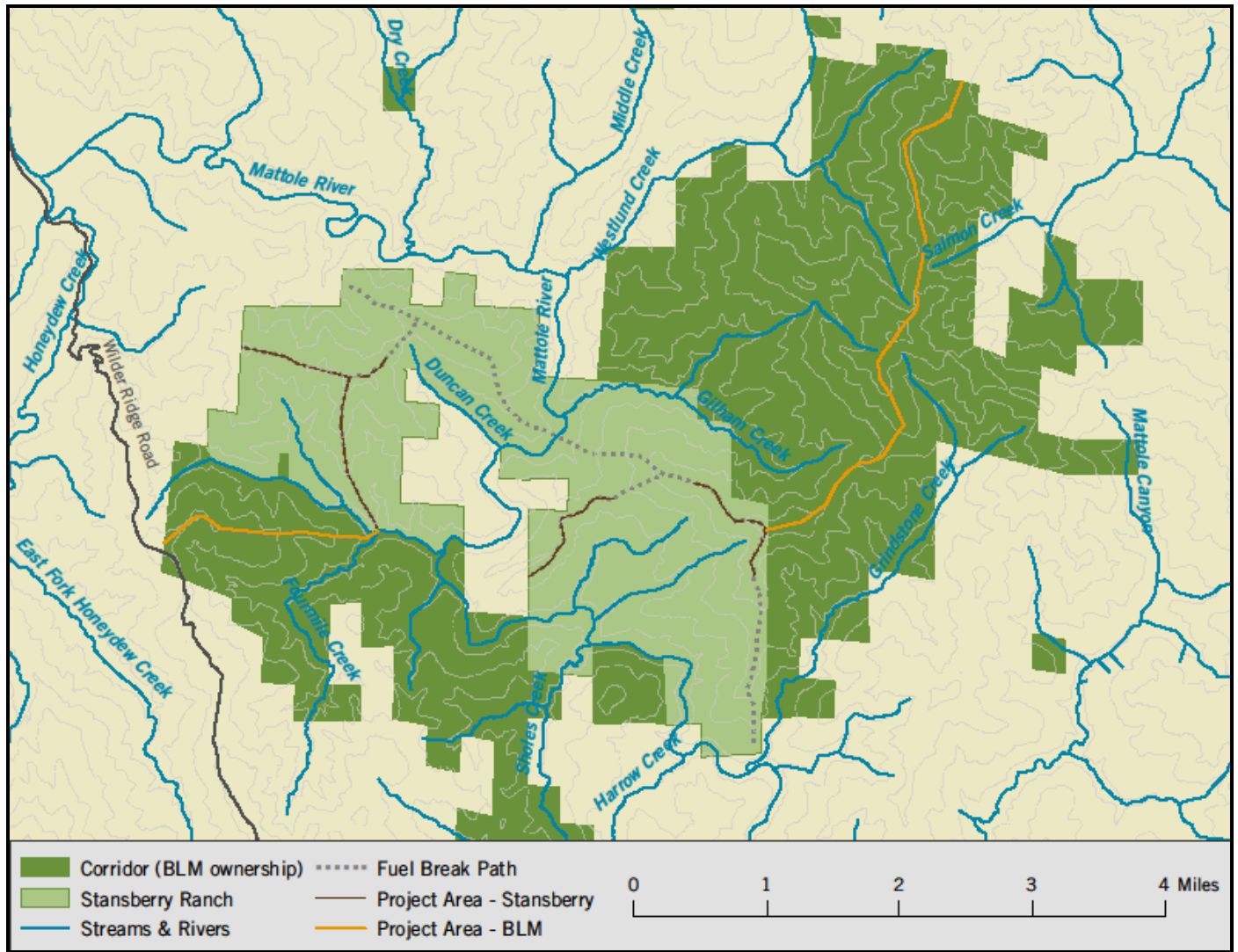
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U.S.G.S. 7.5 Minute Topographical Map: Honeydew Quadrangle  
T3S, R1E of Humboldt B&M  
Published Date: January 1, 1959

## **Summary of Findings**

This initial study-mitigated negative declaration (IS-MND) has been prepared to assess the project's potential effects on the environment and an appraisal of the significance of those effects. Based on this IS-MND, it has been determined that the proposed project will not have any significant effects on the environment after implementation of mitigation measures. This conclusion is supported by the following findings:

1. The proposed project will have no impact related to energy, land use planning, mineral resources, population and housing, public services, recreation, transportation and traffic, utilities and service systems and wildfire.
2. The proposed project will have a less than significant impact on aesthetics, agriculture and forestry resources, air quality, geology and soils, greenhouse gas emissions, hydrology and water quality, hazards, hazardous materials, and noise.
3. The proposed project will have a less than significant impact with mitigation on biological resources, cultural resources, and tribal cultural resources.

This Initial Study revealed that no significant environmental effects are expected to result from the proposed project as mitigation measures are to be adhered to. The Department of Forestry and Fire Protection (CAL FIRE) has found, in consideration of the entire record, that there is no substantial evidence that the proposed project, as currently proposed, would result in a significant effect upon the environment. This IS-MND is therefore the appropriate document for CEQA compliance.

### **INITIAL STUDY-MITIGATED NEGATIVE DECLARATION**

<b>1. Project Title</b>	Redwoods to the Sea Corridor Forest Resilience Project
<b>2. Lead agency name and address:</b>	Department of Forestry and Fire Protection P.O. Box 944246 Sacramento, Ca. 94244
<b>3. Project Location:</b>	Approximately 3.5 miles air miles southeast of the community of Honeydew in Humboldt County. Portions of Section(s) 8; 9; 13; 14; 16; 17; 20; 21; 23; 24 Township 3, South Range 1, East Humboldt Base & Meridian. Coordinates: 40°11'50.1"N 124°04'09.6"W
<b>4. Project sponsor's name and address:</b>	Save the Redwoods League 111 Sutter Street 11 <sup>th</sup> Floor San Francisco, CA 94104
<b>5. County General plan description:</b>	Agriculture General Timber; Agriculture Exclusive; Public
<b>6. Zoning:</b>	Timber Production Zone; AE-B-5 (160), Unclassified

This Initial Study-Mitigated Negative Declaration has been prepared to evaluate potential environmental effects of the proposed Redwoods to the Sea Corridor Forest Resilience project located near the community of Honeydew, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations [CCR] Section 15000 et seq.).

## **Project Description**

The Save the Redwoods League (the League) is working with the Mattole Restoration Council (MRC), the Bureau of Land Management (BLM), landowner Robert Stansberry, and local contractors to implement fuels reduction treatments, including tree thinning, pruning, and shrub removal in order to reduce the fuel load, enhance the quality of trees and their ability to sequester and store greenhouse gas (GHG) emissions, and establish a 15.7-mile fuel break along the Pringle Ridge and Gilham Butte ridge tops. An approximately 4.2-mile, 200-foot wide shaded fuel break will be created across 102 acres of Stansberry Ranch and a 6.1-mile, 200-foot wide shaded fuel break will be created across 148 acres of BLM land. These two new shaded fuel breaks will connect to an existing 5.4-mile fuel break on Stansberry Ranch, thus creating a 15.7-mile long break along the ridge tops. A fuel break along the road on the west side of Stansberry Ranch was a major factor in containing a large wildfire that spread throughout this region in 1952, and smaller fires in the 1960s stopped along Pringle Ridge that bisects the ranch. The goal of establishing the 15.7-mile fuel break is to protect the community of Honeydew, surrounding BLM land, and the extended protected forestlands from uncharacteristically large wildfire as well as the Mattole River from fire-related sediment yield. Additionally, as part of this project, 230-400 small-to-moderate sized Douglas-fir trees will be removed from dense overly stocked stands and flown by helicopter to Fourmile Creek and Sholes Creek (Mattole River tributaries) to be utilized for fish habitat structures. The total project area is 484 acres. This project will not involve new road construction or significant ground-disturbing activities. The only roads to be for the project used are existing roads. The helicopter landings will involve existing vehicle turn around areas or flat pasture along previously used roads with no grading or excavation. No commercial timber products will be removed under this project. Project activities will likely commence June 2020 and be complete by November 2022.

## **Fuels Reduction Treatments**

Fuel reduction treatments will be accomplished according to following guidelines:

- Saplings and seedlings should be removed adjacent to co-dominant and dominant trees to allow for additional growing space.
- Trees with the most desirable phenotypes will be retained, i.e. full crowns, fast growing, and disease-free.
- Trees preferred for removal will be those exhibiting signs of poor growth or containing disease.
- Dense shrub cover will be broken up for purposes of removing fuel continuity.
- In open areas, residual trees will be left for stocking, with a preference for retaining oak species.
- Residual trees will be pruned by lopping low branches up to a minimum height of 8' (above the level of slash on the uphill side of the tree).

All slash produced (branches, limbs, and treatment debris less than four inches in diameter) will be treated using one of the following methods:

- Chip or masticate adjacent to roads and other accessible portions of the treatment areas. Equipment includes power chippers whereby material would be hand fed and chips would be blown into the forest understory. Chippers have little or no potential to impact cultural resources. Mastication involves reducing the size of forest vegetation and downed material by grinding shredding or chopping material and leaving it on-site as mulch.
- Pile and burn: slash piles for burning should be located away from residual trees and structures. Pile and burn operations would occur where vehicle access is available along existing ranch roads utilizing existing openings and compacted ground as feasible. Piles may be created by mechanized equipment such as crawler tractors equipped with a brush rake, or excavators equipped with a grapple. Piles will also be created by hand.
- Lop and scatter: lopping is the severing and spreading of slash so that no part of it remains more than 18 inches above the ground. Lop and scatter will be implemented by hand crews

on steeper slopes and areas with limited access where chipping, mastication, and burning piles is not feasible.

- The project is within an area that the Board of Forestry and Fire Protection has declared a Zone of Infestation or Infection for sudden oak death (SOD) pursuant to Public Resources Code § 4716. SOD host material (Douglas-fir (*Pseudotsuga menziesii*), bay laurel (*Umbellularia californica*), huckleberry (*Vaccinium ovatum*), big leaf maple (*Acer macrophyllum*)), will not be removed from the regulated area unless appropriate state and federal permits are obtained.

Some large wood debris including whole trees (biomass) will be removed from the fuels reduction project sites and utilized for fish habitat structures as described below.

### **Biomass Utilization**

The League will work with MRC and Mattole Salmon Group (MSG) to install large woody debris in tributaries of the Mattole River in order to increase bank stability, slow water flow, retain spawning gravel, and spur the development of side channel and backwater habitats that are important for spawning salmonids.

General site selection has been determined and all work sites are on BLM land and the Stansberry Ranch. Due to the dynamic nature of the streams, the exact treatment locations for a given feature will be determined based on-site conditions at the time of construction. Final biomass utilization site locations will be recorded with global position system equipment (GPS) and mapped.

Treatment prescriptions include installation of up to 230-400 pieces of large wood (18-48" DBH) and whole trees with attached crowns and derived from the shaded fuelbreaks. Tree material will be helicoptered in from the shaded fuel break project site to the biomass utilization project site. A 107-II Vertol helicopter will be used to transport trees from tree source areas to in-stream placement sites. Staging areas for equipment and materials will be located on previously disturbed areas near the move-in and move-out sites. Any perennial vegetation removed for temporary access routes will be replanted, and all disturbed areas will be mulched with native straw following construction.

Structures on the banks and instream will be constructed to promote bank stability and to increase habitat complexity at low flows. In some instances, the objective of the structure may be to create instream habitat features such as scour and cover around an individual log. Design of structures will be based on California Department of Fish and Wildlife's California Salmonid Stream Habitat Restoration Manual and published guidelines (Abbe *et al.* 1997, Braudrick and Grant 2000). No excavation or heavy equipment will be used within streams or on adjacent streambanks. Tree material will be lowered into place during low flows to the high-water bank full channel level. The tree placement will mimic natural blowdown large wood recruitment.

### **Prescribed Fire and Pest Management**

The League will contract with a certified burn boss and work with CAL FIRE and the Humboldt County Prescribed Burn Association (HCPBA) to conduct prescribed fire across 208 acres of oak woodland meadows on Stansberry Ranch. The area is being encroached upon by a Douglas-fir that has invaded the historical meadows for the past 80 years due to fire suppression. Treatment of the meadowlands will help to arrest succession and restore ecological processes, reduce the prevalence of the SOD pathogen, bring back native perennial grasses, help to increase native plant biodiversity, and maintain grazing pasture for cattle. Active management of these meadows will also create a significant firebreak that will assist CAL FIRE, HCPBA, local fire departments, and local landowners in managing threatening wildfires.

Burning will likely take place in the spring to address invasive plants but may be carried out in the fall depending on fuel moisture levels, which will serve to meet the objectives for maintaining meadows, reducing conifer encroachment, and reintroducing fire into the landscape. If the opportunity to burn occurs between mid-May to mid-June (dependent on invasive plant bloom timing), a spring burn may be conducted in order to meet invasive plant objectives. CAL FIRE will be consulted on this burn at least six months before the expected burn date, and the burn plan will be made available for review. The burn plan will also be shared with the North Coast Unified Air Quality Management District, and the League and project cooperators will coordinate with the district to identify a permissible burn day. Where feasible, existing roads, trails, and natural fuel breaks will be utilized for fire lines.

Resource objectives for the prescribed fire as described in the plan are to:

- Increase forage quantity and quality six months after burning.
- Reduce invasive yellow star thistle and medusa head by >50% the season following the burn.
- Eliminate >90% of Douglas-fir less than six feet tall and >10% of remaining encroaching Douglas-fir two to three years after burning.

The environmental analysis for this project focused primarily on physical changes in the environment including but not limited to:

- Cutting trees, brush, limbs.
- Using heavy equipment off-road.
- Creating dust, smoke or noise.
- Exposing mineral soil.
- Disturbing species or reducing habitat.
- Changing aesthetics.

### **Proposed Mitigation Measures**

The project includes methods, California Department of Fish and Wildlife 1600 Agreement conditions, Army Corps of Engineers Nationwide Permit 27 conditions, and mitigation measures designed to avoid, minimize and mitigate potential significant environmental effects of the project. The following 29 mitigation measures are listed below and can also be found within the resource subject area discussion at the end of the document with inclusion of mitigation monitoring protocols. Implementation of these mitigation measures would reduce potential environmental impacts of the proposed project to a less than significant level. Mitigation measures are not required for effects which are not found to be significant.

#### **Mitigation Measure Air-1**

*To minimize dust during treatment activities, the project proponent shall implement the following measures: Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board Fugitive Dust protocol. If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board. The project proponent will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations. Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is*

available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113, suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700.

#### **Mitigation Measure Bio-1**

If any foothill yellow-legged frogs, tailed frogs, southern torrent salamanders or western pond turtles are encountered during construction activities, activities in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the species will not be harmed. This includes relocating these species to an appropriate habitat adjacent to the work area. Any sensitive reptile or amphibian species that are trapped, injured, or killed, shall be reported immediately to California Department of Fish and Wildlife. Survey for foothill yellow legged frog shall be conducted at the low water ford location on the Stansberry ranch road prior to operation. Surveys shall extend 100 feet upstream and downstream of the crossing. Appropriate actions shall be taken to avoid or minimize take of this species under the direction of California Department of Fish and Wildlife. These actions include but are not limited to, installation of exclusion fencing, removal and relocation, and daily pre-work surveys to insure frogs have not reoccupied the project site during periods of inactivity.

#### **Mitigation Measure Bio-2**

Personnel specifically trained in the identification of List 1, List 2 and List 3 species or a professional botanist surveyed the project area. If any federal or state listed threatened or endangered species are detected in the project area that may be impacted by the project work, then all project related activities will immediately stop within that area which will be flagged with a 50' "No Treatment Zone". All sightings will be documented using the California Natural Diversity Data Base (CNDDB) field survey form a copy of which will be submitted to the CNDDB. To date 50' avoidance buffers have been flagged for an observation of *Piperia* spp.

#### **Mitigation Measure Bio-3**

The project is within an area that the Board of Forestry and Fire Protection has declared a Zone of Infestation or Infection for sudden oak death (SOD) pursuant to Public Resources Code § 4716. SOD host material including but not limited to (Douglas-fir (*Pseudotsuga menziesii*), bay laurel (*Umbellularia californica*), huckleberry (*Vaccinium ovatum*), big leaf maple (*Acer macrophyllum*), shall not be removed from the regulated area unless appropriate state and federal permits are obtained.

#### **Mitigation Measure Bio-4**

Each tree destined for harvest for the large woody debris project will be inspected for potential nest or resting platforms. If an arboreal nest is discovered, operations shall be suspended within 100 feet and CDFW will be consulted for species-specific protections. Furthermore, if an occupied nest of a listed species, sensitive species, species of special concern, or a raptor is discovered, nest tree(s), designated perch tree(s), screening tree(s), and replacement tree(s), shall be left standing and unharmed.

**Mitigation Measure Bio-5**

Wood placement at the creeks will occur from August 1-31<sup>st</sup> and will be outside of the breeding season for the foothill yellow-legged frog. The proposed wood placement will be positioned at the bank-full location at each site – in October this will be way above the wetted channel and not have an influence on species in the water. Furthermore, each site will be scanned for potential species prior to the trees being lowered into position.

**Mitigation Measure Bio-6**

Daytime stand searches for northern spotted owl (NSO) will be conducted in activity centers that are within 0.25 mi of flight paths prior to operations by qualified biologists. If an NSO is found then follow-up searches will be conducted to determine nesting status or activity center status. If a nest tree is located, then a 300 foot no cut buffer will be implemented, and no project activity will occur within 300' of the nest tree.

**Mitigation Measure Bio-7**

In order to prevent the spread of invasive plant species, all heavy equipment not already on project site, to be used in the execution of project work will be cleaned off site prior to use within the project area. The project manager and/or trained staff will assure and document equipment cleaning. Contractors shall disclose where equipment had been operating prior to hauling to the project site.

**Mitigation Measure Bio-8**

In the event that equipment will need to cross a live stream outside the road rights-of-way, the California Department of Fish and Wildlife 1600 Stream Alteration Agreement LSAA# 19-0527 conditions for this activity must be adhered to. In such instances, equipment crossings of waterways, streambeds and their associated approaches shall be located and flagged by the project manager prior to the occurrence.

**Mitigation Measure Bio-9**

To avoid impacting nesting birds and/or raptors: All temporary flagging, fencing, trash, debris, and/or barriers will be removed from the project site upon completion of project activities.

**Mitigation Measure Bio-10**

Habitat elements (nest trees, downed logs and woody debris, cavities and tree hollows, snags, large dead branches, etc.) that provide valuable habitat will be identified by an RPF or qualified biologist and retained.

**Mitigation Measure Bio-11**

Fallers of large woody debris conifers will be trained to look up the tree prior to falling and check for nests and "whitewash" at the base of trees. If any arboreal nest is discovered, operations shall be suspended within 100 feet, of the nest tree and the contractors/operators shall immediately notify the project manager and/or California Department of Fish and Wildlife to determine species-specific protection measures. A tree marked for removal for woody debris habitat material where a nest is located will not be cut and the paint mark will be blacked out by the project manager or registered professional forester.

**Mitigation Measure Bio-12**

A registered professional forester or designee will be sufficiently present onsite during operations to evaluate the presence of biological resources and ensure biological resource protection through avoidance. If any wildlife is encountered during project activities, said wildlife will be allowed to leave the area unharmed and if any listed wildlife is encountered and cannot leave the project site on its

own the registered professional forester or project manager should contact California Department of Fish and Wildlife immediately consult regarding species relocation protocol.

### **Mitigation Measure Bio-13**

*Any Sonoma red tree vole eating platforms or resin ducts observed during project activities will be recorded. The tree or trees associated with the observations will be flagged and will be avoided during operations.*

### **Mitigation Measure Bio-14**

*In order to protect any species covered by the Migratory Bird Treaty Act (MBTA), no fuels treatment work will occur between March 1<sup>st</sup> to August 31, unless the following is implemented: 1. A survey is conducted by a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA and it is determined that there are no occupied nests within the proposed activity area. 2. If an occupied nest is found, then a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA will determine if the birds present are those protected by the MBTA. 3. If an MBTA species is located then no activities will occur within 100 feet of the nest during the breeding season (March 1<sup>st</sup>-August 31<sup>st</sup>).*

### **Mitigation Measure Bio-15**

*Adherence to 404 Nationwide Permit 27 File # 2019-00229S*

- To remain exempt from the prohibitions of Section 9 of the Endangered Species Act, the non-discretionary Terms and Conditions for incidental take of federally-listed Northern California steelhead (*Onchorynchus mykiss*), Southern Oregon-Northern California Coast Coho salmon (*O. kisutch*), and California Coastal Chinook salmon (*O. tshawytscha*) and critical habitat shall be fully implemented as stipulated in the Biological Opinion titled "Endangered Species Act Section 7(a)(2) Biological Opinion, and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Program for restoration projects within the NOAA Restoration Center's Central Coastal California Office jurisdictional area in California" (pages 1-108), dated June 14, 2016 (enclosure 3). Project authorization under the NWP is conditional upon compliance with the mandatory terms and conditions associated with incidental take. Failure to comply with the terms and conditions for incidental take, where a take of a federally-listed species occurs, would constitute an unauthorized take and non-compliance with the NWP authorization for your project. The NMFS is, however, the authoritative federal agency for determining compliance with the incidental take statement and for initiating appropriate enforcement actions or penalties under the Endangered Species Act.
- Incidents where any individuals of Northern California steelhead (*Onchorynchus mykiss*), Southern Oregon-Northern California Coast Coho salmon (*O. kisutch*), and California Coastal Chinook salmon (*O. tshawytscha*) listed by NOAA Fisheries under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the United States or structures or work in navigable waters of the United States authorized by this NWP shall be reported to NOAA Fisheries, Office of Protected Resources, at (301) 713-1401 and the Regulatory Office of the San Francisco District of the U.S. Army Corps of Engineers at (707) 443-0855. The finder should leave the plant or animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved, and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.
- Standard Best Management Practices shall be implemented to prevent the movement of

sediment downstream. No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products, or other organic or earthen material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the waterways.

- A post construction report shall be submitted 45 days after the conclusion of construction activities. The report shall document construction activities and contain as-built drawings (if different from drawings submitted with application) and include before and after photos.

#### **Mitigation Measure Hydro-1**

*Prior to any project activities, provide the Initial Study-Mitigated Negative Declaration and Mitigation Monitoring and Reporting Plan to the California Regional Water Quality Control Board and comply with the Categorical Waiver of Waste Discharge Requirements (Order No. RI-2014-0011 Category F).*

#### **Mitigation Measure Hydro-2**

- *Tractor or heavy equipment operation will not be conducted on known slides or unstable areas.*
- *Heavy equipment will not be used within the standard watercourse and lake protection zones (14 CCR 916.9).*
- *Should operations extend into the winter period, as defined by the Forest Practice Act and Rules, limitations on operations related to using saturated roads, stabilizing erodible soils and installing erosion control measures will be followed. (14 CCR 914.7 (c))*
- *Equipment maintenance and refueling will occur outside the standard watercourse and lake protection zones (14 CCR 914.5).*
- *Heavy equipment operations will not be conducted on slopes greater than 50%.*
- *Ignition will occur outside of the standard Forest Practice Rule defined Watercourse and Lake Protection Zone (14 CCR 916.9).*

#### **Mitigation Measure Hydro-3**

*In order to buffer watercourses, riparian habitats and beneficial uses of water from the potential impacts of prescribed fire or fuel treatments, all wet stream courses (Class I and Class II) will be protected by a 75' horizontal distance "No Treatment Zone." Buffers will be established on both sides of stream channels. All wetlands and springs will be encircled by a 50' "No Treatment Zone." "No Treatment Zones" will be established and flagged as directed by the project manager prior to the implementation of any project work. No prescribed fire or fuel treatment will occur within the "no treatment zones." Seasonal watercourses or Class III watercourses, shall be protected with a 25' equipment exclusion zone.*

#### **Mitigation Measure Hydro-4**

*The project manager will select refueling and maintenance areas for heavy equipment, chainsaws and other combustion-powered hand tools on flat sites that are away from dry or wet waterways as well as areas that could potentially flow into a stream in the event of an accidental spill. Fuel containment equipment (i.e., absorbent sheets and waddles) will be made available and used at refueling and maintenance areas. Fuel spillage will be minimized by conducting these operations in flat areas. Equipment will be stored and maintained within properly cleared areas. The project manager will inspect refueling areas to assure compliance with this mitigation measure. These inspections will also verify the sites' adequacy in protecting riparian and terrestrial resources as well as the use and availability of containment equipment.*

### **Mitigation Measure Cultural-1**

*All new and previously recorded archeological sites identified during field surveys completed in connection with the preparation of this IS-MND and documented in the archeological report for the project shall be protected through following the protective measures contained in the 2019 Archeological Survey Report. Flagged 50' buffers shall be established around each artifact or site by the project manager or registered professional forester prior to implementation of any project work. An "archaeologically trained resource professional," or a designee of either shall shield the historic artifacts or sites with a temporary protective fire-resistant material. Within areas of ground or vegetation disturbing activities, if project work appears to expose any previously unknown archeological, prehistoric, historic or paleontological resource sites along the path of the fuel break or within 100 feet beyond the project boundary, the site shall be avoided. Work may continue elsewhere within the overall project area. Exposed cultural or paleontological resources shall be appropriately flagged in order to immediately establish an exclusion buffer of at least 100-feet. Any discoveries of previously unidentified cultural resources that are made during operations shall be dealt with in accordance with the Procedures for Post-Approval Discovery of Cultural Resources (pp. 17 and 18, Archaeological Procedures for CAL FIRE Projects).*

### **Mitigation Measure Cultural-2**

*Should human remains be inadvertently discovered during ground-disturbing activities, work at the discovery area shall be halted immediately, the project manager, in coordination with CAL FIRE's CCI Cultural Lead, shall then immediately contact the Native American Heritage Commission (NAHC), and the relevant Native American representative(s) shall be notified immediately, and the remains shall be treated in accordance with NAHC treatment and disposition requirements and relevant state law. Work shall not resume in the Discovery Area until the landowner or a designated representative of the landowner notifies the project manager that the PRC § 5097.98 process has been concluded.*

### **Mitigation Measure Cultural-3**

*Prior to conducting operations including prescribed burning, project managers and wildland fire officials shall receive training on the location of cultural resources and measures necessary to protect them. Upon completion of operations, markings designating the location of cultural resources shall be removed. Upon completion of operations, the project manager shall email documentation for the monitoring of the Flagged Areas and for any discoveries to the CAL FIRE CCI Cultural Resources Lead.*

### **Mitigation Measure Tribal-1**

*In the event that any Native American archaeological remains are discovered during implementation of management activities, local tribes will be contacted and consulted who have traditional and cultural affiliation with the Project area. If the tribe(s) considers the resource to be a tribal resource, appropriate mitigation measures will be developed in accordance with Public Resources Code 21080.3.2.*

### **Mitigation Measure Geo-1**

*For the fuelbreak treatment work adjacent to the existing road network, any newly-exposed soil of over 100 square feet in area will be mulched with brush to minimize the potential for erosion. Hand water bars will be installed to divert water onto stable vegetation and away from watercourses, as needed. Verification of proper installation and sufficiency of both mulching and waterbars will be made by the project manager prior to and following the season's first precipitation event and recorded in the project file.*

### **Mitigation Measure Haz-1**

*Diesel fuel will not be transported across a live stream, except for that in the fuel tank of equipment being operated. Aviation fuel will not be transported across river or creek ford crossings. Contractors providing operations equipment (masticators, excavators, etc.) will make daily inspection of equipment for leaks, correcting and repairing any such leaks prior to crossing of live streams.*

### **Mitigation Measure Haz-2**

*Standard Public Notifications: Approximately two weeks prior to the commencement of prescribed burning operations, the project coordinator will: 1) post signs along the closest major road way to the area describing the activity, timing, and requesting for smoke-sensitive persons in the area to contact the project coordinator; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and requesting for smoke sensitive persons in the area to contact the local CAL FIRE Unit; and 3) develop a list of smoke sensitive persons in the area and contact them prior to burning.*

### **Mitigation Measure Haz-3**

*Burn Plan Communications: Prior to the start of operations, CAL FIRE personnel should meet with the project coordinator onsite to discuss resource protection measures. Additionally, the project coordinator should specify the resource protection measures and details of the burn plan in the incident action plan and should attend the pre-operation briefing to provide further information.*

### **Mitigation Measure Haz-4**

*To reduce impacts associated with exposure of people or structures to wildland fires, the project manager or registered professional forester shall ensure that adequate fire protection equipment is available at work sites. This shall include fire extinguishers attached to all mechanized equipment. In addition, firefighting hand tools shall be made available at all areas where equipment is operated. The project manager, or registered professional forester, and any other workers shall comply with all applicable fire safe standards as found in Public Resources Code Division 4, Chapter 6, (Public Resources Code §§ 4427, 4428, 4429, 4431, 4442, list not all inclusive). Vehicles shall not be parked in tall grass or any other location where heat from the exhaust system could ignite a fire.*

### **Mitigation Measure Haz-5**

- Hot work areas shall not contain combustibles or shall be provided with appropriate shielding to prevent sparks, slag or heat from igniting exposed combustibles (Section 3504, California Code of Regulations, Title 24, Part 9).*
- A fire watch shall be provided during hot work activities and shall continue for a minimum of 30 minutes after the conclusion of the work.*
- Individuals assigned to fire watch duty shall have fire-extinguisher equipment readily available and shall be trained in the use of such equipment.*
- Where fire hoses are required, they shall be connected, charged, and ready for operation utilizing a portable water truck if needed.*
- A minimum of one portable fire extinguisher complying with Section 906 California Code of Regulations, Title 24, Part 9, and with a minimum 2-A:20-B:C rating shall be readily accessible within 30 feet (9144 mm) of the location where hot work is performed*
- There shall be no hot work, chain saw work, heavy equipment work, chipping or masticating on red flag days declared by the North Coast Air Quality District.*

### **Surrounding Land Uses and Setting**

Surrounding land uses include BLM lands, large private ranchlands and private timberlands in some cases hosting residential structures. Much of the landscape is steep and bisected by watercourses. Elevations range from 600' to 2,400'.

Sawyer, Keeler-Wolf and Evans (2009) describe the mixed coniferous forest community as the *Pseudotsuga menziesii* Forest Alliance, which exhibits greater than 50% relative cover of Douglas-fir in the tree canopy. Other commonly encountered species consistent to the mixed coniferous forest community type are tanoak, canyon live oak, and Pacific madrone.

Riparian forest can be found along the margins of Sholes Creek and Fourmile Creek within the proposed action project area. Conifer tree species in riparian forest include Douglas-fir and Pacific yew (*Taxus brevifolia*). Hardwood species include red alder, California bay laurel, big leaf maple and *Salix spp.* Understory species indicative of more mesic conditions are thimbleberry (*Rubus parviflorus*), coltsfoot (*Petasites frigidus*), coastal brookfoam (*Boykinia occidentalis*), giant chainfern (*Woodwardia fimbriata*), Whipplevine (*Whipplea modesta*) and horsetail fern (*Equisetum spp.*)

Grasslands occur in small openings along ridgelines and slopes, having declined in extent due to fire suppression and conifer encroachment over the past several decades. The grasslands are comprised of a mix of non-native, annual and perennial grasses, native, perennial grasses, as well as a combination of native forbs, bracken fern (*Pteridium aquilinum*), bulbs, and non-native forbs. Common examples of annual grasses are annual dogtail (*Cynosurus echinatus*), European hairgrass (*Aira caryophyllaea*), soft chess (*Bromus hordeaceus*), velvet grass (*Holcus lanatus*), and slender wild oat (*Avena barbata*). Blue wild rye (*Elymus glaucus*), a native, perennial grass, is commonly encountered. Native forbs include Ithuriel's spear (*Triteleia laxa*), California poppy (*Eschscholzia California*), and farewell-to-spring (*Clarkia sp.*)

### **Other Public Agency Approvals**

Other agencies with jurisdiction over the project include California Department of Fish and Wildlife, and the State Water Quality Control Board. The project will require a Categorical Waiver of Waste Discharge Requirements (Order No. RI-2014-0011 Category F) from the Regional Water Quality Control Board North Coast Region. The waiver will be obtained prior to commencement of operations, and the project will adhere to all of the stipulations in the waiver including implementation of an erosion control plan.

Categorical Waiver F: The General and Specific Conditions of this Categorical Waiver limit the scope of impacts from Timber Harvest Plans approved by CAL FIRE and other CEQA compliant timber harvesting activities so that the threatened discharges of waste will be minimized. Further, Regional Water Board staff participation in the CEQA functional equivalent THP review process ensures site-specific mitigation and appropriate project planning to protect water quality. As such, projects that meet the eligibility criteria for Category F are not expected to pose a significant threat to water quality, and therefore, it is appropriate to conditionally waive Waste Discharge Requirements.

A 1600 Agreement is required, and Agreement Number LSAA# 19-0527 has been filed with the California Department of Fish and Wildlife. The final 1600 Agreement has not been issued. The project is required to adhere to all of the conditions in the agreement.

The large wood placement qualifies for authorization under Department of the Army Nationwide Permit (NW P) 27 for Aquatic Habitat Restoration, Enhancement, and Establishment Activities (82 Fed. Reg. 1860, January 6, 2017), pursuant to Section 404 of the CWA of 1972, as

By implementing the all permit requirements, mitigation measures, and standard best management practices (BMPs), the project will not conflict with applicable local, federal, or state plans, policies, or regulations, and therefore impacts will be less than significant.

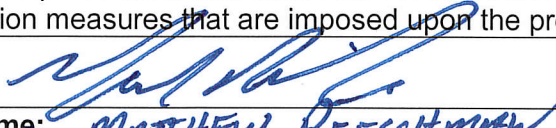
#### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project

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

#### DETERMINATION

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and is exempt from environmental review pursuant to statutory and categorical exemptions.
<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required
Signature: 	
Date: 2/18/20	
Printed Name: MATTHEW REESMAN	
For: CAL FIRE	

#### EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each questions. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors

## EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each questions. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, “Earlier Analyses,” may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are “Less Than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
- 9) The analysis of each issue should identify:
  - a) the significance criteria or threshold used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significant.

<b>I. Issues and Supporting Information</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>AESTHETICS:</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point).			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

a-c) **Less than Significant Impact.** The project will not cause a long-term alteration or not result in a permanent adverse change to physical, vegetative, or scenic resources. The shaded fuelbreaks and prescribed fire areas will not be visible from a paved public road, scenic highway or scenic vista. Public views from off-site vantage points are very limited due to topography and vegetation. The proposed project is located on private ranchlands and a portion of federal lands that do not receive a large amount of public access.

Shaded fuel breaks are typically used in forest settings and the tree canopy is thinned to reduce the potential for a crown fire to move through the canopy; larger trees are left in place. Because not all of the existing vegetation would be cleared, and large trees would remain within shaded fuel breaks, intactness, and unity of views would likely remain high and it is unlikely that they would substantially affect views or degrade the existing visible character and quality of the project site and its surroundings.

d) **No Impact.** The project will not create a new source of substantial light or glare. The proposed project will be completed during daylight hours, does not require lighting or the use of reflective materials, and will not contribute to night lighting or glare.

II. Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>AGRICULTURE AND FOREST RESOURCES:</b> 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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
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 forestland to non-forest use?				X

a, e) **No Impact.** The Farmland Mapping and Monitoring Program has not mapped Humboldt County. Thus, there will be no conversion of “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. Farmlands of Statewide Importance are defined by the California General Plan Glossary as, “Land other than Prime Farmland which has a good combination of physical and chemical characteristics for the production of crops. It must have been used for the production of irrigated crops within the last three years.” The project is located on a Timberland Production Zone and Agricultural Exclusive and public lands that in part are currently grazed, however are not irrigated. As such, it is not considered Farmland of Statewide Importance. “Unique Farmland” is defined as land that is currently used for the production of specific high economic value crops which does not meet the criteria for Prime Farmland or Farmland of Statewide Importance. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. Examples of such crops may include oranges, olives, avocados, rice, grapes, and cut flowers. The project is also not located on a parcel considered Unique Farmland. Therefore, there will be no conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

b) **No Impact.** Because the project activities are allowable uses within the zoned area and do not involve a change to the land use or zoning designation, it will not conflict with the existing zoning for agricultural use. The project is not within a property that is under a Williamson Act contract and therefore will not be in conflict. As such, there will be no impact.

c, d) **No Impact.** Project work would not change land use within the project area or on surrounding lands and thus would not conflict with existing zoning for agricultural activities or Williamson Act contracts. The project will not result in the loss of forest land or conversion of forest land to non-forest use.

e) **No Impact** The project does not involve changes to the environment that could result in a conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use.

III.  Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>AIR QUALITY:</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct Implementation of the applicable air quality plan?			X	
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.			X	
c) Expose sensitive receptors to substantial pollutant concentrations?		X		
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

a-b) **Less than Significant Impact.** The North Coast Unified Air Quality Management District's (NCUAQMD) attainment plan established goals to reduce PM-10 emissions and eliminate the number of days in which standards are exceeded. The plan includes three areas of recommended control strategies to meet these goals: transportation, land use, and burning. Control measures for these areas are included in the attainment plan and have also been incorporated in the Humboldt County General Plan.

Particulate matter less than 10 microns in size (PM10 and PM2.5) is the pollutant of greatest concern with respect to construction activities. PM10 and PM2.5 emissions can result from a variety of construction activities, including excavation, grading, vehicle travel on paved and unpaved roads, and vehicle and equipment exhaust. Particulate emissions can lead to adverse health effects as well as nuisance concerns, such as reduced visibility and soiling of exposed surfaces. Construction-related dust emissions typically vary from day to day, depending on the level and type of activity, silt content of construction site soil, and weather conditions. Larger dust particles settle out of the atmosphere close to the construction site resulting in a potential soiling nuisance for adjacent uses.

The NCUAQMD's Regulation 1 prohibits nuisance dust generation, such as that generated by road construction activity.

Although the NCUAQMD is in non-attainment for PM10, the temporary nature (approximately three months) of project activities combined with implementation of standard dust reduction measures during activities (e.g., watering of access roads and helicopter landing sites, etc.) would avoid

significant impacts. Biomass burning will be done in conformance with local and state air district standards and should not conflict with air quality plans. The proposed project would not obstruct implementation of the NCUAQMD Particulate Matter Attainment Plan, violate air quality standards, or contribute substantially to an existing or projected air quality violation. Therefore, operation of the proposed project will not violate any air quality standard or contribute to an existing or projected air quality violation nor result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

c-d) ***Less than Significant Impact with Mitigation Incorporated.*** CAL FIRE will be consulted on this burn before the expected burn date, and the burn plan will be made available for review. The burn plan will also be shared with NCUAQMD, and the League and project cooperators will coordinate with the district to identify a permissible burn day.

Prior to the start of burn operations, CAL FIRE personnel should meet with the project coordinator onsite to discuss resource protection measures. Additionally, the project coordinator should specify the resource protection measures and details of the burn plan in the incident action plan and should attend the pre-operation briefing to provide further information. Burning would be conducted on permissive burn days for Humboldt County, which should result in a negligible effect to the air quality of the project area and ensure smoke dispersion to meet air quality standards and minimize short-term or long-term effects.

All implementation would comply with Occupational Safety and Health Administration regulations, Forest Service direction, regional air quality standards, Clean Air Act, and other applicable laws and guidance. While short-term impacts to air quality from prescribed burning may occur, these effects will be minimized by burning under appropriate climatic conditions approved by NCUAQMD.

Sensitive receptors are typically defined as the segment of the population most susceptible to air quality effects including children, the elderly, and the sick, as well as land uses such as schools, hospitals, parks, and residential communities. There are no schools or hospitals located adjacent to the site. During project activities there will be localized air emissions of criteria constituents from heavy equipment, chain saws, helicopters, vehicles and equipment powered by internal combustion engines. The closest residence to the project site is the Stansberry residence and it is approximately 1,500 feet away and, with air movement common to the area, project-related emissions should disperse quickly and avoid concentrations or still-air pools. Therefore, activities will not expose sensitive receptors to substantial pollutant concentrations.

The work will not create new exposure to any sensitive receptors located in the immediate area.

Exhaust from construction equipment powered by internal combustion engines and odors associated with coating and painting could occur. Since the closest residential use is more than 1,500 feet from the project site this allows substantial opportunity for dissipation of odors.

Execution of project work will result in minor releases of diesel smoke related to equipment operation as well as from smoke released from the limited amount of burning to occur. Due to the fact that project operations will occur in a very remote location, any odors or minor pollutants generated in connection with project work will not affect substantial numbers of people.

The following mitigation measures should ensure that any effects resulting from fugitive dust created by project activities should remain at a less than significant level:

**Mitigation Measure Air-1**

*To minimize dust during treatment activities, the project proponent shall implement the following measures: Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board Fugitive Dust protocol. If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board. The project proponent will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations. Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113, suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700.*

IV.  Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>BIOLOGICAL RESOURCES:</b> 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 or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
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?		X		
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?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
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?				X

a) **Less than Significant with Mitigation Incorporated.** Project activities will occur in later summer to early fall and avoid all unnecessary disturbance of vegetation. The proposed wood placement will be positioned at the bank-full height at the creek sites – August through October this will be far y above the wetted channel and not have an influence on species in the water. Although short term impacts may occur during project activities, these impacts will be minimized through implementation of BMPs, mitigation measures and adherence to regulatory permit requirements. While temporary project impacts may affect habitat usage, they will not interfere substantially with the movement of any native resident or migratory fish or wildlife species; have a substantial adverse affect on riparian habitat; with established native resident or migratory wildlife corridors; or impede the use of native wildlife nursery sites. Alterations to the understory will occur by removing many of the small trees and downed wood, but a certain amount of these understory components will remain as well as regenerate. Such attributes are important for wildlife species and can provide for needs such as forage and cover. It is also reasonable to expect an increase in the quality and quantity of browse availability following project activities. Understory flora could become more diverse as plants currently not common could increase in number, and post-thinning and burning more of the forest floor would be exposed to light creating suitable habitat for a more diverse array of understory species. Due to the light intensity of the vegetation treatments of the proposed project and

incorporation of the project mitigation measures listed below, it is not expected that any candidate, sensitive, or special status species would be significantly impacted by this project.

A registered professional forester or their designee will be sufficiently present onsite during operations to evaluate the presence of biological resources and ensure biological resource protection through avoidance. If any wildlife is encountered during project activities, said wildlife will be allowed to leave the area unharmed and if any listed wildlife is encountered and cannot leave the project site on its own the registered professional forester or project manager should contact California Department of Fish and Wildlife immediately consult regarding species relocation protocol. \* **See Mitigation Measure Bio-12.**

### **Scoping**

Scoping for potential presence of special status animal species, plant species and communities was undertaken in order to determine whether the proposed project could have significant negative impacts on those species and communities. After reviewing several reference data sources, a list was compiled for species whose ranges include the project and surrounding area. California Department of Fish and Wildlife Natural Diversity Data Base (CNDDDB) was consulted (May 2019) utilizing the following search parameters: 1) nine-quad search centered on the Honeydew 7.5' quadrangle, and 2) within the plan elevation range of 500-2600'. Additionally, for plants, the California Native Plant Society (CNPS) inventory was queried (May 2019) utilizing the following search parameters: 1) nine-quad search centered on the Honeydew 7.5' quadrangle, and 2) within the plan elevation range of 500'-2600'.

A general habitat assessment was made for the project area, and nearby unique habitats (e.g. late-seral forest stands, large streams, lakes, rock outcroppings, meadows, unique soil types such as serpentine, etc.) were noted based upon aerial photo interpretation, familiarity with the area, and consultation with adjacent or nearby projects. Also, specific habitat and range information was obtained by using previously published listings of endangered, threatened or rare species by region, county, local knowledge of pertinent species and their ranges, and field manuals. Results of the scoping are listed in Table 1.

The CNDDDB and CNPS queries found one occurrence for a special status plant community, the Upland Douglas-fir Forest, intersecting the northeastern length of the fuel break polygons. Since no trees >10" DBH will be removed from the proposed fuel breaks, the treatments will likely have no adverse effects on the Upland Douglas-fir Forest associated with this project. The fuels break project will likely benefit this special status community by removing ladder fuel from under the late seral trees.

### **Plants**

#### **Rare Plant Survey Results**

Two potential special status plants were located during a June 2019 botanical survey of the proposed fuelbreaks on the non-federal parcels, prescribed fire units and portions of the watercourses to receive large wood for habitat structures. The survey was conducted by BBW & Associates botanists. The field survey was informed by conducted a scoping list of potential listed or special status plants from a Natural Diversity Database query of the Honeydew 7.5" quadrangle as well as the adjacent search of the project area. The non-federal portions of the project area were traversed by two field botanists with a focus on ecotones and habitat types likely to host special status species listed in the Natural Diversity Database query. (\*See Mitigation Measure Bio-2) The BLM conducted a complete botanical survey of the federal portion of the project area on June 20, 2019 and July 12, 2019. No state federal rare, threatened or endangered plants were detected during the BLM surveys. The project is not expected to result in a significant adverse effect to botanical resources.

***Piperia* spp.** Five closely spaced *Piperia* spp. were located during the rare plant survey on non-federal lands. Specific characters necessary to identify the plants to species (e.g. flowers) were not observed during the surveys but were potentially the white-flowered rein orchid (*Piperia candida*, CRPR 1B.2). The individual plants were located just outside of the Tree Source C harvest area and flagging was placed at the location of the species detections and a 50' buffer will be implemented to ensure that impacts to the plants are avoided. Per Mitigation Measure Bio-2 a 50' avoidance buffer has been flagged for the locations of *Piperia* spp.)

**Long beard lichen** (*Usnea longissima*), a CNPS List 4 and BLM Sensitive species. Long beard lichen is a pendulant, fruticose lichen whose main branches are up to 3 meters long. It occurs in old-growth and late-successional conifer stands, hardwood stands, and riparian areas, particularly in coastal climates or on fog-swept mountains where humidity is high (USDI 2006). This species was located on the ground within the fuel break on the Stansberry property. It was flagged in the field and the host tree was not marked for the large woody debris stream habitat project. Per Mitigation Measure Bio-2 a 50' avoidance buffer has been flagged for the locations of *Usnea* spp.)

## **Animals**

### **Cooper's Hawk** (*Accipiter cooperii*)

Listing Status: California Department of Fish and Wildlife 'Watch List'

Reported in Project area: No

Habitat: Cismontane woodland, riparian forest, riparian woodland & upper montane coniferous forest. Woodland, chiefly of open, interrupted or marginal type.

The Cooper's hawk is an uncommon resident, breeding sparingly throughout the region. No nests were located during fieldwork and no Cooper's hawks were observed. If a Cooper's hawk nest is identified, operations shall be suspended within 100 feet, of the nest tree and the contractors/operators shall immediately notify the California Department of Fish and Wildlife to determine species-specific protection measures. \* **See Mitigation Measure Bio-11.** Significant impacts to Cooper's hawk are not expected as a result of this project.

### **Golden Eagle** (*Aquila chrysaetos*)

Listing Status: California Department of Fish and Wildlife 'Fully Protected' & 'Watch List'

Reported in Project area: No

Habitat: Broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland & scrub, upper & lower montane coniferous forest, pinon & juniper woodlands, and valley & foothill grassland habitats. General habitat includes rolling foothills, mountain areas, sage-juniper flats and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.

The golden eagle is a large bird (30" to 41" tall) that lives primarily in mountain forest and open grasslands. The golden eagle preys mainly on medium-sized birds and mammals but will also feed on carrion. Nests are built on rock ledges or in tall trees. Golden eagles require large openings and large trees in open areas as habitat.

The area around the project area contains potential habitat for golden eagles. During the preparatory stages, the project area was surveyed for nest structures; none were found. The surrounding forests could provide possible structure for roosting and nesting and the grasslands located adjacent to the project area could be used for foraging. The post-project retention within the fuelbreaks have been

designed for the retention of larger trees. No significant impacts to eagles are expected as a result of this project

**Sonoma Red Tree Vole (*Arborimus pomus*)**

Listing Status: California Department of Fish and Wildlife 'Species of Special Concern'

Reported on CNDDB in project area: No

Range: Sonoma County north to Humboldt and western Trinity counties to the South Fork of the Smith River, Del Norte County.

Habitat: North Coast coniferous forest, old-growth and redwood habitats

The Sonoma red tree vole primarily inhabits coniferous forests dominated by Douglas-fir, but they also live where Douglas-fir co-occurs with other species. The species is most abundant in mature stands though can also inhabit pole and young stands (Thompson & Diller 2002). Arboreal voles that exhibit some terrestrial activity, nests are 2-65 m above the ground, in trees of any size, often in Douglas-fir, generally in the largest available trees. They feed almost exclusively on Douglas-fir needles, though will occasionally take needles of grand fir, hemlock or spruce. Commonly in the lower third of the live crown; several nests may be built in large; whorls of branches provide support for nests in young trees; large branches of old-growth trees can support large maternal nests or nurseries; nests are sometimes built in cavities and hollows in trees or under the moss covering large branches of old trees. There is likely red tree vole habitat within the project area but they were not observed during the biological field review.

Any Sonoma red tree vole eating platforms or resin ducts observed during project activities they will be recorded. The tree or trees associated with the observations will be flagged and will be avoided during operations. This project should not have a significant negative impact on Sonoma red tree voles. \***See Mitigation Measure Bio-13.**

**Pacific Tailed Frog (*Ascaphus truei*)**

Listing Status: California Department of Fish and Wildlife 'Species of Special Concern'

Reported on CNDDB in project area: No

Range: The range in California extends from Del Norte County south to central Sonoma County and eastward to Shasta and Tehama Counties.

Habitat: Occur in aquatic, Klamath and north coast flowing waters, lower montane coniferous forest, north coast coniferous forest, redwood and riparian forest habitats. The general habitats of this species are flowing waters in montane hardwood-conifer, redwood, Douglas-fir and ponderosa pine forests. They are restricted to perennial montane streams. In California, the range of this species is from sea level to approximately 6,500' above sea level. A rocky streambed is important in providing hiding places for larvae, sites for attaching eggs and cover for adults. Tadpoles require water below 15 °C. This species is mostly aquatic, though the adult is known to forage on land during cool and wet conditions. Stream characteristics seem to be a better predictor of *A. truei* abundance than landscape characteristics (Bull and Carter 1996). This suggests the possibility that other factors of habitat suitability, such as water temperature, may be more important than forest age and observations of this species in suitable habitat in young growth stands corroborates this. This species has also been found in suitable habitat in the Turwar Creek drainage (tributary of the Klamath River) following intense fires which removed essentially all stream side vegetation and woody instream cover. It was also able to quickly reestablish itself on the treeless terrain created by the Mt. St. Helen eruption (Hawkins *et al.* 1988).

No tailed frogs or juveniles were observed in the plan area though their presence will be assumed in aquatic habitats within the project area. Tailed frogs are presumed to exist in the larger watercourses

having substrates of consolidated parent material. Considering protection provided to watercourses and the project area in its entirety, it is reasonable to conclude that this project will not create a significant adverse impact to tailed frog populations.

**Marbled Murrelet (*Brachyramphus marmoratus*)**

Listing Status: State Endangered, Federal Threatened

Reported on CNDDDB in project area: No

Range: Nests inland along coast from Eureka to the Oregon border & from Half Moon Bay to Santa Cruz.

Habitat: Lower montane coniferous forest, old-growth and redwood habitats. Nests in old-growth, redwood-dominated forests, often in Douglas-fir. Non-breeding season occurs in pelagic habitats.

The marbled murrelet is a small seabird that nests in old-growth trees within 60 km of the coast or, less frequently, on the ground in areas where trees are absent. Specific nesting habitat of this species in this part of its range is large, sometimes decadent trees with large limbs (>10 cm) for nesting platforms (Hamer and Nelson 1995). The marbled murrelet will lay one egg on these platforms within natural accumulations of lichens and moss. It feeds in near-shore habitats up to 1.4 km offshore, in bays, lagoons and sometimes inland lakes. In California the species ranges from the Oregon border south to Santa Cruz County. Throughout most of the year this species is found in small groupings in near-shore coastal waters where they feed on small baitfish. Cutting of nest trees, gillnetting, and catastrophic events such as oil spills and wildfires are potential threats to this species. The project area is within the range of the marbled murrelet, however specific habitat elements do not exist within or adjacent to the project area. No sightings have been reported to the CNDDDB for the project area. Considering the location of the project area and the lack of available habitat, no formal surveys were deemed necessary. This project should not have a significant negative impact on or result in take of marbled murrelets.

**Townsend's Big-eared Bat (*Corynorhinus townsendii*)**

Listing Status: California Department of Fish and Wildlife 'Species of Special Concern'

Reported on CNDDDB in project area: No

Current range maps for coastal California indicate that this project area falls within the current winter and summer range of the COTO.

Even though the project area is not prime COTO habitat due to the lack of viable roosting structures (buildings, mine shafts, tunnels, and caves) for nursing colonies, a general search was made during plan preparation of likely areas (e.g. hollow or rotten trees or live trees with goose pens) for roosting sites and other signs, including guano deposits in basal hollows.

Since the project area does not contain prime big-eared bat habitat, there are no known big-eared bat observations in the project area, and the proposed retention of large trees and snags (excluding hazard trees), significant negative impacts to COTO population are not expected.

**Northern Spotted Owl (*Strix occidentalis caurina*)**

Listing Status: State & Federally Threatened, California Department of Fish and Wildlife 'Species of Special Concern'

Reported on CNDDDB in project area: Yes

Range: Northern California, Oregon, Washington and southern British Columbia.

Habitat: North Coast coniferous forest, old-growth and redwood habitats.

Habitat: The northern spotted owl (NSO) is a medium to large raptor, which primarily preys on small mammals. Usually found in stands of larger multi-storied timber, they nest in large trees, snags and cliffs, and they often use abandoned raptor nests.

Requiring mature forest patches with permanent water and suitable nesting trees and snags (Zeiner 1990a), this species was initially believed to be old growth obligate. Post listing it became evident that NSOs that were common in younger forest types of northern California. In their seminal work, "Climate, habitat quality, and fitness in northern spotted owl populations in northwestern California" (2000), Franklin, Anderson, Burnham and Gutierrez suggested that a mosaic of older forest types interspersed with other vegetation types promoted the highest NSO fitness.

NSO habitat exists within and out to a 0.7-mile NSO radius surrounding the project area. CNDDDB was run in preparation for this project area and out to a 0.7-mile radius. The project area had two recorded NSO activity centers at the time of the database query within 0.25 miles of the project area, HUM0530 and HUM0017. There are three additional activity centers (HUM0018, HUM0707 & HUM0700) between 0.25 miles and 0.7 miles of the project area. A dead barred owl (*Strix varia*) was found within the project area during archeological surveys on October 24, 2019. Barred owls are larger, more aggressive, and more adaptable than northern spotted owls. They displace spotted owls, disrupt their nesting, and compete with them for food.

No NSO habitat will be degraded as a result of operations. Operations will occur after the breeding season (post Aug. 1st). All helicopter flight paths are further than 0.25 miles from any of the activity centers. If an NSO is found then follow-up searches will be conducted to determine nesting or activity center status. If an NSO nest tree is located, then a 300-foot no-cut buffer will be implemented, and no project activity will occur within 300' of the nest tree. This project should not have a significant negative impact on or result in take of northern spotted owls. \* **See Mitigation Measure Bio-6.**

**Coho (*Oncorhynchus kisutch*) Southern Oregon/northern California Evolutionarily Significant Unit (ESU)** are listed as threatened at the state & federal level and are California Department of Fish and Wildlife 'Species of Special Concern'. **Steelhead trout (*Oncorhynchus mykiss irideus*) of the Northern California Distinct Population Segment (DPS)** are listed as threatened at the federal level and are a California Department of Fish and Wildlife 'Species of Special Concern.' Both species of fish are known inhabitants of the Mattole River. Fourmile and Sholes Creeks provide important spawning and rearing habitat for coho salmon, Chinook salmon, and steelhead, and are designated critical habitat for coho salmon and steelhead and essential fish habitat for coho and chinook salmon.

In general, fish habitat quality in Fourmile and Sholes Creeks is poor to fair due to legacy timber harvest and road building activities. Summer maximum weekly average temperatures in each creek range from 16-18 °C (MSG unpublished data from 2007-2017), with daily maximum temperatures periodically exceeding 20 °C. These temperatures are suitable for steelhead and marginal for coho salmon. Pool frequency, depth, and shelter ratings in Fourmile and Sholes Creeks were determined to be 'unsuitable' by Downie *et al.* (2002), indicating degraded instream habitat conditions. Downie *et al.* (2002) also determined riparian canopy cover was 'suitable' in Fourmile Creek and 'fully suitable' in Sholes Creek. The riparian forests have been recovering since 2003; therefore, riparian canopy cover today is improved.

The proposed wood placement will be positioned at the bank-full height at each site – in October this will be above the wetted channel and not have an influence on species in the water. This project will not have a significant adverse effect or result in take of any salmonids species.

**Pacific Fisher (*Pekania pennanti*)** (Northern California Evolutionarily Significant Unit)

Listing Status: Federally Proposed Threatened, California Department of Fish and Wildlife 'Species of Special Concern'

Reported on CNDDB in project area: No

Range: The West Coast Distinct Population Segment includes the states of Washington, Oregon, and California. Fishers were re-introduced into the Olympic Peninsula of Washington in January & March of 2008.

Habitat: North Coast coniferous forest, old-growth and riparian forest habitats.

Fishers use large areas of primarily coniferous forest with fairly dense canopies and large trees, snags and down logs. The fisher dens in rotting logs, hollow trees, and rocky crevices of old growth forests. They are specialized animals that frequently travel along waterways and rest in or on live trees, snags, or downed logs with cavities. These characteristics are usually only found in large tracts of old forests. Although fishers use a variety of protected cavities, brush piles, logs, or upturned trees, hollow logs, trees and snags are especially important (Zeiner *et al.* 1990b). Douglas-fir is the most common species used for resting in northern California, whereas, the general oak species, white fir, and red firs are commonly used in the Sierra. The diameter of trees used by fishers for resting and denning is consistently large. Rest sites are widely distributed throughout fisher habitat. The average home range of fishers vary between coastal and Sierra populations. In addition, the home range for males is greater than females. In a Zielinski *et al.* (2004) study, home range size for the coastal population was estimated at 3,702 acres for females and 14,334 acres for males. The Sierra population home ranges were smaller with females at 1,286 acres and 7,408 acres for males. This study also found that there were no obvious differences between the sexes with respect to proportion of different size classes of trees within the home ranges. Average stand sizes of 11-24" in dbh with canopy closures 61-100% occupied the highest proportion of home ranges. For the coastal population, Douglas-fir and true fir were the most prevalent species type. Sierra mixed conifer and ponderosa pine were the most prevalent species types for the Sierra Nevada study area. Resting structures were among the largest diameter trees available and resting site locations had high levels of canopy cover. Additionally, the Sierra Nevada study area resting sites were more frequently noted within 100 meters of water and with a hardwood component (Zielinski *et al.* 2004, Purcell *et al.* 2009, Zhao *et al.* 2012). Structural elements used by the fisher include; live tree cavities, broken tops, mistletoe platforms, large down logs, stumps and ground cavities. Other stand characteristics selected by fisher include high levels of canopy cover (>60%) and relative greater height and average diameter of the stand in relationship to the surrounding areas (Zhao *et al.* 2012). Reportedly extirpated from 48% of its historical range, the California Department of Fish and Wildlife considers potential threats to the fisher to include timber harvest that excessively reduces late seral forest and/or does not retain late seral elements (California Department of Fish and Wildlife 2010). Rather than the range map provided by California Department of Fish and Wildlife this analysis utilizes CEQA appropriate fisher range map offered by CAL FIRE that more closely corresponding to experts' opinion (Zielinski *et al.* 2004).

Fisher habitat does exist within and adjacent to the project boundary, though no resting or denning structures were identified during the preparatory stages of this project. This project should not have a significant negative impact on or result in take of Pacific fishers.

#### **Foothill Yellow-legged Frog (*Rana boylei*)**

Listing Status: State 'Candidate Threatened', California Department of Fish and Wildlife 'Species of Special Concern'

Reported on CNDDB in project area: No

Range: Present in most of northern California west of the Cascade crest from sea level to 7,000 feet, occurring in the coast ranges from the Oregon border to Los Angeles County, east to the western flank of the Sierra Nevada's and south to Kern County.

Habitat: Aquatic, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadow & seep, riparian forest, riparian woodland, Sacramento and San Joaquin flowing water habitats. General habitats include partly-shaded, shallow streams & riffles with a rocky substrate in a variety of habitats.

Confined to the immediate vicinity of permanent streams, most common along streams having rocky, gravelly, or sandy bottoms but may occur in those with muddy bottoms. In all habitats, the species is seldom found far from small, permanent streams with banks that can provide sunning sites. They need at least some cobble-sized substrate for egg-laying. They need at least 15 weeks to attain metamorphosis. Declines in the number of this species in the foothills of the Sierra Nevada and San Joaquin Valley are believed to be the result of habitat alteration, predation and competition by introduced bullfrogs.

If foothill yellow-legged frogs are encountered during construction activities, activities in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the species will not be harmed. This includes relocating these species to an appropriate habitat adjacent to the work area. Survey for foothill yellow legged frog shall be conducted at the low water ford location on the Stansberry ranch road prior to operation. Surveys shall extend 100 feet upstream and downstream of the crossing. Appropriate actions shall be taken to avoid or minimize take of this species under the direction of California Department of Fish and Wildlife. These actions include but are not limited to, installation of exclusion fencing, removal and relocation, and daily pre-work surveys to insure frogs have not reoccupied the project site during periods of inactivity. \* **See Mitigation Measures Bio 1.**

Wood placement at the creeks will occur from August 1 1-31<sup>st</sup> and will be outside of the breeding season for the foothill yellow-legged frog. The proposed wood placement will be positioned at the bank-full location at each site from August 1– October 31<sup>st</sup> this will be far above the wetted channel and not have an influence on species in the water. Furthermore, each site will be scanned for potential species prior to the trees being lowered into position. \* **See Mitigation Measures Bio 5.** This project should not have a significant negative impact on or result in take of foothill yellow-legged frogs.

#### **Red-bellied Newt (*Taricha rivularis*)**

Listing Status: California Department of Fish and Wildlife 'Species of Special Concern'

Reported on CNDDB in project area: No

Habitat: Broadleaved upland forest, North coast coniferous forest, redwood, riparian forest & riparian woodland. This species can be found in coastal drainages from Humboldt County south to Sonoma County, inland to Lake County (There is an isolated population of uncertain origin in Santa Clara County). The red-bellied newt lives in terrestrial habitats, juveniles generally underground and adults active at the surface in moist environments. They are known to migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.

The proposed wood placement will be positioned at the bank-full height at each site – in October this will be way above the wetted channel and not have an influence on species in the water. Each site will be scanned for potential species before the trees are lowered into position. This project will not have a significant adverse effect on red-bellied newts.

**Western Pond Turtle (*Emys marmorata*)**

Listing Status: California Department of Fish and Wildlife 'Species of Special Concern'

Reported on NDDDB in project area: No

Habitat: Aquatic, artificial flowing water, Klamath and north coast flowing and standing water, marsh & swamp, Sacramento and San Joaquin flowing and standing waters, south coast flowing and standing waters, and wetland habitats. This species needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg laying.

The western pond turtle is a diurnal and aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000' elevation. This turtle is often seen basking above the water but will quickly slide into the water when it feels threatened. Active from around February to November; may be active during warm periods in winter. It hibernates underwater, often in the muddy bottom of a pool. The western pond turtle is in decline in 75 – 80% of its range (Stebbins 2003). The proposed wood placement will be positioned at the bank-full height at each site – in October this will be way above the wetted channel and not have an influence on species in the water. Furthermore, each site will be scanned for potential species before the trees are lowered into position.

If western pond turtles are encountered during construction activities, activities in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the species will not be harmed. This includes relocating these species to an appropriate habitat adjacent to the work area. Any sensitive reptile or amphibian species that are trapped, injured, or killed, shall be reported immediately to California Department of Fish and Wildlife. Survey for foothill yellow legged frog shall be conducted at the low water ford location on the Stansberry ranch road prior to operation. Surveys shall extend 100 feet upstream and downstream of the crossing. Appropriate actions shall be taken to avoid or minimize take of this species under the direction of California Department of Fish and Wildlife. These actions include but are not limited to, installation of exclusion fencing, removal and relocation, and daily pre-work surveys to insure frogs have not reoccupied the project site during periods of inactivity. \* **See Mitigation Measure Bio 1**. This project will not have a significant adverse effect on western pond turtle populations.

Table 1. Scoping – Special Status Plants

Scientific Name	Common Name	CRPR	Global Rank	State Rank	Elevation Range (m)	Lifeform & Blooming Period	Habitat/Micro Habitat	Occurs in project area
Antennaria suffrutescens	evergreen everlasting	4.3	G4	S3	500-1600	Perennial stoloniferous herb. Jan-Jul	Lower montane coniferous forest (serpentine)	No known occurrences. Unlikely potential for suitable habitat; No serpentine

<i>Astragalus agnicidus</i>	Humboldt milk vetch	1B.1	G2	S2	115-670	Perennial herb. Apr-Sep	North coast coniferous forest, broad leaved forest; disturbed areas by roadsides	No known occurrences. Potential for suitable habitat
<i>Calamagrostis foliosa</i>	leafy reed grass	4.2	G3	S3	0-1220	Perennial herb. May-Sep	Coastal bluff scrub, North Coast coniferous forest; rocky.	No known occurrences. Minimal potential for suitable habitat
<i>Ceanothus gloriosus</i> var. <i>exaltatus</i>	glory brush	4.3	G4T4	S4	30-610	Perennial evergreen shrub. Mar-Jun (Aug)	Chaparral	No known occurrences. Unlikely that suitable habitat present
<i>Coptis laciniata</i>	Oregon goldthread	4.2	G4?	S3?	0-1000	Perennial rhizomatous herb. (Feb) Mar-May (Sep-Nov)	Meadows and seeps, North Coast coniferous forest (streambanks); mesic.	No known occurrences. Potential suitable habitat present
<i>Epilobium septentrionale</i>	Humboldt County fuchsia	4.3	G4	S4	45-1800	perennial herb. Jul-Sep	Broad-leaved upland forest, North Coast coniferous forest; sandy or rocky.	No known occurrences. Potential habitat present
<i>Erigeron bioletti</i>	Stream-side daisy	3	G3?	S3?	30-1100	Perennial herb. Jun-Oct	Broad leaved upland forest, cismontane woodland, North coast coniferous forest; rocky mesic sites	No known occurrences. Potential habitat present
<i>Erythronium oregonum</i>	giant fawn lily	2B.2	G4G5	S2	100-1150	Perennial bulbiferous herb. Mar-Jun (Jul)	Cismontane woodland, Meadows and seeps; sometimes serpentine, rocky, openings	No known occurrences. Potential habitat present
<i>Erythronium revolutum</i>	coast fawn lily	2B.2	G4G5	S3	0-1600	Perennial bulbiferous herb. Mar-Jul (Aug)	Bogs and fens, Broadleaved upland forest, North Coast coniferous forest; mesic, streambanks	No known occurrences. Potential habitat present

<i>Gilia capitata</i> ssp. <i>pacifica</i>	Pacific gilia	1B.2	G5T3	S2	5-1665	Annual herb. Apr-Aug	Coastal bluff scrub, Chaparral (openings), Coastal prairie, Valley and foothill grassland	No known occurrences. Unlikely that habitat present
<i>Kopsiopsis hookeri</i>	small ground-cone				120-1325		North coast coniferous forest,	No known occurrences. Suitable habitat present
<i>Lasthenia californica</i> ssp. <i>macrantha</i>	perennial goldfields	1B.2	G3T2	S2	5-520	Perennial herb. Jan-Nov	Coastal bluff scrub, Coastal dunes, Coastal scrub	No known occurrences. No suitable habitat.
<i>Lathyrus glandulosus</i>	sticky pea	4.3	G3	S3	300-800	Perennial rhizomatous herb. Apr-Jun	Cismontane woodland	No known occurrences. Unlikely potential for suitable habitat.
<i>Lathyrus palustris</i>	Marsh pea				2-140	Perennial herb. Mar-Aug	Bogs & fens, marshes & swamps, coastal prairie & scrub, lower montane coniferous forest and North cost coniferous forest	No known occurrences. Suitable habitat unlikely
<i>Lilium rubescens</i>	redwood lily	4.2	G3	S3	30-1910	Perennial bulbiferous herb. Apr-Aug (Sep)	Broadleafed upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest; sometimes serpentine, sometimes roadsides	No known occurrences. Suitable habitat present
<i>Listera cordata</i>	heart-leaved twayblade	4.2	G5	S4	5-1370	Perennial herb. Feb-Jul	Bogs and fens, Lower montane coniferous forest, North Coast coniferous forest	No known occurrences. Suitable habitat present

<i>Lycopodium clavatum</i>	running-pine	4.1	G5	S3	45-1225	Perennial cryptogam. Jun-Aug (Sep)	Lower montane coniferous forest (mesic), Marshes and swamps, North Coast coniferous forest (mesic); often edges, openings, and roadsides	No known occurrences. Suitable habitat unlikely.
<i>Montia howellii</i>	Howell's montia	2B.2	G3G4	S2	0-835	Annual herb. (Jan-Feb) Mar-May	Meadows and seeps, North Coast coniferous forest, Vernal pools; vernal mesic	No known occurrences. Minimal potential for suitable habitat
<i>Packera bolanderi</i> var. <i>bolanderi</i>	seacoast ragwort	2B.2	G4T4	S2S3	30-650	Perennial rhizomatous herb. (Jan-Apr) May-Jul(Aug)	Coastal scrub, North Coast coniferous forest; sometimes roadsides	No known occurrences. Minimal potential for suitable habitat
<i>Piperia candida</i>	white-flowered rein orchid	1B.2	G3	S3	30-1310	Perennial herb. (Mar)May-Sep	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest; sometimes serpentinite	Potentially detected in project site
<i>Pityopus californicus</i>	California pinefoot	4.2	G4G5	S4	15-2225	Perennial herb (achlorophyllous). (Mar-Apr) May-Aug	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest; mesic	No known occurrences. Potential suitable habitat
<i>Pleuropogon refractus</i>	nodding semaphore grass	4.2	G4	S4	0-1600	Perennial rhizomatous herb. (Mar) Apr-Aug	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest; mesic	No known occurrences. Potential suitable habitat

Ribes roezlii var. amictum	hoary gooseberry	4.3	G5T4	S4	120-2300	Perennial deciduous shrub. Mar- Apr	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest	No known occurrences. Potential suitable habitat
Sidalcea malachroides	maple-leaved checkerbloom	4.2	G3	S3	0-730	Perennial herb. (Mar) Apr-Aug	Broadleaved upland forest, Coastal prairie, Coastal scrub, North Coast coniferous forest, Riparian woodland; often in disturbed areas	No known occurrences. Potential suitable habitat
Sidalcea malviflora ssp. patula	Siskiyou checker- bloom				5-1255	Perennial rhizomatous herb. May- Aug	Open coastal forest & bluffs	No known occurrences. Minimal potential for suitable habitat
Usnea longissima	Methuselah's beard lichen	4.2	G4	S4	50-1460	Fruiticose chlorolichen	Broadleaved upland forest, North Coast coniferous forest; on tree branches; usually on old growth hardwoods and conifers	Detected in project site
Upland Douglas Fir Forest			G4	S3.1		Forest	North coast coniferous forest; old growth conifers mixed with hardwoods	CNDDDB occurrence in fuel break treatment area. No trees >10" DBH to be removed

c) ***Less than Significant with Mitigation Incorporated.*** Pursuant to Clean Water Act Section 404, a Section 404 Permit is required for any fill or dredging within jurisdictional wetlands or waters of the Army Corps of Engineers has jurisdiction over wetlands which meet the three-parameter wetland criteria (hydrology, soils, and vegetation) defined in the COE Wetlands Delineation No wetland fill is associated with this project therefor not impacts expected to federally protected wetlands.

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

Less than significant impact: The project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species, will not interfere with any wildlife corridors, and

will not impede the use of native wildlife nursery sites. The project includes hand thinning, pile burning, and prescribed fire. These treatments would not result in a conversion of forested to non-forested land, or otherwise result in conditions that would impede the local or regional movements of wildlife or impede the use of native wildlife nursery sites. Therefore, the project would not substantially interfere with the use of nursery sites or the movement of migratory birds or other wildlife species. The impact would be less than significant.

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

No Impact: The project will not conflict with any local policies or ordinances protecting biological resources, including tree preservation policies or ordinances. The 2017 Humboldt County General Plan contains directives to identify important wildlife habitats, important wildlife migration routes, and significant wetlands. As discussed in a) above, the project would not conflict with these policies. However, the mitigation measures identified in the impacts analysis above would ensure that project activities comply with County policies. The impact would be less-than-significant.

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

No Impact: The project will not conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, Safe Harbor Agreement or other approved local, regional, or state habitat conservation plan. There are four approved habitat conservation plans in Humboldt County and one includes the Mattole watershed (Humboldt Redwood Company (HRC) multi-species Habitat Conservation Plan (HCP) (Pacific Lumber Company [PALCO], 1999). The HRC Habitat Conservation Plan is not located in or adjacent to the project area. Project activities will not conflict with the multi-species Plan. The project is consistent with the 2004 *Coho Salmon Conservation Strategy* including goals to “identify those riparian vegetation communities that provide good opportunities for conifer (large woody debris) LWD recruitment to coho salmon habitat”. There would be no impact.

## **Biological Resources Mitigation Measures**

### **Mitigation Measure Bio-1**

*If any foothill yellow-legged frogs, tailed frogs, southern torrent salamanders or western pond turtles are encountered during construction activities, activities in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the species will not be harmed. This includes relocating these species to an appropriate habitat adjacent to the work area. Any sensitive reptile or amphibian species that are trapped, injured, or killed, shall be reported immediately to California Department of Fish and Wildlife. Survey for foothill yellow legged frog shall be conducted at the low water ford location on the Stansberry ranch road prior to operation. Surveys shall extend 100 feet upstream and downstream of the crossing. Appropriate actions shall be taken to avoid or minimize take of this species under the direction of California Department of Fish and Wildlife. These actions include but are not limited to, installation of exclusion fencing, removal and relocation, and daily pre-work surveys to insure frogs have not reoccupied the project site during periods of inactivity.*

### **Mitigation Measure Bio-2**

Personnel specifically trained in the identification of List 1, List 2 and List 3 species or a professional botanist surveyed the project area. If any federal or state listed threatened or endangered species are detected in the project area that may be impacted by the project work, then all project related activities will immediately stop within that area which will be flagged with a 50' "No Treatment Zone". All sightings will be documented using the California Natural Diversity Data Base (CNDDDB) field survey form a copy of which will be submitted to the CNDDDB. To date 50' avoidance buffers have been flagged for an observation of *Piperia* spp.

### **Mitigation Measure Bio-3**

The project is within an area that the Board of Forestry and Fire Protection has declared a Zone of Infestation or Infection for sudden oak death (SOD) pursuant to Public Resources Code § 4716. SOD host material including but not limited to (Douglas-fir (*Pseudotsuga menziesii*), bay laurel (*Umbellularia californica*), huckleberry (*Vaccinium ovatum*), big leaf maple (*Acer macrophyllum*)), shall not be removed from the regulated area unless appropriate state and federal permits are obtained.

### **Mitigation Measure Bio-4**

Each tree destined for harvest for the large woody debris project will be inspected for potential nest or resting platforms. If an arboreal nest is discovered, operations shall be suspended within 100 feet and CDFW will be consulted for species-specific protections. Furthermore, if an occupied nest of a listed species, sensitive species, species of special concern, or a raptor is discovered, nest tree(s), designated perch tree(s), screening tree(s), and replacement tree(s), shall be left standing and unharmed.

### **Mitigation Measure Bio-5**

Wood placement at the creeks will occur from August 1 1-31<sup>st</sup> and will be outside of the breeding season for the foothill yellow-legged frog. The proposed wood placement will be positioned at the bank-full location at each site – in October this will be way above the wetted channel and not have an influence on species in the water. Furthermore, each site will be scanned for potential species prior to the trees being lowered into position.

### **Mitigation Measure Bio-6**

Daytime stand searches for northern spotted owl (NSO) will be conducted in activity centers that are within 0.25 mi of flight paths prior to operations by qualified biologists. If a NSO is found then follow-up searches will be conducted to determine nesting status or activity center status. If a nest tree is located, then a 300 foot no cut buffer will be implemented, and no project activity will occur within 300' of the nest tree.

### **Mitigation Measure Bio-7**

In order to prevent the spread of invasive plant species, all heavy equipment not already on project site, to be used in the execution of project work will be cleaned off site prior to use within the project area. The project manager and/or trained staff will assure and document equipment cleaning. Contractors shall disclose where equipment had been operating prior to hauling to the project site.

### **Mitigation Measure Bio-8**

In the event that equipment will need to cross a live stream outside the road rights-of-way, the California Department of Fish and Wildlife 1600 Stream Alteration Agreement LSAA# 19-0527 conditions for this activity must be adhered to. In such instances, equipment crossings of waterways, streambeds and their associated approaches shall be located and flagged by the project manager

prior to the occurrence.

**Mitigation Measure Bio-9**

*To avoid impacting nesting birds and/or raptors: All temporary flagging, fencing, trash, debris, and/or barriers will be removed from the project site upon completion of project activities.*

**Mitigation Measure Bio-10**

*Habitat elements (nest trees, downed logs and woody debris, cavities and tree hollows, snags, large dead branches, etc.) that provide valuable habitat will be identified by an RPF or qualified biologist and retained.*

**Mitigation Measure Bio-11**

*Fallers of large woody debris conifers will be trained to look up the tree prior to falling and check for nests and "whitewash" at the base of trees. If any arboreal nest is discovered, operations shall be suspended within 100 feet of the nest tree and the contractors/operators shall immediately notify the project manager and/or California Department of Fish and Wildlife to determine species-specific protection measures. A tree marked for removal for woody debris habitat material where a nest is located will not be cut and the paint mark will be blacked out by the project manager or registered professional forester.*

**Mitigation Measure Bio-12**

*A registered professional forester or designee will be sufficiently present onsite during operations to evaluate the presence of biological resources and ensure biological resource protection through avoidance. If any wildlife is encountered during project activities, said wildlife will be allowed to leave the area unharmed and if any listed wildlife is encountered and cannot leave the project site on its own the registered professional forester or project manager should contact California Department of Fish and Wildlife immediately consult regarding species relocation protocol.*

**Mitigation Measure Bio-13**

*Any Sonoma red tree vole eating platforms or resin ducts observed during project activities will be recorded. The tree or trees associated with the observations will be flagged and will be avoided during operations.*

**Mitigation Measure Bio-14**

*In order to protect any species covered by the Migratory Bird Treaty Act (MBTA), no fuels treatment work will occur between March 1<sup>st</sup> to August 31, unless the following is implemented: 1. A survey is conducted by a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA and it is determined that there are no occupied nests within the proposed activity area. 2. If an occupied nest is found, then a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA will determine if the birds present are those protected by the MBTA. 3. If an MBTA species is located then no activities will occur within 100 feet of the nest during the breeding season (March 1<sup>st</sup>-August 31<sup>st</sup>).*

**Mitigation Measure Bio-15**

*Adherence to 404 Nationwide Permit 27 File # 2019-00229S*

- To remain exempt from the prohibitions of Section 9 of the Endangered Species Act, the non-discretionary Terms and Conditions for incidental take of federally-listed Northern California steelhead (*Onchorynchus mykiss*), Southern Oregon-Northern California Coast Coho salmon (*O. kisutch*), and California Coastal Chinook salmon (*O. tshawytscha*) and critical habitat shall be fully implemented as stipulated in the Biological Opinion titled "Endangered Species Act Section

7(a)(2) Biological Opinion, and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Program for restoration projects within the NOAA Restoration Center's Central Coastal California Office jurisdictional area in California" (pages 1-108), dated June 14, 2016 (enclosure 3). Project authorization under the NWP is conditional upon compliance with the mandatory terms and conditions associated with incidental take. Failure to comply with the terms and conditions for incidental take, where a take of a federally-listed species occurs, would constitute an unauthorized take and non-compliance with the NWP authorization for your project. The NMFS is, however, the authoritative federal agency for determining compliance with the incidental take statement and for initiating appropriate enforcement actions or penalties under the Endangered Species Act.

- Incidents where any individuals of Northern California steelhead (*Onchorynchus mykiss*), Southern Oregon-Northern California Coast Coho salmon (*O. kisutch*), and California Coastal Chinook salmon (*O. tshawytscha*) listed by NOAA Fisheries under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the United States or structures or work in navigable waters of the United States authorized by this NWP shall be reported to NOAA Fisheries, Office of Protected Resources, at (301) 713-1401 and the Regulatory Office of the San Francisco District of the U.S. Army Corps of Engineers at (707) 443-0855. The finder should leave the plant or animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved, and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.
- Standard Best Management Practices shall be implemented to prevent the movement of sediment downstream. No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products, or other organic or earthen material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the waterways.
- A post construction report shall be submitted 45 days after the conclusion of construction activities. The report shall document construction activities and contain as-built drawings (if different from drawings submitted with application) and include before and after photos.

**TABLE 1 - Potential Threatened or Endangered Animal Species Impacts**

<b>NAME</b>	<b>STATUS</b>	<b>SHORT &amp; LONG-TERM PROJECT IMPACTS/BENEFITS</b>
Coho Salmon – Southern Oregon / Northern California ESU <i>Oncorhynchus kisutch</i>	Federal Threatened (06/05/97) State Threatened (02/25/04)	<u>NO IMPACT</u> - Work will occur during the dry season and employ BMPs to minimize construction related impacts to surrounding area
Chinook Salmon O. <i>tshawytscha</i>	Federal Threatened (11/15/99)	<u>NO IMPACT</u> - Work will occur during the dry season and employ BMPs to minimize construction related impacts to surrounding area
Steelhead – Northern California ESU <i>Oncorhynchus mykiss</i>	Federal Threatened (08/07/00)	<u>NO IMPACT</u> - Work will occur during the dry season and employ BMPs to minimize construction related impacts to surrounding area
Marbled Murrelet <i>Brachyramphus marmoratus</i>	Federal Threatened (09/30/92) State Endangered (03/12/92)	<u>NO IMPACT</u> The project area and vicinity lack late seral-stage conifer forest, favored by Marbled Murrelet.
Foothill Yellow-legged Frog <i>Rana boylei</i>	State Candidate Threatened (S3)	<u>NO IMPACT</u> <i>Rana boylei</i> requires shallow, flowing water, apparently preferentially in small to moderate-sized streams situations with at least some cobble-sized substrate. No equipment operations are proposed within streams, ponded areas, springs or watercourses and no downstream effects are anticipated since work will occur during the dry season and employ BMPs to minimize large woody debris placement related impacts. This species was found in Fourmile Creek and habitat is assumed also in Sholes Creek and the Mattole River.
Fisher (West Coast DPS) <i>Pekania pennanti</i>	State Threatened (S2S3)	<u>NO IMPACT</u> Fishers require large areas of mature conifer forest habitat. High quality habitat exists surrounding the project site and Nesting and denning sites have not been located in the project site. No large stature trees or diameter, snags or special habitat features will be impacted. <u>The natal den period for fisher is March-May 15. The maternal den period is May 16-July 31<sup>st</sup>. If work occurs during this period and a fisher is encountered near the project site, a consultation with California Department of Fish and Wildlife will be conducted.</u>

V. Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>CULTURAL RESOURCES:</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

**a&b) Less than Significant with Mitigation Incorporated.** As such, there will be no impact that causes a substantial adverse change in the significant of a historical resource. Historic resources, as distinguished from archaeological resources, include antiques, buildings, structures, and sites generally from the past two centuries. The historic period brought with it large-scale changes to the landscape, with logging, clearing of the land for agriculture, importation of livestock, and fire suppression leading to alterations in the vegetation and habitat types on the project area and the surrounding area. For much of the historic period, the project area was used for timber operations and livestock ranching. The project area was logged in the 1950s and has a history of disturbance associated with grazing, road building, logging and ranching.

The Northwest Information Center (NWIC) at Sonoma State was contacted to conduct a records search. The NWIC base maps show that there are no previously recorded Native American archaeological resources within or adjacent to the project area. But, based on the environmental setting that there is a moderate to high potential for unrecorded Native American resources as well as historic period cultural resources.

Notification letters were sent to the Native American Contacts, Tribal Heritage Preservation Officers (THPOS) listed by CAL FIRE and the Naive American Heritage Commission (NAHC). That included Elk Valley Rancheria and Wiyot Tribe. A BLM archaeologist surveyed the BLM project area. On the private lands, a registered professional forester who is a Certified Archaeological Surveyor through the California State Board of Forestry and Fire Protection (14 CCR Section 929 *et seq.*) surveyed the private lands portion of the project. That included a survey of the proposed fuelbreak corridors, and prescribed burn units and portions of the creek zones where large wood will be placed. Based upon the notification letters and communication with Native Americans, the responses received did not indicate that they wanted to consult on this project and that no information concerning archaeological or cultural sites within the project area was disclosed.

In order to assess potential impacts to archaeological and historic resources, an archeological survey and preliminary report was prepared in accordance with *Archaeological Review Procedures for CAL FIRE Projects* (April 26, 2010) during June and July 2019 and provided to the CAL FIRE Archaeologist. The work was conducted by a registered professional forester with current CAL FIRE archaeological training. The preliminary report was followed up with a final Archaeological Survey Report. The survey and report included:

1. Pre-field research including other archeological surveys in the region, historic maps, interviews with the property owner, aerial photos and area historic literature.
2. A NWIC Sonoma State archaeological records search.
3. A field survey and reconnaissance covered the project area during June, July and October 2019.

4. Prehistoric or cultural resources were not discovered during the survey. Four historic artifacts or features were documented, and primary records were recorded including: 1) an 1878 brass section corner and "witness tree"; 2) an early century white oak cul-1 possibly associated with livestock use near an area labeled as "pack trail" on the USGS quadrangle map near the Buckeye burn unit. 3) A white oak hardwood fence post associated with what the landowner called the "Buckeye Corner"; 4) a length of telephone wire and insulators estimated to date from 1938. These resources should be treated as significant, historically significant, and therefore protected, unless further investigations provide evidence to the contrary (PRC 5024.1, Title 14 CCR, Section 4850 *et seq.*). An additional primary record and linear feature record was documented for a portion of the project area ranch road that appears to coincide with probable locations of what is labeled on the USGS map as "pack trail".
5. Mitigation Measure Cultural-1 requires a flagged 50' buffer to be established around each of these (4) sites by the project manager or registered professional forester prior to implementation of any project work. An "archaeologically trained resource professional," or a designee of either shall shield the historic fence posts at Sites 2 and 3, with a fire-resistant material.
6. A preliminary report was submitted to CAL FIRE on August 7, 2019. A final report was submitted on 1-9-2020. The report was reviewed and approved by the CAL FIRE Archeologist on 2-11-2020.

There are no known prehistoric or cultural resources other than the historical artifacts and sites documented by the 2019 survey within the project area. There is the potential for inadvertently discovering cultural/paleontological resources during project activities. As such, appropriate mitigation measures have been described should any resources be discovered. With incorporation of all mitigation measures, impacts to cultural resources will be less than significant.

The prescribed fire burn prescription will be designed to initiate a surface fire of sufficient intensity that will only consume surface and ladder fuels while protecting soil resources from direct soil heating impacts.

**a & b) Mitigation Measure Cultural-1** will provide mitigation to a less than significant level for impacts to archeological and historical resources.

c) ***Less than Significant with Mitigation Incorporated.*** No human remains have been documented within the project area during any of the previous and recent cultural resource surveys. However, ground disturbing activities related to erosion control, fuelbreak treatments, road treatments and fire lines could potentially disturb previously undocumented buried human remains. These activities could therefore have a potentially significant impact on human remains. Should human remains be uncovered, State law requires that the County Coroner be contacted immediately. Should the Coroner determine that the remains are likely those of a Native American, the California Native Heritage Commission must be contacted. The Heritage Commission consults with the most likely Native American descendants to determine the appropriate treatment of the remains. ***Mitigation Measure Cultural-2***, procedures for encountering human remains, would reduce impacts on human remains to a less-than-significant level by requiring the implementation of standard procedures if human remains are encountered.

#### **Mitigation Measure Cultural-1**

*All new and previously recorded archeological sites identified during field surveys completed in connection with the preparation of this IS-MND and documented in the archeological report for the project shall be protected through following the protective measures contained in the project 2019 Archaeological Survey Report. Flagged 50' buffers shall be established around each artifacts or sites by the project manager or registered professional forester prior to implementation of any project work. An "archaeologically trained resource professional," or a designee of either shall shield the historic artifacts or sites with a temporary protective fire-resistant material. Within areas of ground or vegetation disturbing activities, if project work appears to expose any previously unknown*

archeological, prehistoric, historic or paleontological resource sites along the path of the fuel break or within 100 feet beyond the project boundary, the site shall be avoided. Work may continue elsewhere within the overall project area. Exposed cultural or paleontological resources shall be appropriately flagged in order to immediately establish an exclusion buffer of at least 100-feet. Any discoveries of previously unidentified cultural resources that are made during operations shall be dealt with in accordance with the Procedures for Post-Approval Discovery of Cultural Resources (pp. 17 and 18, Archaeological Procedures for CAL FIRE Projects).

### **Mitigation Measure Cultural-2**

Should human remains be inadvertently discovered during ground-disturbing activities, work at the Discovery Area shall be halted immediately, the project manager, in coordination with CAL FIRE's CCI Cultural Lead, shall then immediately contact the Native American Heritage Commission (NAHC), and the relevant Native American representative(s) shall be notified immediately, and the remains shall be treated in accordance with NAHC treatment and disposition requirements and relevant state law. Work shall not resume in the Discovery Area until the landowner or designated representative of the landowner notifies the project manager that the PRC § 5097.98 process has been concluded.

### **Mitigation Measure Cultural-3**

Prior to conducting operations including prescribed burns, project managers and wildland fire officials shall receive training on the location of cultural resources and measures necessary to protect them. Upon completion of operations, markings designating the location of cultural resources shall be removed. Upon completion of operations, the project manager shall email documentation for the monitoring of the Flagged Areas and for any discoveries to the CAL FIRE CCI Cultural Resources Lead.

## **VI. Energy**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) **No Impact.** Implementation of project activities would not result in the development or ongoing use of electricity or natural gas utility services. Therefore, project-level activities would result in no environmental impact due to wasteful, inefficient, or unnecessary consumption of electricity and natural gas resources. Forest resilience projects would require the use of construction equipment and would therefore result in the consumption of petroleum-based fuels. Additionally, project-level prescribed fire activities in the project area grasslands would require the use of small amounts of petroleum-based fuels for ignition, as well as for vehicles and support equipment.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

b) **No Impact.** Project-level activities proposed project would not increase the use of electricity or natural gas utilities and would result in only a minor increase in the consumption of petroleum-based fuels for vehicles and equipment. These activities would not conflict with or obstruct any renewable energy or energy efficiency plan. There would be no impact.

VII.  Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>GEOLOGY AND SOILS:</b> Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				X
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.				X
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?		X		
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
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?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

a) *i-iv) **No Impact.*** The project is not located within the Alquist-Priolo Earthquake fault hazard area but is located within a seismically active region with active fault zones and landsliding. The project site is susceptible to strong seismic ground shaking common to the north coast region of California. The proposed project does not involve construction of any roads or habitable structures, and therefore will not expose people or structures to potential adverse effects including risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic induced ground failure, or landslides. The project will not cause rupture of a known earthquake fault, will not cause seismic ground shaking, will not cause seismic-related ground failure, including liquefaction, and will not cause any landslides or increase landslide potential.

b) ***Less than Significant Impact with Mitigation.*** The proposed project will not result in substantial soil erosion or the loss of topsoil. This project is not expected to generate significant soil erosion and will not deliver sediment into watercourses. Adequate mulch will cover fuelbreaks. Heavy equipment

will not be conducted on slopes over 50%. Prescribed fire units are expected to revegetate quickly with on-site seed banks. Work will occur during the dry season, from August 1 through October 31 to avoid substantial erosion or topsoil loss and will therefore result in a less than significant impact with mitigation

**Mitigation Measure Geo-1**

*For the fuelbreak treatment work adjacent to the existing road network, any newly-exposed soil of over 100 square feet in area will be mulched with brush to minimize the potential for erosion. Hand water bars will be installed to divert water onto stable vegetation and away from watercourses, as needed. Verification of proper installation and sufficiency of both mulching and waterbars will be made by the project manager prior to and following the season's first precipitation event and recorded in the project file.*

c) **No Impact.** The area is located within the Franciscan Coastal Belt of sedimentary rock. Numerous earthflows, rotational slides and debris slides have been mapped. A recent slide at Fourmile Creek was observed to have discharged dozens of red alder trees into the channel. The project is unlikely to increase the potential for onsite or offsite land sliding as no new road construction or reconstruction is planned and drainage patterns will not be changed. Overall, the project is expected to mitigate the effects of elevated sediment loads in the project area tributaries. Woody debris accumulations provide localized sediment storage and sorting compartments which provide spawning habitat and meter the quantities of sediment transported to downstream reaches. The project will use existing roads. Helicopter landings are located adjacent to existing roads on grassy flat ridgetops and no excavation or grading is required for the landings. Tractor or heavy equipment operation will not be conducted on known slides or unstable areas.

d) **No Impact.** Expansive soil occurs when clay particles interact with water causing volume changes in the clay soil. The clay soil may swell when saturated and shrink when dried, destabilizing any structures in the proximity. The proposed project will not create risks to life and property because it does not involve erection of any structures and is not located in the proximity of any structures such that it could impact their stability.

e) **No Impact.** The project does not involve the construction or use of septic systems or an onsite wastewater disposal system.

f) **Less than Significant with Mitigation Incorporated** . Incorporated or project protection and mitigation measures ( Mitigation Measure Cultural-1) will insure that unique paleontological resource or site or unique geologic features are not impacted.

Paleontological resources are the remains or traces of prehistoric animals and plants. Paleontological resources, which include fossil remains and geologic sites with fossil-bearing strata are non-renewable and scarce and are a sensitive resource afforded protection under environmental legislation in California. Under California PRC Section 5097.5, unauthorized disturbance or removal of a fossil locality or remains on public land is a misdemeanor. State law also requires reasonable mitigation of adverse environmental impacts that result from development of public land and affect paleontological resources (CPR Section 30244). Although it is unlikely that project activities would impact potentially significant unique paleontological or geologic resources, it cannot be ruled out altogether. The published geologic mapping of the region (CDMG 1984) indicate that sediments underlying the project area are associated with the Franciscan Formation. There is no evidence to suggest that the project will directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Paleontological resources were not surveyed or encountered during field environmental review for this project.

VIII. Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact		No Impact
<b>GREENHOUSE GAS EMISSIONS:</b> Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X		

a) **Less than Significant Impact.** The area for assessment of GHG impacts is statewide. Under CEQA guidelines developed by the Office of Planning & Research, lead agencies must determine if a project will emit GHGs, determine the significance of the emission and develop mitigations. CEQA Guidelines define greenhouse gases to include CO<sub>2</sub>, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Using the Air Resources Board Calculator for the California Department of Forestry & Fire Protection Forest Health Grant Program Registered Professional Forester James Clack Registered Professional Forester #2528 calculated that the Greenhouse Gas benefit from fuels reduction activities were calculated to be **1,851** metric tonnes of carbon dioxide equivalent (MT CO<sub>2</sub>e) over a 15 year period for the proposed treatments.

Growth and Yield Model: The growth and yield modeling performed as a component of the quantification of GHG stocks utilized the FVS growth and yield model. Volume and biomass calculations were performed using the Jenkins equations as described the Quantification Methodology. The use of FVS and Jenkins biomass equation guidance meets the requirements in the Quantification methodology regarding the use of growth and yield models. Annual probability of fire occurrence: The annual probability of fire occurrence was estimated using the FRAP web-based tool as detailed in the Quantification Methodology. This involved uploading the treatment boundary into the web tool and obtaining the mean annual probability of fire occurrence. The mean fire occurrence value reported is 21.9%. Data Inputs for Estimating Fire Impacts: The effective period for the proposed fuel reduction treatment is estimated to be 15 years, thus severe fire impacts were simulated at year 2025. Weather conditions for a severe fire (95th percentile) were calculated using FireFamily Plus 4.2 and historical weather data from the Eel River Camp RAWS station (40421). Weather parameters for the 95th percentile are as follows: Wind – 10 MPH; Temperature – 97 degrees; Herbaceous Fuel Moisture 130.32 and Woody Fuel Moisture 144.22 indicating a Dry moisture level for all fuels. Season of fire is set to “3 = After greenup (before fall)” for the severe fire simulations and “1 = Early spring (compact leaves)” for prescribed fire used as a fuel treatment. Percentage of stand are burned is set to 70% for prescribed fire, and 90% for severe fires (95th percentile). Fire impacts associated with a larger impact boundary were not calculated for this project. Fuels Reduction through Thinning Project Scenario: The Project includes 252 acres of fuels reduction associated with a planned shaded fuel break. The fuels reduction was modeled in FVS by performing a thin from below for trees 12” DBH and smaller, thinned to a 16’ spacing in 2018. The treatment area was grown for a 60-year project duration using FVS. Four project scenarios were modeled in FVS: Thin in 2018 then grow 60 years to 2078; Thin in 2018, simulate a severe fire in 2025 and then grow to 2078; grow to 2078 without thinning; and simulate a severe fire in 2025, then grow to 2078. Fuels Reduction through Prescribed Fire Project Scenario: The Project includes 100+ acres of fuels reduction associated with the use of prescribed fire. The treatment area was grown for a 60-year project duration using FVS. Four project scenarios were modeled in FVS: simulate prescribed fire in 2018 then grow 60 years to 2078; simulate prescribed fire in 2018, simulate severe fire in 2025 and then grow to 2078; grow to 2078 without prescribed fire; and simulate a severe fire in 2025, then grow to 2078.

GHG benefit from prescribed fire fuels reduction activity (MT CO <sub>2</sub> e)	998 metric tonnes
On-site carbon storage and project emissions in fuels reduction project scenario (MT CO <sub>2</sub> e)	43,171
On-site carbon storage in baseline scenario (MT CO <sub>2</sub> e)	42,173
GHG benefit from shaded fuelbreak fuels reduction activity 1(MT CO <sub>2</sub> e)	863 metric tonnes
On-site carbon storage and project emissions in fuels reduction project scenario (MT CO <sub>2</sub> e)	131,824
On-site carbon storage in baseline scenario (MT CO <sub>2</sub> e)	130,961

Direct effects of forest restoration and fuels reduction treatments include the removal of carbon from the forest carbon cycle in the form of approximately 240 Douglas-fir trees for use as in-stream structures and chipped masticated or burned biomass. Carbon from this project material will be stored as large woody debris or chipped biomass until they decompose or are burned, ultimately releasing the carbon back to the atmosphere. Additional activity generated fuels may be left in the woods and would slowly emit carbon back to the atmosphere. Other emissions include smoke, dust, and greenhouse gases from prescribed fire, pile burning, and vehicle and equipment use during implementation. While the project would reduce a long-term store of carbon through vegetation treatments, the stability of the existing stores would be increased by reducing the risk of large wildfire. This trade-off is in agreement with Stephens *et al.* (2009) and Hurteau and North (2009) who conclude that when weighing the risk of reducing existing carbon stocks in the short-term by thinning forests and reducing fire risk, compared to allowing forests to grow untreated with higher amounts of carbon storage but high risk of wildfire, the more prudent approach is to reduce fire risk. These studies also found that initial emissions from fuels treatments could be recovered within a decade or more of growth due to the increase in growth of residual trees. Burning was found to be a large source of emissions, as compared to only mechanical treatment, but was still small compared to high severity wildfire which converted most live carbon stores into decomposing carbon sources (North and Hurteau 2011). Treatments which reduce densities of small diameter trees as well as some intermediate, fire-sensitive trees were found to be most effective in reducing losses during burning and enabling rapid carbon recovery (Millar et al. 2007, Hurteau and North 2010).

Humboldt County and the NCUAQMD currently do not have local plans, policies or regulations adopted to reduce GHG emissions. As a result, it is anticipated that the limited amount of greenhouse gas emissions generated through the development of this project will be sequestered along with those generated offsite by area traffic and other activities. Based upon a negligible contribution to overall emissions, consistency with adopted air quality regulations for vehicle emissions and the positive impacts the reduction of wild land fuels will have on forest sequestration of greenhouse gas emissions, it is anticipated that this project will have a **less than significant impact** on greenhouse gas emissions.

**b) Less than Significant Impact.** Project activities would be temporary and minor, and therefore have minimal effects on AB 32 greenhouse gas emission reduction goals. As mentioned above, the proposed project would likely reduce long-term greenhouse gases region-wide from uncharacteristic large wildfire and therefore would not conflict with an applicable plan, policy or regulation adopted for the purpose of

reducing reduce long-term greenhouse gases. The California Air Resources Board adopted a Climate Change Scoping Plan Update in 2017, which contains strategies for reducing GHGs. The scoping plan recognizes the role of California's natural and working lands in meeting California's reduction goals. One of the key sectors is forestry, where the emphasis is on preparing for increased wildfire hazards, including treatment of hazardous fuels, and improving forest management approaches in a changing climate (CNRA 2017). The scoping plan recognizes that some actions taken to address ecosystem health may result in temporary, short-term reduction in sequestration or emissions, but are necessary for forest resilience for reducing larger carbon losses due to wildfire. Additionally, the proposed project is consistent with the California Forest Carbon Plan (2018).

Humboldt County and the NCUAQMD currently do not have local plans, policies or regulations adopted to reduce GHG emissions. As a result, it is anticipated that the limited amount of greenhouse gas emissions generated through the development of this project will be sequestered along with those generated offsite by area traffic and other activities. Based upon a negligible contribution to overall emissions, consistency with adopted air quality regulations for vehicle emissions and the positive impacts the reduction of wild land fuels will have on forest sequestration of greenhouse gas emissions, it is anticipated that this project will have a **less than significant impact** on greenhouse gas emissions.

IX.  Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>HAZARDS AND HAZARDOUS MATERIALS:</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
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?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
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?				X
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?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires.		X		

a) **Less than Significant with Mitigation Incorporated.** Refueling staging areas will be situated away from waterways, dry or wet, and equipment will be stored and maintained within properly

cleared areas. The existing ranch road system includes a low water ford of the Mattole River. With the exception of the low water ford, diesel fuel will not be transported across a live stream, except for that in the fuel tank of equipment being operated. Aviation fuel will not be transported across river or creek ford crossings. Contractors providing operations equipment (masticators, excavators, etc.) will make daily inspection of equipment for leaks, correcting and repairing any such leaks prior to crossing of live streams. Drip torch fuel will be transported to the project area in containers designed for that use. Based upon implementation of Mitigation Measure Haz-1 and Haz-2, there will be a less than significant impact pertaining to hazards to the public and environment through transport of hazardous materials.

**Mitigation Measure Haz-1**

*Diesel fuel will not be transported across a live stream, except for that in the fuel tank of equipment being operated. Aviation fuel will not be transported across river or creek ford crossings. Contractors providing operations equipment (masticators, excavators, etc.) will make daily inspection of equipment for leaks, correcting and repairing any such leaks prior to crossing of live streams.*

**Mitigation Measure Haz-2**

*The project manager will select refueling and maintenance areas for heavy equipment, chainsaws and other combustion powered hand tools on flat sites that are away from dry or wet waterways, as well as areas that could potentially flow into a stream, in the event of an accidental spill. Fuel containment equipment (i.e., absorbent sheets and waddles) will be made available and used at refueling and maintenance areas. Fuel spillage will be minimized by conducting these operations in flat areas. Equipment will be stored and maintained within properly cleared areas. The project manager and/or staff will inspect refueling areas to assure compliance with this mitigation measure. These inspections will also verify the site adequacy in protecting riparian and terrestrial resources as well as the use and availability of containment equipment. Spent fluids, such as motor oil and radiator coolant, and used vehicle or equipment batteries will be collected, stored, and recycled as hazardous waste offsite.*

**b) No Impact.** No hazardous materials other than those listed in a), above, are to be used on the project site; therefore, no release of hazardous materials is foreseen. Spill kits will be onsite to clean up any small spills that could occur, therefore preventing the release of hazardous materials into the environment. As such, there will be no impact involving the release of hazardous materials.

**c) No Impact.** The project site is not located within a quarter of a mile from an existing or proposed school. Therefore, there will be no impact.

**d) No Impact.** California Government Code Section 65962.5(a)(1) requires the California Department of Toxic Substances to compile and update, as appropriate, a list of all hazardous waste facilities subject to corrective action, all land designated as hazardous waste property or border zone property, all information received by the Department of Toxic Substances Control pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land, all sites listed pursuant to Section 25356 of the Health and Safety Code, and all sites included in the Abandoned Site Assessment Program. These lists are commonly referred to as the Cortese List. The project site is not listed on any of the individual lists that comprise the Cortese List; none of the lands bordering the site are on any of the Cortese List. The proposed project is not located on a site that is included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment.

**e) No Impact.** The project site is not located within an airport land use plan or within two miles of a public airport.

f) **No Impact.** The project is in a remote location and will not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project will not include development that would increase the number of people exposed to emergencies and would not include uses that would require an amendment of a locally adopted emergency plan. Helicopter landings locations have been identified within the project area and could be used to evacuate personnel in an emergency. Therefore, no impacts are anticipated.

g) **Less than Significant Impact with Mitigation Incorporated.** The execution of the project work has the potential to ignite a fire within a wildland area. The risk to people and structures will be reduced as project work will be conducted when fuel moisture and humidity are at adequate levels as determined by CAL FIRE or other local firefighting authorities. In addition, firefighting equipment, fire extinguishers and firefighting tools will be made available at work sites per **Mitigation Measure Haz-5**. Long- term, the project will reduce risks of loss injury or death from large wildfires through the removal of excess vegetative fuels. Therefore, exposure to people or structures directly or indirectly from a significant risk of loss, injury or death involving wildland fire during the implementation of the project or over the long- term will be less than significant with incorporation of Mitigation Measures Haz-3, Haz-4 and Haz-5.

### **Mitigation Measure Haz-3**

*Burn Plan Communications: Prior to the start of operations, CAL FIRE personnel should meet with the project coordinator onsite to discuss resource protection measures. Additionally, the project coordinator should specify the resource protection measures and details of the burn plan in the incident action plan and should attend the pre-operation briefing to provide further information.*

### **Mitigation Measure Haz-4**

*To reduce impacts associated with exposure of people or structures to wildland fires, the project manager or registered professional forester shall ensure that adequate fire protection equipment is available at work sites. This shall include fire extinguishers attached to all mechanized equipment. In addition, firefighting hand tools shall be made available at all areas where equipment is operated. The project manager, or registered professional forester, and any other workers shall comply with all applicable fire safe standards as found in Public Resources Code Division 4, Chapter 6, (Public Resources Code §§ 4427, 4428, 4429, 4431, 4442, list not all inclusive). Vehicles shall not be parked in tall grass or any other location where heat from the exhaust system could ignite a fire.*

### **Mitigation Measure Haz-5**

- *Hot work areas shall not contain combustibles or shall be provided with appropriate shielding to prevent sparks, slag or heat from igniting exposed combustibles (Section 3504, California Code of Regulations, Title 24, Part 9.*
- *A fire watch shall be provided during hot work activities and shall continue for a minimum of 30 minutes after the conclusion of the work.*
- *Individuals assigned to fire watch duty shall have fire-extinguisher equipment readily available and shall be trained in the use of such equipment.*
- *Where fire hoses are required, they shall be connected, charged, and ready for operation utilizing a portable water truck if needed.*
- *A minimum of one portable fire extinguisher complying with Section 906 California Code of Regulations, Title 24, Part 9 and with a minimum 2-A:20-B:C rating shall be readily accessible within 30 feet (9144 mm) of the location where hot work is performed*
- *There shall be no hot work, chain saw work, heavy equipment work, chipping or masticating on red flag days declared by the North Coast Air Quality District.*

X.  Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>HYDROLOGY AND WATER QUALITY:</b> Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.				X
c) Substantially alter the existing drainage pattern of the site or area, including through stream or river or through the addition of impervious surfaces in a manner which would:		X		
i) result in substantial erosion or siltation onsite or offsite?		X		
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				X
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			X	
iv) impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

**a) Less than Significant Impact.** The project proponent will comply with all applicable water quality requirements adopted by the appropriate Regional Water Quality Control Board and approved by the SWRCB (i.e., Basin Plan). In general, GWDR and waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that water board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions

Through the implementation of mitigation measures, project BMPs, and permit requirements from the Regional Water Quality Control Board that require that no significant sediment discharge occur from project activities and because the project will not generate or discharge wastewater or industrial flows to wetlands, creeks or waters of the US, the project will not violate any water quality standards or waste

discharge requirements and therefore impacts will be less than significant to surface or groundwater quality.

**Mitigation Measure Hydro-1**

*Prior to any project activities, provide the Initial Study-Mitigated Negative Declaration and Mitigation Monitoring and Reporting Plan to the California Regional Water Quality Control Board and comply with the Categorical Waiver of Waste Discharge Requirements (Order No. RI-2014-0011 Category F.*

**b) No Impact.** No wells or structures that would remove groundwater are proposed in the project. No project-level activities would interfere with groundwater recharge. Therefore, there would be no impact.

**c) i. Less than Significant Impact with Mitigation Incorporated.** The fuelbreak and prescribed fire sites are located on or near ridge tops more than 75-150 feet from any seasonal or perennial stream. Significant vegetation including forest vegetation will buffer any watercourses from storm water impacts associated with fuel break and prescribed fire treatments. Storm water runoff will follow the same flow patterns as the existing site configuration. The existing drainage pattern of the site will not be altered and therefore impacts will be less than significant with the incorporation of Mitigation Measure Hydro-2.. The project will not alter the existing drainage pattern of the area or increase the rate or amount of surface runoff in a manner which would result in off-site flooding.

**ii. No Impact** Project activities will not create new impervious surfaces or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. Broadcast burning will be implemented using low-intensity burn prescriptions that will not be hot enough to cause hydrophobic soil conditions which could affect runoff rates.. Hand and mechanized fuel treatment on the shaded fuel breaks will leave sufficient mulch on the ground to prevent surface erosion.

**iii. Less than Significant Impact** The project would not create or contribute runoff in amounts that would exceed the capacity of existing stormwater drainage systems or provide substantial additional sources of polluted runoff. The area is rural and lacks stormwater and flood control facilities. The existing road system has drainage facilities that include, structures such as culverts, dips and waterbars that will not receive increased flow as a result of this project. The existing road system will be improved to correct existing controllable erosion sites prior the end of the project per the Erosion Control Plan (ECP) as part of the Regional Water Quality Control Board Discharge Waiver Category "F" under Mitigation Measure Hydro-1. Implementation of Mitigation Measures Hydro-1 and Hydro-2 will assure that there will not be significant impacts to stormwater systems including introduction of polluted runoff into those systems.

**iv. Less than Significant Impact** Placing large wood structures within Class I watercourses will have a less than significant impact to the impedance or redirection of flood flows. Wood in these streams is a natural and dynamic process and the watercourses will adjust. Large wood within the stream channel slows the flow of water as it is forced to flow over and around logs. As the velocity of water is reduced, its ability to erode and carry sediment is decreased.

**Mitigation Measure Hydro-2**

- *Tractor or heavy equipment operation will not be conducted on known slides or unstable areas.*
- *Heavy equipment will not be used within the standard watercourse and lake protection zones (14 CCR 916.9).*
- *Should operations extend into the winter period, as defined by the Forest Practice Act and Rules, limitations on operations related to using saturated roads, stabilizing erodible soils and installing erosion control measures will be followed. (14 CCR 914.7 (c))*
- *Equipment maintenance and refueling will occur outside the standard watercourse and lake protection zones (14 CCR 914.5).*

- *Heavy equipment operations will not be conducted on slopes greater than 50%.*
- *Ignition will occur outside of the standard Forest Practice Rule defined Watercourse and Lake Protection Zone (14 CCR 916.9).*

**d) No Impact.** The project does not involve housing construction and will not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map. The project does not involve construction of any structures and therefore will not place any structures within a 100-year flood hazard area, which would impede or redirect flood flows. The project will not expose people or structures to a significant risk or loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. The project is not located in an area that would be affected by a seiche, or tsunami, or mudflow.

**e) Less than Significant Impact with Mitigation Incorporated.** The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Mitigation Measure Hydro-1 will require compliance with the Regional Water Quality Control Board requirements. There is no known sustainable groundwater plan for the area.

#### **Mitigation Measure Hydro-1**

*Prior to any project activities, provide the Initial Study-Mitigated Negative Declaration and Mitigation Monitoring and Reporting Plan to the California Regional Water Quality Control Board and comply with the Categorical Waiver of Waste Discharge Requirements (Order No. RI-2014-0011 Category F.*

#### **Mitigation Measure Hydro-2**

- *Tractor or heavy equipment operation will not be conducted on known slides or unstable areas.*
- *Heavy equipment will not be used within the standard watercourse and lake protection zones (14 CCR 916.9).*
- *Should operations extend into the winter period, as defined by the Forest Practice Act and Rules, limitations on operations related to using saturated roads, stabilizing erodible soils and installing erosion control measures will be followed. (14 CCR 914.7 (c))*
- *Equipment maintenance and refueling will occur outside the standard watercourse and lake protection zones (14 CCR 914.5).*
- *Heavy equipment operations will not be conducted on slopes greater than 50%.*
- *Ignition will occur outside of the standard Forest Practice Rule defined Watercourse and Lake Protection Zone (14 CCR 916.9).*

**f) Less than Significant Impact with Mitigation Incorporated.** Equipment used for mechanical vegetation removal treatments require the use of fuels and lubricants. Qualifying treatments implemented under the project would control the potential risks of spills and leaks by requiring that equipment be fueled and serviced outside of watercourse or lake protection zones and wet areas and require that all equipment be maintained and regularly inspected for leaks. Additionally, the project proponent will prepare a Spill Prevention and Response Plan and maintain a spill kit onsite. Implementation of these BMPs would prevent spills of fuels and lubricants onto soils that could be carried by runoff into adjacent waterbodies and ensure that a significant effect will occur. Adherence to permit conditions and mitigation measures Hydro-1-4 will assure that there will not be impacts that substantially degrade water quality.

#### **Mitigation Measure Hydro-1**

*Prior to any project activities, provide the Initial Study-Mitigated Negative Declaration and Mitigation Monitoring and Reporting Plan to the California Regional Water Quality Control Board and comply with the Categorical Waiver of Waste Discharge Requirements (Order No. RI-2014-0011 Category F.*

### **Mitigation Measure Hydro-2**

- Tractor or heavy equipment operation will not be conducted on known slides or unstable areas.
- Heavy equipment will not be used within the standard watercourse and lake protection zones (14 CCR 916.9).
- Should operations extend into the winter period, as defined by the Forest Practice Act and Rules, limitations on operations related to using saturated roads, stabilizing erodible soils and installing erosion control measures will be followed. (14 CCR 914.7 (c))
- Equipment maintenance and refueling will occur outside the standard watercourse and lake protection zones (14 CCR 914.5).
- Heavy equipment operations will not be conducted on slopes greater than 50%.
- Ignition will occur outside of the standard Forest Practice Rule defined Watercourse and Lake Protection Zone (14 CCR 916.9).

### **Mitigation Measure Hydro-3**

In order to buffer watercourses, riparian habitats and beneficial uses of water from the potential impacts of prescribed fire or fuel treatments, all wet stream courses (Class I and Class II) will be protected by a 75' horizontal distance "No Treatment Zone." Buffers will be established on both sides of stream channels. All wetlands and springs will be encircled by a 50' "No Treatment Zone." "No Treatment Zones" will be established and flagged as directed by the project manager prior to the implementation of any project work. No prescribed fire or fuel treatment will occur within the "no treatment zones." Seasonal watercourses or Class III watercourses, shall be protected with a 25' equipment exclusion zone

### **Mitigation Measure Hydro-4**

The project manager will select refueling and maintenance areas for heavy equipment, chainsaws and other combustion-powered hand tools on flat sites that are away from dry or wet waterways as well as areas that could potentially flow into a stream in the event of an accidental spill. Fuel containment equipment (i.e., absorbent sheets and waddles) will be made available and used at refueling and maintenance areas. Fuel spillage will be minimized by conducting these operations in flat areas. Equipment will be stored and maintained within properly cleared areas. The project manager will inspect refueling areas to assure compliance with this mitigation measure. These inspections will also verify the sites' adequacy in protecting riparian and terrestrial resources as well as the use and availability of containment equipment.

<b>XI.</b>				
<b>Issues and Supporting Information</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>LAND USE AND PLANNING:</b> Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

a) **No Impact.** The proposed project is to restore aquatic and forested habitat and forest resilience. It will not physically divide an established community; therefore there will be no impact.

**b) No Impact.** This project does not conflict with land use policies, plans or regulations by the County of Humboldt. The project is consistent with allowable uses on resource lands such as Timberland Production Zone and Agriculture and therefore there will be no impact. The project is consistent with the goals of the California Department of Fish and Wildlife's Recovery Strategy for California Coho Salmon, and will enhance instream and riparian habitat in all project-area creeks, thus improving rearing habitat. The project does not conflict with any applicable habitat conservation plan or natural community conservation plan.

<b>XII.</b>				
<b>Issues and Supporting Information</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>MINERAL RESOURCES:</b> 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?				X
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?				X

**a & b) No Impact.** There are no known valuable or locally-important mineral resources on the site. The Division of Mines and Geology has noted that the 'Classification and Designation of Mineral Lands' per Surface Mining and Reclamation Act Section 2790 'Minerals of Regional Significance' and associated mapping has not occurred for Humboldt County and other than in-stream gravel resources and rock quarries, have not identified any mineral resources needing protection from incompatible land uses. Therefore the project will not 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. Based on the project description and its location, the proposed project will not result in any mineral resource-related impacts.

<b>XIII.</b>				
<b>Issues and Supporting Information</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>NOISE:</b> Would the project:				
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?			X	
b) Generation of excessive groundborne noise levels?			X	
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?				X

a) **Less than Significant Impact.** The project area located in a remote forested area with low background or ambient noise levels. The closest residential area is over 1,500 feet from one of the project work sites. Project-related activities will result in short term increases in noise levels in the project area. The noise levels from the mastication, chain saws, and chippers will vary during the different activity periods, depending upon the number and types of equipment being used. The exact complement of noise producing equipment in use during any particular period is difficult to predict. However, the noise levels from construction activity during various phases of a typical construction project were evaluated by the Environmental Protection Agency in 1971. Although these studies were done 30 years ago, they remain the industry standards for estimated base noise emissions from construction and demolition equipment. Use of this data is considered conservative since newer construction equipment has incorporated quieter designs to protect both operators and the public from exposure to high noise levels. Project construction noise based on typical noise level emissions from public works projects, as developed by the United States Environmental Protection Agency Office of Noise Abatement and Control (1971), show noise from typical construction equipment usually ranging between 70 to 95 dB at 50 feet from the source. A chain saw is typically 85 decibels at 50 feet. Note that these typical noise levels at distances away from the equipment item (beyond 50 feet) are conservative since the only attenuating mechanism considered was divergence of the sound waves in open air. Attenuation from air absorption, ground effects, and shielding from intervening topography, structures and vegetation are not included in these tabled calculations. Noise will also vary throughout the project according to specific activities, location, orientation of the activities, and changing equipment operations.

The proposed project will not expose persons to or generation of noise levels in excess of standards established in the local general plan (Table 13-D Land Use / Noise Compatibility Standards). Noise-sensitive land uses, or sensitive receptors, are generally defined as locations where people reside or locations where the presence of unwanted sound could adversely affect the use of the land. Noise-sensitive land uses typically include residences, hospitals, schools, libraries, and certain types of recreational uses. Project related activities will be limited to Monday through Saturday, and between 6 a.m. to 7 p.m. No heavy equipment or aircraft related activities shall be allowed on Sundays or federally recognized holidays. Helicopter use will occur during the period of October 1-October 31. The project noise will be temporary over the course of the project's duration. . Within that portion of the project area immediately adjacent to mastication, helicopter and chainsaw operations, ambient noise levels will be increased above existing levels but only for a short period of time. Once project work has been completed, ambient noise levels will return to their pre-project levels. Impacts to temporary ambient noise levels will be less than significant. Therefore the proposed project's impact is less than significant.

b) **Less than Significant Impact.** During construction activities, equipment may generate a small amount of ground-borne vibration or ground-borne noise; the level of vibration or noise would typically be minor. No pile driving or other substantial ground-borne vibration generators will be used. Vibration levels associated with the project's level of land form modification should not be perceptible at the nearest residential unit and would not result in cosmetic or structural damage to buildings. Therefore, impacts associated with ground-borne noise levels will be less than significant. . Following completion of project construction there would be no noise generated by the project that would differ from current conditions. Therefore, operation of the proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

c) **No Impact** The project site is not located within two miles of a public airport or in the vicinity of a private airstrip, and thus would not expose people working or residing in the area due to excessive noise levels.

<b>XIV.</b>				
<b>Issues and Supporting Information</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>POPULATION AND HOUSING:</b> Would the project:				
a) Induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

*a-b) **No Impact.*** No existing housing occurs within the footprint of the project, and the project will not directly or indirectly induce substantial population growth, would not displace existing people or housing or people, and would not necessitate the construction of replacement housing. Therefore, there will be no impacts associated with population and housing.

<b>XV.</b>				
<b>Issues and Supporting Information</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>PUBLIC SERVICES:</b> Would the project result in substantial adverse physical impacts associated with the provision of 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:				
a) Fire protection?				X
b) Police protection?				X
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X

*a-e) **No Impact.*** The primary purpose of the proposed project is to reduce fire hazards and improve fish habitat. It will not result in an increase in population that requires an increase in service ratios, response times or other performance objectives for any of the public services. Therefore, it will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. Service ratios, response times and other public service performance objectives will not change due to the implementation of this project.

<b>XVI.</b> <b>Issues and Supporting Information</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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?				X
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?				X

**a-b) No Impact.** The primary purpose of the proposed project is to reduce fire hazards and improve fish habitat. The proposed project will not induce population growth or result in any demographic changes in the community. The project will not increase the use of existing neighborhood and regional parks or other recreational facilities, therefore there would be no impact on recreation. The project does not require the construction or expansion of existing recreational facilities. The proposed project does not include the construction of recreational facilities.

<b>XVII.</b> <b>Issues and Supporting Information</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>TRANSPORTATION:</b> Would the project:				
a) Conflict with a program , ordinance or policy addressing the circulation system,including transit, roadway, bicycle and pedestrian facilities?.			X	
b) Would the project conflict of be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? Criteria for Analyzing Transportation Impacts				X
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
				X
d) Result in inadequate emergency access?				X

**a) Less than Significant Impact.** As the project is of short-term duration, the project will not cause a long-term increase in vehicle trips or cause a significant long term increase in traffic, or conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. The project will not conflict with any policies, plans or programs regarding public transit, bicycle or pedestrian facilities, as it only involves forest and fish habitat restoration and enhancement.

**b) Less than Significant Impact-***The project is of relative short duration and will not cause a permanent transportation impact in terms of vehicle miles travelled compared to the baseline situation.* Therefore, impacts to transportation and traffic are expected to be less than significant. There are no impacted roads with limited levels of service or problematic travel demand measures.

c) No Impact Hazards will not be increased due to design features or incompatible uses because no new development is proposed. Temporary and intermittent use of Wilder Ridge Road during the 3 to 4 month seasonal activities of the project may cause a temporary increase in traffic, but this would not be a substantial increase.

d) **No Impact.** The contractors and crews are required to keep access roads open at all times for emergency access. No impacts to emergency access will result.

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

Starting July 1, 2015, Lead Agencies are to consult with Tribes and initiate consultation prior to the release of a negative declaration, mitigated negative declaration or environmental impact report under CEQA. More specifically, AB 52 creates a new category of resources in CEQA called "tribal cultural resources" and seeks to engage the expertise of Native American tribes in the protection and preservation of those resources. To fulfill that purpose, the new law requires the lead agency to consult with a local Native American tribe as part of the environmental review process. The law also requires that the details of the tribal cultural resource be kept confidential and provides examples of mitigation measures that focus on preserving tribal cultural resources.

Tribal notification letters were sent on June 14, 2019 with a follow up letter sent on June 19, 2019. No responses were received for this project from contacted tribal (Wiyot Tribe, Inter-Tribal Sinkyone Wilderness Council, Round Valley Indian Tribes of the Round Valley Reservation, the Bear River Band of Rohnerville Rancheria and Elk Valley Rancheria).. The NWIC of the California Historic Resources Information System was contacted via a letter on June 3, 2019 requesting a file search. The purpose of the file search was to determine if cultural resources surveys were conducted on or adjacent to the project site. Follow up notifications were sent by CAL FIRE in

conformance with state law under Assembly Bill 52 (Public Resources Code Section 21080.3.1). Tribal responses to consultations per 21080.3.1, did not result in a request to consult for this project. The tribes were contacted early in the process and did not express concern for cultural resources within the area of potential impacts. If any incidental discoveries are made of potentially culturally significant resource, the tribes will be consulted on said resource.

a)) **No Impact.** There are no tribal cultural resources located on the project site that are either listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resource Code section 5020.1(k). Therefore, there will be no impact.

b) **Less than Significant with Mitigation Incorporated.** A CAL FIRE Archaeologist will be consulted as necessary to help ensure cultural resource protection. Prior to the start of operations, (historical) resource sites that were identified in the archaeological survey report within the activity area, will be appropriately marked and locations communicated to operating contractors to ensure protection and avoidance. Confidentiality of cultural resources sites must be maintained with a minimal disclosure of site locations. If additional cultural resources are encountered during operations, all ground-disturbing work to be temporarily halted. Work on site shall not be resumed until a qualified archeologist has evaluated the materials and offered recommendations for further action. Should human remains be uncovered, State law requires that the County Coroner be contacted immediately. Should the Coroner determine that the remains are likely those of a Native American, the California Native Heritage Commission must be contacted. The Heritage Commission consults with the most likely Native American descendants to determine the appropriate treatment of the remains. The California Office of Historic Preservation, California Historic Information Center's archeological database has been searched for sensitive cultural resources in the project area.

#### **Mitigation Measure Tribal-1**

In the event that any Native American archaeological remains are discovered during implementation of management activities, local tribes will be contacted and consulted who have traditional and cultural affiliation with the Project area. If the tribe(s) considers the resource to be a tribal resource, appropriate mitigation measures will be developed in accordance with Public Resources Code 21080.3.2.

Other Mitigation measures to protect cultural resources in the project area have been outlined in Section V. Cultural Resources.

XIX.  Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>UTILITIES AND SERVICE SYSTEMS:</b> 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?				X
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
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?				X
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?				X
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

a) **No Impact.** rd. The project will not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas or telecommunications facilities the construction or relocation of which could cause significant environmental effects.

b) **No Impact.** The project involves habitat restoration and enhancement The project has sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?Therefore no impact is expected.

c.) **No Impact.** A habitat restoration and enhancement project would not create an increased demand for wastewater treatment capacity; therefore, no new construction of wastewater treatment facilities would be required.

d-e. ) **No impact.** The County of Humboldt is a member of the Humboldt Waste Management Authority (HWMA), which provides waste disposal services for its members. The HWMA has contracts with Anderson Landfill and Dry Creek Landfill both of which have adequate disposal capacity to serve the needs of this project. Materials that cannot be recycled will be disposed of through the HWMA in an appropriate approved landfill. Therefore, the project work will not result in the need for a landfill and no impact will result.

## XX. Wildfire

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

The project is located in the State Responsibility Area and is rated as having high fire hazard severity. Policy documents and plans for addressing wildfire risks in Humboldt County include the Humboldt County General Plan Public Safety Element, the Humboldt County Hazard Mitigation Plan, the Humboldt County Community Wildfire Protection Plan (2019), and Strategic Fire Plan for the Humboldt-Del Norte Unit (CAL FIRE 2018). The site's setting amid mature trees and forest understory provides a setting conducive to the ignition and spread of a wildland fire if appropriate measures are not taken during work. Chapter 26 of the California Fire Code (California Code of Regulations, Title 24, Part 9) establishes provisions for safety and care during construction activities defined as hot work. In brief, the code requires that specific measures be taken during construction to minimize the potential ignition of a wildland fire in areas susceptible to such events, which include the project site and surrounding lands. Personnel carrying out the prescribed burns will be highly trained with prescribed burning and wildland firefighting and will take all safety precautions necessary to avoid an escaped fire. Site watering and adherence to the California Fire Code will ensure that the proposed project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

a) **No Impact.** The proposed project would not require the closure of public roadways or otherwise interfere with emergency evacuation plans for the surrounding area. Fuelbreak work and prescribed fire treatment activities could result in temporary road closures within the project boundaries but would not impact roadways outside of the project area. Prescribed burning could lead to increased smoke on nearby roadways and temporarily decreased visibility. However, smoke would be carefully managed in accordance with an approved smoke management plan and measures such as public

notification of burn days and smoke warning signage would be implemented. These activities could cause a slight increase in vehicle use during construction activities and potential short-term reduced visibility from prescribed fire but would not impair emergency response plans or evacuation plans. Therefore, there would be no impact on emergency response or evacuation plans.

b) **No Impact.** The project is designed to reduce fire hazard severity and impacts associated with wildfire. Therefore the project is not likely to exacerbate wildfire risks, and expose people to pollutant concentrations from a wildfire. No new housing units or business will be constructed under this project. Therefore, no impact should result of implementation of the proposed project.

c) **No Impact.** The project will not 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. Therefore no impact should result of implementation of the proposed project.

d) **No Impact.** The project is designed to reduce fire hazard severity and impacts associated with wildfire. No immediate downslope or downstream structures or infrastructure exists for the project area and no downslope or downstream flooding or landslides should result from project activities.

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

Certain mandatory findings of significance must be made to comply with CEQA Guidelines §15065. The proposed project has been analyzed, and it has been determined that with implementation of the mitigation measures recommended in this initial study, it would not:

- Substantially degrade environmental quality.
- Substantially reduce fish or wildlife habitat.
- Cause a fish or wildlife population to fall below self-sustaining levels.

- Threaten to eliminate a plant or animal community.
- Reduce the numbers or range of a rare, threatened, or endangered species.
- Eliminate important examples of the major periods of California history or pre-history.
- Achieve short term goals to the disadvantage of long term goals.
- Have environmental effects that will directly or indirectly cause substantial adverse effects on human beings.
- Have possible environmental effects that are individually limited but cumulatively considerable when viewed in connection with past, current, and reasonably anticipated future projects.

a) ***Less than Significant Impact with Mitigation Incorporated.*** The project is a restoration and habitat improvement project designed to benefit aquatic habitat and upland forest resilience. It will result in a long term benefit to terrestrial carbon storage, fish, amphibians, and forest upland species by improving habitat. Through the implementation of mitigation measures, the project will have a less than significant impact. Through avoidance, minimization and mitigation measures, the project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or eliminate important examples of the major periods of California history or prehistory.

b) ***Less than Significant Impact.*** The incremental effects of a project are cumulatively considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. Implementation of forest health treatments under the proposed action will lead to an improvement in the health of the forest landscape in the general vicinity of the project area. Forest health treatments and fuels reduction activities, combined with similar efforts being planned and implemented on adjacent private lands, will result in reduced wildfire activity which will reduce the risk of fire across the landscape. No Impact: The project will not have impacts that are individually limited, but cumulatively considerable.

The project will not incrementally contribute to future population growth and development in the area as it does not result in a change in land use or zoning or involve development of any habitable structures or initiation of new uses. Many of the items reviewed as part of this initial study would result in no impact or were considered to have less than significant impacts, and where appropriate, findings were made with reference made to prevent cumulative impacts resulting from individual projects.

c) ***Less than Significant Impact.*** The proposed project would not displace existing residents or employees, generate substantial pollution, or generate a substantial demand for public services or utilities. With implementation of mitigation measures, the project activities proposed in this remote area project do not have the potential to, either directly or indirectly, cause a substantial adverse effect on human beings. The project area is very remote and given the low intensity nature of project work, no direct or indirect impacts to human beings are anticipated.

## **Mitigation Monitoring and Reporting Plan (MMRP)**

### **Mitigation Measure Air-1**

*To minimize dust during treatment activities, the project proponent shall implement the following measures: Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board Fugitive Dust protocol. If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board. The project proponent will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations. Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113, suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700.*

**Monitoring:** *Evidence of Compliance: Field survey and field notes to be added to project log.*

**Schedule:** Prior to project start date..

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Project work logbook.

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

### **Mitigation Measure Bio-1**

*If any foothill yellow-legged frogs, tailed frogs, southern torrent salamanders or western pond turtles are encountered during construction activities, activities in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the species will not be harmed. This includes relocating these species to an appropriate habitat adjacent to the work area. Any sensitive reptile or amphibian species that are trapped, injured, or killed, shall be reported immediately to California Department of Fish and Wildlife. Survey for foothill yellow legged frog shall be conducted at the low water ford location on the Stansberry ranch road prior to operation. Surveys shall extend 100 feet upstream and downstream of the crossing. Appropriate actions shall be taken to avoid or minimize take of this species under the direction of California Department of Fish and Wildlife. These actions include but are not limited to, installation of exclusion fencing, removal and relocation, and daily pre-work surveys to insure frogs have not reoccupied the project site during periods of inactivity.*

**Monitoring:** *Project Manager shall document record of surveys and communication with California Department of Fish and Wildlife in the project log book..*

**Schedule:** Prior to work in or adjacent to flowing watercourses.

**Responsible Party:** Project Manager/Mattole Restoration Group

**Verification of Compliance:** Field survey and field notes

Monitoring arty:

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

### **Mitigation Measure Bio-2**

Personnel specifically trained in the identification of List 1, List 2 and List 3 species or a professional botanist surveyed the project area. If any federal or state listed threatened or endangered species are detected in the project area that may be impacted by the project work, then all project related activities will immediately stop within that area which will be flagged with a 50' "No Treatment Zone". All sightings will be documented using the California Natural Diversity Data Base (CNDDB) field survey form a copy of which will be submitted to the CNDDB. To date 50' avoidance buffers have been flagged for locations of *Piperia* spp. and *Usnea longissimi*.

**Monitoring:** Prior to implementation of work within the project area, the project proponent shall provide a written evaluation from personnel specifically trained in the identification of List 1, List 2 and List 3 species or a professional botanist, stating that potential habitat for these species will not be significantly affected by the project.

**Schedule:**

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Written report to California Dept. of Fish and Wildlife.

Monitoring Party:

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

### **Mitigation Measure Bio-3**

The project is within an area that the Board of Forestry and Fire Protection has declared a Zone of Infestation or Infection for sudden oak death (SOD) pursuant to Public Resources Code § 4716. SOD host material (Douglas-fir (*Pseudotsuga menziesii*), bay laurel (*Umbellularia californica*), huckleberry (*Vaccinium ovatum*), big leaf maple (*Acer acrophyllum*)), shall not be removed from the regulated area unless appropriate state and federal permits are obtained.

**Monitoring:** Project Manager and or registered professional forester shall document that has that no biomass is removed from the declared zone of infestation.

**Schedule:**

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Project logbook and field notes.

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

### **Mitigation Measure Bio-4**

Each tree destined for harvest for the large woody debris project will be inspected for potential nest or resting platforms. If an arboreal nest is discovered, operations shall be suspended within 100 feet and CDFW will be consulted for species-specific protections. Furthermore, if an occupied nest of a listed species, sensitive species, species of special concern, or a raptor is discovered, nest tree(s), designated perch tree(s), screening tree(s), and replacement tree(s), shall be left standing and unharmed.

**Monitoring:** The project Manager shall document that fallers and or trained personnel have inspected each tree selected for the large woody debris project.

**Schedule:** Prior to tree felling operations

**Responsible Party:** Project Manager or RPF

**Verification of Compliance:** Project logbook. Visual inspection.

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

### **Mitigation Measure Bio-5**

Wood placement at the creeks will occur from August 1-31<sup>st</sup> and will be outside of the breeding season for the foothill yellow-legged frog. The proposed wood placement will be positioned at the

bank-full location at each site – in October this will be way above the wetted channel and not have an influence on species in the water. Furthermore, each site will be scanned for potential species prior to the trees being lowered into position.

**Monitoring:** Project Manager shall include site photos and map and note location of this species if observed.

**Schedule:** Continuous during wood placement activity.

**Responsible Party:** Contractor/Workers observe; Mattole Restoration Council relocate and report to CDFW.

**Verification of Compliance:** project logbook and photographs, visual inspection.

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

### **Mitigation Measure Bio-6**

Daytime stand searches for northern spotted owl (NSO) will be conducted in activity centers that are within 0.25 mi of flight paths prior to operations by qualified biologists. If a NSO is found, then follow-up searches will be conducted to determine nesting status or activity center status. If a nest tree is located, then a 300 foot no cut buffer will be implemented, and no project activity will occur within 300' of the nest tree.

**Monitoring:** If this species is located a qualified biologist will enter the site record into the NDDB and contact the USFWS, California Department of Fish and Wildlife and BLM.

**Schedule:** Prior to helicopter use.

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Biological Field reports

Monitoring Party: CAL FIRE & Calif. Dept. Fish and Wildlife

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

### **Mitigation Measure Bio-7**

In order to prevent the spread of invasive plant species, all heavy equipment not already on project site, to be used in the execution of project work will be cleaned off site prior to use within the project area. The project manager and/or trained staff will assure and document equipment cleaning. Contractors shall disclose where equipment had been operating prior to hauling to the project site.

**Monitoring:** The Project Manager will document in the project log book with photos and notes of any vehicle cleaning to avoid invasive plant species.

**Schedule:** At the time of equipment mobilization.

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:**

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

### **Mitigation Measure Bio-8**

In the event that equipment will need to cross a live stream outside the road rights-of-way, a California Department of Fish and Wildlife 1600 Stream Alteration Agreement would be required at the discretion of that agency. In such instances, equipment crossings of waterways, streambeds and their associated approaches shall be located and flagged by the project manager prior to the occurrence.

**Monitoring:** Project Manager shall document in the project log book and communicate with field staff of requirements.

**Schedule:** Prior to crossing watercourses with equipment,

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** 1600 Agreement

Monitoring Party: Calif. Dept. of Fish and Wildlife

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Bio-9**

*To avoid impacting nesting birds and/or raptors: All temporary flagging, fencing, trash, debris, and/or barriers will be removed from the project site upon completion of project activities.*

**Monitoring:**

**Schedule:** At the conclusion of project activities

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Project logbook

Monitoring Party: Project Manager/Save the Redwoods League

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Bio-10**

*Habitat elements (nest trees, downed logs and woody debris, cavities and tree hollows, snags, large dead branches, etc.) that provide valuable habitat will be identified by an RPF or qualified biologist and retained.*

**Monitoring:** GPS mapped location of features

**Schedule:** As necessary prior to work start up each year.

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Project logbook

Monitoring Party: registered professional forester or CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Bio-11**

*Fallers of large woody debris conifers will be trained to look up the tree prior to falling and check for nests and "whitewash" at the base of trees. If any arboreal nest is discovered, operations shall be suspended within 100 feet, of the nest tree and the contractors/operators shall immediately notify the project manager and/or California Department of Fish and Wildlife to determine species-specific protection measures. A tree marked for removal for woody debris habitat material where a nest is located will not be cut and the paint mark will be blacked out by the project manager or registered professional forester.*

**Monitoring:** Project Manager shall contact California Department of Fish and Wildlife or registered professional forester and flag nest tree and document nest trees with GPS coordinates.

**Schedule:** As necessary

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:**

Monitoring Party: California Department of Fish and Wildlife or registered professional forester

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Bio-12**

*A registered professional forester or designee will be sufficiently present onsite during operations to evaluate the presence of biological resources and ensure biological resource protection through avoidance. If any wildlife is encountered during project activities, said wildlife will be allowed to leave the area unharmed and if any listed wildlife is encountered and cannot leave the project site on its own the registered professional forester or project manager should contact California Department of Fish and Wildlife immediately consult regarding species relocation protocol.*

**Monitoring:** Project Manager shall contact California Department of Fish and Wildlife or registered professional forester and flag nest tree and document nest trees with GPS coordinates.

**Schedule:**

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Field survey and field notes

**Monitoring Party:** California Department of Fish and Wildlife

**Initials:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Mitigation Measure Bio-13**

*Any Sonoma red tree vole eating platforms or resin ducts observed during project activities they will be recorded. The tree or trees associated with the observations will be flagged and will be avoided during operations.*

**Monitoring:** Project Manager shall contact California Department of Fish and Wildlife or registered professional forester and flag nest tree and document nest trees with GPS coordinates.

**Schedule:**

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:**

**Monitoring Party:** California Department of Fish and Wildlife

**Initials:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Mitigation Measure Bio-14**

*In order to protect any species covered by the Migratory Bird Treaty Act (MBTA), no fuels treatment work will occur between March 1<sup>st</sup> to August 31<sup>st</sup>, unless the following is implemented: 1. A survey is conducted by a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA and it is determined that there are no occupied nests within the proposed activity area. 2. If an occupied nest is found, then a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA will determine if the birds present are those protected by the MBTA. 3. If an MBTA species is located then no activities will occur within 100 feet of the nest during the breeding season (March 1<sup>st</sup>- August 31<sup>st</sup>).*

**Monitoring:** Evidence of Compliance: Field survey and field notes to be added to project log.

**Schedule:** Prior to fuel treatment operations.

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Project logbook and survey datasheets.

**Monitoring Party:** CAL FIRE

**Initials:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Mitigation Measure Bio-15**

*Adherence to 404 Nationwide Permit 27 File # 2019-00229S*

1. To remain exempt from the prohibitions of Section 9 of the Endangered Species Act, the non-discretionary Terms and Conditions for incidental take of federally-listed Northern California steelhead (*Onchorynchus mykiss*), Southern Oregon-Northern California Coast Coho salmon (*O. kisutch*), and California Coastal Chinook salmon (*O. tshawytscha*) and critical habitat shall be fully implemented as stipulated in the Biological Opinion titled "Endangered Species Act Section 7(a)(2) Biological Opinion, and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Program for restoration projects within the NOAA Restoration Center's Central Coastal California Office jurisdictional area in California" (pages 1- 108), dated June 14, 2016 (enclosure 3). Project authorization under the NWP is conditional upon compliance with the mandatory terms and conditions associated with incidental take. Failure to comply with the terms and conditions for incidental take, where a take of a federally-listed species occurs, would constitute an unauthorized take and non-compliance with the NWP authorization for your project. The NMFS is, however, the authoritative federal agency for determining compliance with the incidental take statement and for initiating appropriate enforcement actions or penalties under the Endangered Species Act.

2. Incidents where any individuals of Northern California steelhead (*Onchorynchus mykiss*), Southern Oregon-Northern California Coast Coho salmon (*O. kisutch*), and California Coastal Chinook salmon (*O. tshawytscha*) listed by NOAA Fisheries under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the United States or structures or work in navigable waters of the United States authorized by this NWP shall be reported to NOAA Fisheries, Office of Protected Resources, at (301) 713-1401 and the Regulatory Office of the San Francisco District of the U.S. Army Corps of Engineers at (707) 443-0855. The finder should leave the plant or animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved, and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.

3. Standard Best Management Practices shall be implemented to prevent the movement of sediment downstream. No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products, or other organic or earthen material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the waterways.

4. A post construction report shall be submitted 45 days after the conclusion of construction activities. The report shall document construction activities and contain as-built drawings (if different from drawings submitted with application) and include before and after photos.

**Monitoring:** Project Manager shall provide documentation of adherence to 404 conditions and file post project report to the Army Corps of Engineers..

**Schedule:** During project period up to March 18, 2022.

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:**

Monitoring Party: Army Corps of Engineers San Francisco Office

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

#### **Mitigation Measure Hydro-1**

*Prior to any project activities, provide the Initial Study Mitigated Negative Declaration and Mitigation Monitoring and Reporting Plan to the California Regional Water Quality Control Board and comply with the Categorical Waiver of Waste Discharge Requirements (Order No. RI-2014-0011 Category F waiver*

**Monitoring:**

**Schedule:** During project implementation period.

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Project log (photos and description) including completion of Erosion Control Plan (ECP).

Monitoring Party: CAL FIRE and Regional Water Quality Control Board.

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

#### **Mitigation Measure Hydro-2**

- *Tractor or heavy equipment operation will not be conducted on known slides or unstable areas.*
- *Heavy equipment will not be used within the standard watercourse and lake protection zones (14 CCR 916.9).*
- *Should operations extend into the winter period, as defined by the Forest Practice Act and Rules, limitations on operations related to using saturated roads, stabilizing erodible soils and installing erosion control measures will be followed. (14 CCR 914.7 (c))*

- *Equipment maintenance and refueling will occur outside the standard watercourse and lake protection zones (14 CCR 914.5).*
- *Heavy equipment operations will not be conducted on slopes greater than 50%.*
- *Ignition will occur outside of the standard Forest Practice Rule defined Watercourse and Lake Protection Zone (14 CCR 916.9).*

**Monitoring:** *Project manager shall document that all six bullet points are adhered to in the Project Log and notify the CAL FIRE Grant Manager and BLM representative of an exceptions or non-conformances.*

**Schedule:**

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:**

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

### **Mitigation Measure Hydro-3**

*In order to buffer watercourses, riparian habitats and beneficial uses of water from the potential impacts of prescribed fire or fuel treatments, all wet stream courses (Class I and Class II) will be protected by a 75' horizontal distance "No Treatment Zone." Buffers will be established on both sides of stream channels. All wetlands and springs will be encircled by a 50' "No Treatment Zone." "No Treatment Zones" will be established and flagged as directed by the project manager prior to the implementation of any project work. No prescribed fire or fuel treatment will occur within the "no treatment zones." Seasonal watercourses or Class III watercourses, shall be protected with a 25' equipment exclusion zone*

**Monitoring:** *Representative photographs of all wet and dry stream courses within the project footprint shall be taken (with location labels added) by the Project Manager or trained staff, before any project work, indicating that flagging of "No Treatment Zones" has been completed, in order to document pre-project conditions.*

**Schedule:**

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Project logbook field notes.

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

### **Mitigation Measure Hydro-4**

*The project manager will select refueling and maintenance areas for heavy equipment, chainsaws and other combustion-powered hand tools on flat sites that are away from dry or wet waterways as well as areas that could potentially flow into a stream in the event of an accidental spill. Fuel containment equipment (i.e., absorbent sheets and waddles) will be made available and used at refueling and maintenance areas. Fuel spillage will be minimized by conducting these operations in flat areas. Equipment will be stored and maintained within properly cleared areas. The project manager will inspect refueling areas to assure compliance with this mitigation measure. These inspections will also verify the sites' adequacy in protecting riparian and terrestrial resources as well as the use and availability of containment equipment.*

**Monitoring:** *The documentation process detailed in Monitoring of Mitigation Measure #1 shall be implemented to document that selected refueling and maintenance areas have been provided and that fuel containment equipment has been made available and used at refueling and maintenance areas, in compliance with Mitigation Measure Hydro -4.*

**Schedule:**

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Photographs and project log book.

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Cultural-1**

*All new and previously recorded archeological sites identified during field surveys completed in connection with the preparation of this IS-MND and documented in the archeological report for the project shall be protected through following the protective measures contained in the project 2019 Archaeological Survey Report. Flagged 50' buffers shall be established around each artifacts or sites by the project manager or registered professional forester prior to implementation of any project work. An "archaeologically trained resource professional," or a designee of either shall shield the historic artifacts or sites with a temporary protective fire-resistant material.*

*Within areas of ground or vegetation disturbing activities, if project work appears to expose any previously unknown archeological, prehistoric, historic or paleontological resource sites along the path of the fuel break or within 100 feet beyond the project boundary, the site shall be avoided. Work may continue elsewhere within the overall project area. Exposed cultural or paleontological resources shall be appropriately flagged in order to immediately establish an exclusion buffer of at least 100-feet. Any discoveries of previously unidentified cultural resources that are made during operations shall be dealt with in accordance with the Procedures for Post-Approval Discovery of Cultural Resources (pp. 17 and 18, Archaeological Procedures for CAL FIRE Projects).*

**Monitoring:** *A copy of any such findings including site photos shall be sent to the CAL FIRE Archaeologist*

**Schedule:**

**Responsible Party:**

**Verification of Compliance:**

Monitoring Party: CAL FIRE Archaeologist

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Cultural-2**

*Should human remains be inadvertently discovered during ground-disturbing activities, work at the Discovery Area shall be halted immediately, the project manager, in coordination with CAL FIRE's CCI Cultural Lead, shall then immediately contact the Native American Heritage Commission (NAHC), and the relevant Native American representative(s) shall be notified immediately, and the remains shall be treated in accordance with NAHC treatment and disposition requirements and relevant state law. Work shall not resume in the Discovery Area until the landowner or a designated representative of the landowner notifies the project manager that the PRC § 5097.98 process has been concluded.*

**Monitoring:** *A copy of any such findings shall be sent to the CAL FIRE Archaeologist.*

**Schedule:** Continuous

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:**

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Cultural-3**

*Prior to conducting operations including prescribed burns, project managers and wildland fire officials shall receive training on the location of cultural resources and measures necessary to protect them. Upon completion of operations, markings designating the location of cultural resources shall be removed. Upon completion of operations, the project manager shall email documentation for the monitoring of the Flagged Areas and for any discoveries to the CAL FIRE CCI Cultural Resources Lead.*

**Monitoring:** *A copy of training records and post project marker removals shall be sent to the CAL FIRE Project Manager.*

**Schedule:** As necessary

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:**

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Tribal-1**

In the event that any Native American archaeological remains are discovered during implementation of management activities, local tribes will be contacted and consulted who have traditional and cultural affiliation with the Project area. If the tribe(s) considers the resource to be a tribal resource, appropriate mitigation measures will be developed in accordance with Public Resources Code 21080.3.2.

**Monitoring:** *A copy of any such findings shall be sent to the CAL FIRE Archaeologist.*

**Schedule:** As necessary.

**Responsible Party:** Project Manager

**Verification of Compliance:**

Monitoring Party: CAL FIRE Archaeologist

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Geo-1**

*For the fuelbreak treatment work adjacent to the existing road network, any newly-exposed soil of over 100 square feet in area will be mulched with brush to minimize the potential for erosion. Hand water bars will be installed to divert water onto stable vegetation and away from watercourses, as needed. Verification of proper installation and sufficiency of both mulching and waterbars will be made by the project manager prior to and following the season's first precipitation event and recorded in the project file.*

**Monitoring:** *The documentation process detailed in Monitoring of Mitigation Measure Geo-1 shall be implemented to document that such newly-exposed soil has been mulched with brush to minimize the potential for erosion, and waterbars have been installed prior to the season's first precipitation event.*

**Schedule:** Prior to November 15<sup>th</sup> of work season.

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:**

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Haz-1**

*Diesel fuel will not be transported across a live stream, except for that in the fuel tank of equipment being operated. Aviation fuel will not be transported across river or creek ford crossings. Contractors providing operations equipment (masticators, excavators, etc.) will make daily inspection of equipment for leaks, correcting and repairing any such leaks prior to crossing of live streams.*

**Monitoring:** *A project work log shall be maintained by the Project Manager which documents the outcomes of meetings with California Department of Fish and Wildlife.*

**Schedule:**

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Project work logbook.

Monitoring Party: Project Manager/Save the Redwoods League

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Haz-2**

*Standard Public Notifications: Approximately two weeks prior to the commencement of prescribed burning operations, the project coordinator will: 1) post signs along the closest major road way to the area describing the activity, timing, and requesting for smoke-sensitive persons in the area to contact the project coordinator; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and requesting for smoke sensitive persons in the area to contact the local CAL FIRE Unit; and 3) develop a list of smoke sensitive persons in the area and contact them prior to burning.*

**Monitoring:** *Evidence of Compliance: Project Manager Field survey and field notes.*

**Schedule:**

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** Photos, published legal add notice.

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Haz-3**

*Burn Plan Communications: Prior to the start of operations, CAL FIRE personnel should meet with the project coordinator onsite to discuss resource protection measures. Additionally, the project coordinator should specify the resource protection measures and details of the burn plan in the incident action plan and should attend the pre-operation briefing to provide further information.*

**Monitoring:** *Evidence of Compliance: Field survey and field notes to be added to project log.*

**Schedule:** Prior to burn operations.

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:**

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure Haz-4**

*To reduce impacts associated with exposure of people or structures to wildland fires, the project manager or registered professional forester shall ensure that adequate fire protection equipment is available at work sites. This shall include fire extinguishers attached to all mechanized equipment. In addition, firefighting hand tools shall be made available at all areas where equipment is operated. The project manager, or registered professional forester, and any other workers shall comply with all applicable fire safe standards as found in Public Resources Code Division 4, Chapter 6, (Public Resources Code §§ 4427, 4428, 4429, 4431, 4442, list not all inclusive). Vehicles shall not be parked in tall grass or any other location where heat from the exhaust system could ignite a fire.*

**Monitoring:** *A Project Work Log shall be maintained which documents that contractors and/or landowners have provided equipment for adequate fire protection prior to the start of any project work by that contractor and/or landowners, and that fire-fighting hand tools have been made available at all areas where equipment is operated.*

**Schedule:**

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:**

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

### **Mitigation Measure Haz-5**

- *Hot work areas shall not contain combustibles or shall be provided with appropriate shielding to prevent sparks, slag or heat from igniting exposed combustibles (Section 3504, California Code of Regulations, Title 24, Part 9. A fire watch shall be provided during hot work activities and shall continue for a minimum of 30 minutes after the conclusion of the work.*
- *Individuals assigned to fire watch duty shall have fire-extinguisher equipment readily available and shall be trained in the use of such equipment.*
- *Where fire hoses are required, they shall be connected, charged, and ready for operation utilizing a portable water truck if needed.*
- *A minimum of one portable fire extinguisher complying with Section 906 California Code of Regulations, Title 24, Part 9 and with a minimum 2-A:20-B:C rating shall be readily accessible within 30 feet (9144 mm) of the location where hot work is performed*
- *There shall be no hot work, chain saw work, heavy equipment work, chipping or masticating on red flag days declared by the North Coast Air Quality District.*

**Monitoring:** *A Project Work Log shall be maintained which documents that contractors and/or landowners have provided equipment for adequate fire protection prior to the start of any project work by that contractor and/or landowners, and that fire-fighting hand tools have been made available at all areas where equipment is operated.*

**Schedule:** When hot work activities are conducted.

**Responsible Party:** Project Manager/Save the Redwoods League

**Verification of Compliance:** *Project Work Log*

Monitoring Party: CAL FIRE

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

## References

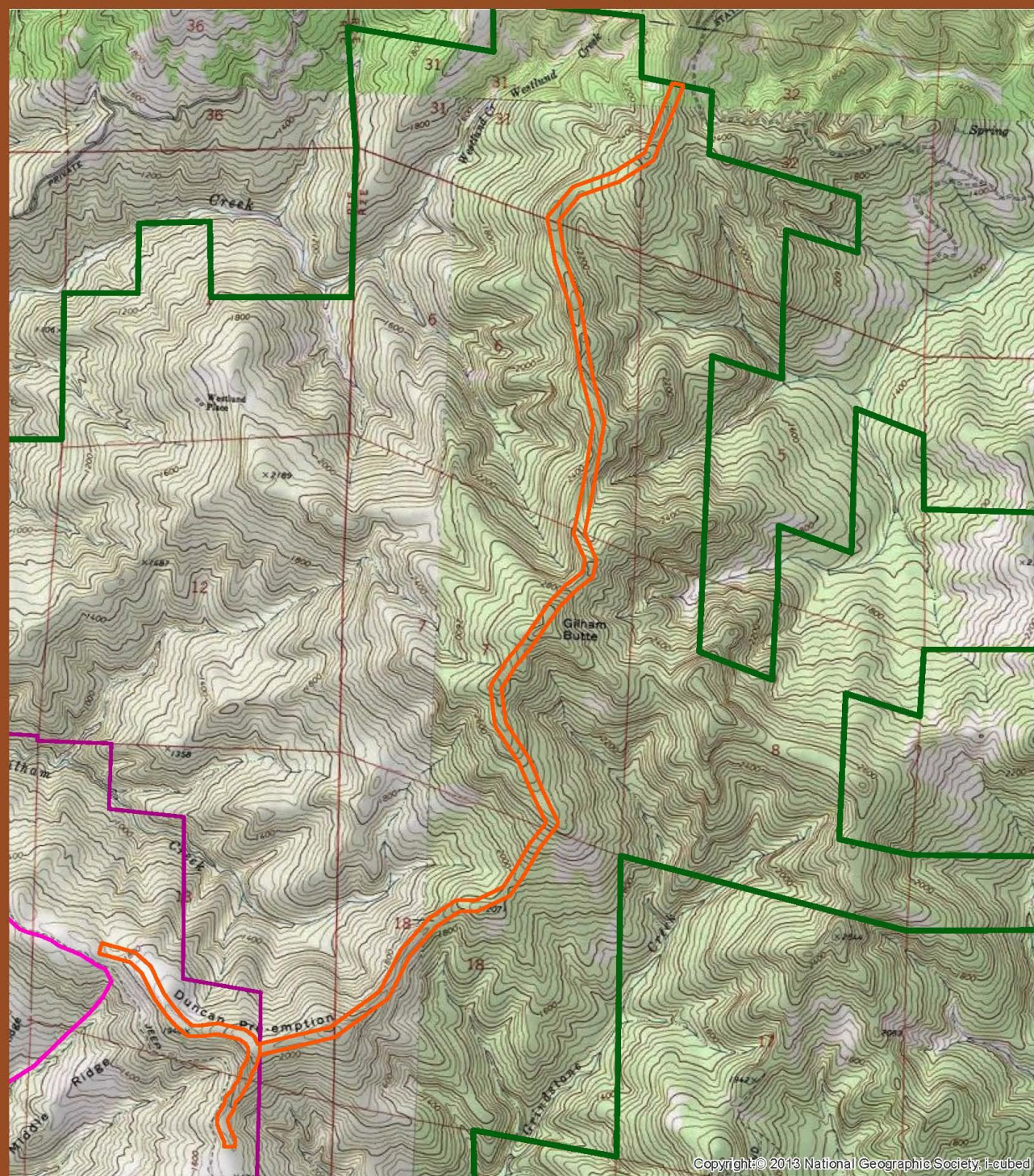
The following information sources were used in the preparation of this document and referenced throughout the Initial Study Checklist:

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2. California Department of Fish and Wildlife, Natural Diversity Database (CNDDB). 2019. *Rarefind 5* including the Northern Spotted Owl Observations Database accessed May 25, and June 8<sup>th</sup> 2019. <https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data>.
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4. Botanical and Biological Surveys 2019 BBW & Associates.
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11. USFWS Wetlands Mapper.
12. 2016 Lower Mattole Community Wildfire protection Plan
13. Mattole Integrated Coastal Watershed Management Plan Foresight 2020
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CAL FIRE FRAP, Map
16. Humboldt Redwood Company, *Mattole River Watershed Analysis Cumulative Watershed Effects*, Public Review draft 2011.
17. Millar CI, Stephenson NL, Stephens SL (2007a) Climate change and forests of the future: managing in the face of uncertainty. *Ecol Appl* 17:2145–2151
18. California Historical Resources System Northwest Information Center, NWIC File No. 18-2327.
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20. Mid-Mattole Fuel Break and Instream Wood Placement EA/Negative Declaration (ND) # DOI-BLM-CA-N030-2019-0004. U.S. Department of the Interior Bureau of Land Management (BLM) Arcata Field Office Arcata, CA.
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22. Non-industrial Timber management Plan 1-19- NTMP-00006 HUM "Haga" In 1<sup>st</sup> Review. Wilder Ridge Road 538 Acres.
23. Northwest information Center File NWIC File No. 18-2327. Sonoma State University
24. California's 2017 Climate Change Scoping Plan, The strategy for achieving California's 2030 greenhouse gas target, November. Available at:  
[https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf)
25. North Coast Unified Air Quality Management District (NCUAQMD). 2019. Accessed on line on June 16, 2019, at <http://www.ncuaqmd.org/index.php?page=district.info>

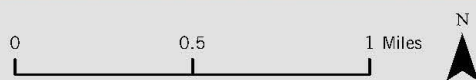
- GGRF 2018 - CalFire's Forest Health Grant Program  
Redwoods to the Sea Corridor Forest Resilience Project

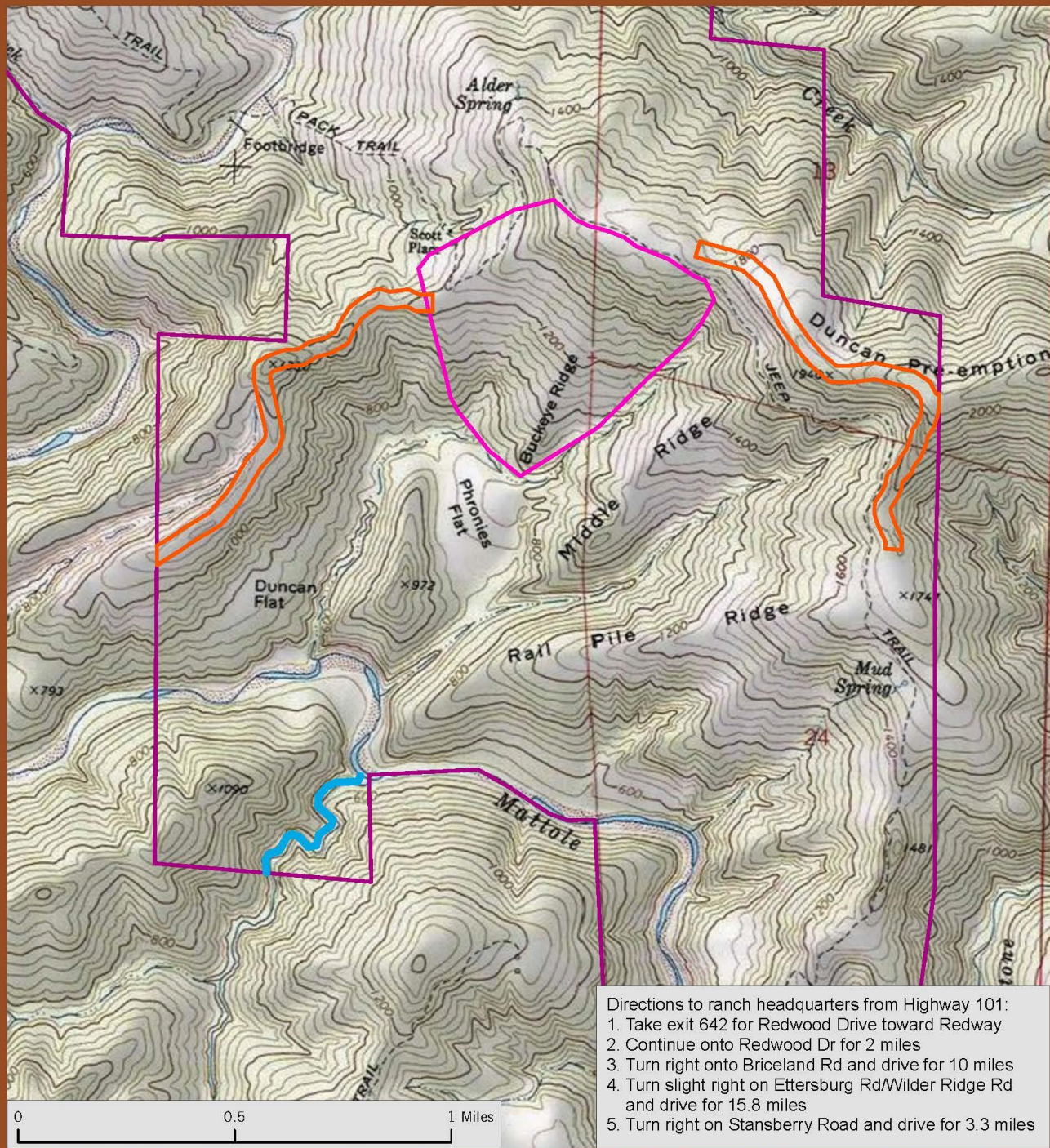
A detailed topographic map of the Grand Canyon region. The Colorado River is shown flowing through the center, with its path highlighted in blue. The map features numerous contour lines indicating elevation, with labels such as 500, 750, and 1000 feet. Key landmarks include the Grand Canyon, the Colorado River, and several smaller canyons and ridges. The map is overlaid with a grid of latitude and longitude lines. A scale bar at the bottom left indicates distances from 0 to 2 miles. The map is titled "Grand Canyon" at the top center.





- |  |   |
|--|---|
| <span style="border: 2px solid green; display: inline-block; width: 20px; height: 10px; margin-right: 5px;"></span> Redwoods to the Sea Corridor | <span style="border: 2px solid orange; display: inline-block; width: 20px; height: 10px; margin-right: 5px;"></span> Fuel Break Treatment |
| <span style="border: 2px solid purple; display: inline-block; width: 20px; height: 10px; margin-right: 5px;"></span> Stansberry Ranch            | <span style="border: 2px solid pink; display: inline-block; width: 20px; height: 10px; margin-right: 5px;"></span> Burn Unit              |





Stansberry Ranch
  Fuel Break Treatment  
 Burn Unit (170 acres)
  LWD Treatment

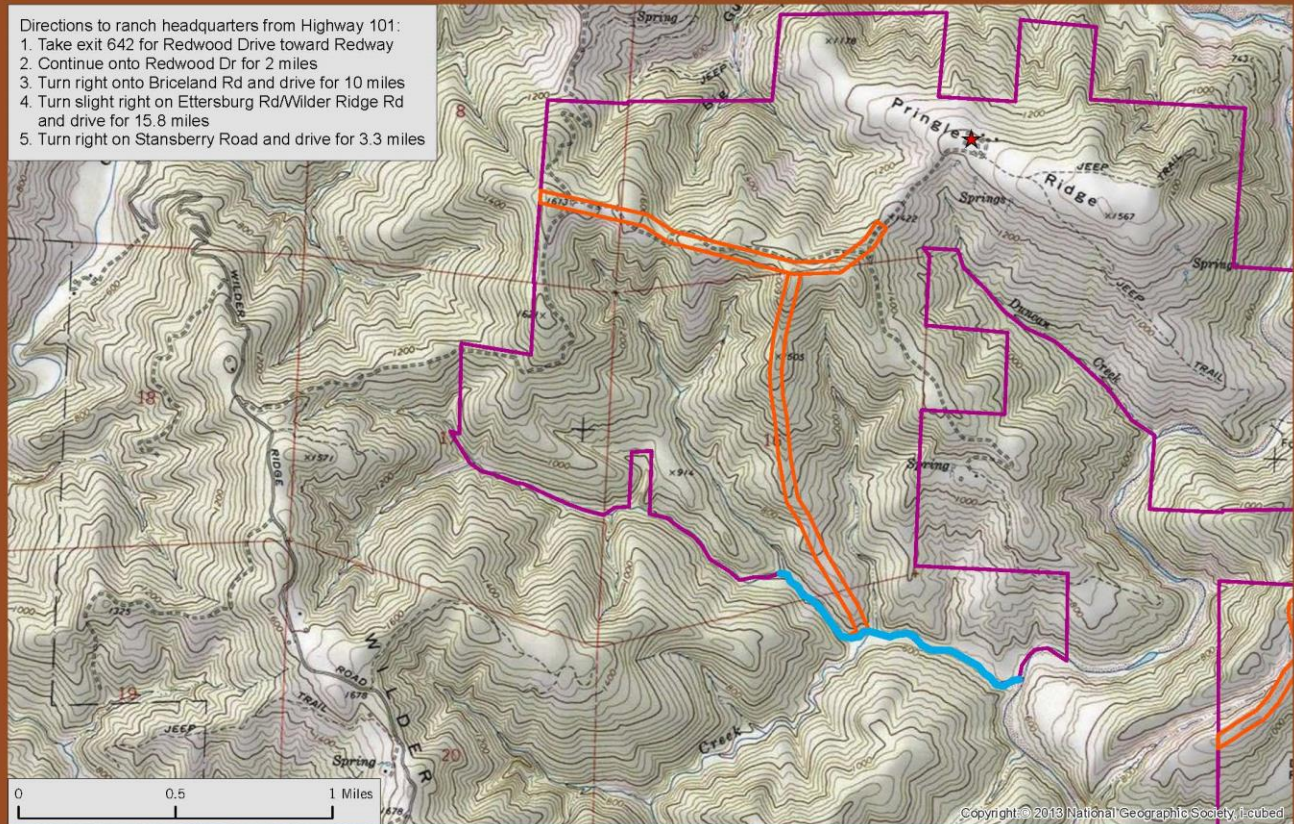
U.S.G.S. 7.5 Minute Topographical Map:  
 Honeydew Quadrangle  
 Section 13, 14, 23, 24 of T3S,  
 R1E of Humboldt B&M  
 Published Date: January 1, 1959



## Stansberry - Project Location

*Save The Redwoods*  
LEAGUE®

Directions to ranch headquarters from Highway 101:  
1. Take exit 642 for Redwood Drive toward Redway  
2. Continue onto Redwood Dr for 2 miles  
3. Turn right onto Briceland Rd and drive for 10 miles  
4. Turn slight right on Ettersburg Rd/Wilder Ridge Rd and drive for 15.8 miles  
5. Turn right on Stansberry Road and drive for 3.3 miles



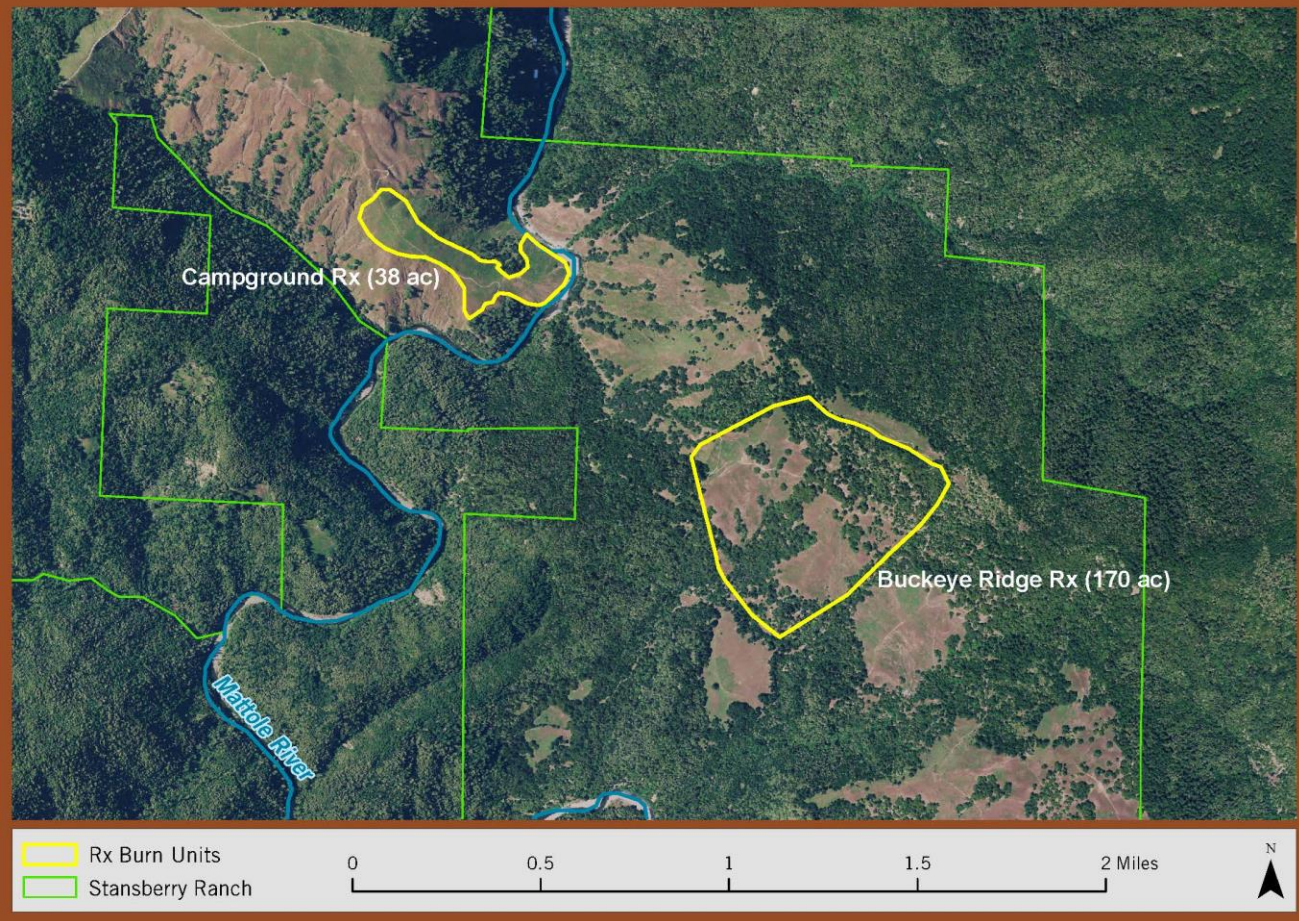
  Stansberry Ranch  
★ Ranch Headquarters  
  Fuel Break Treatment  
  LWD Treatment

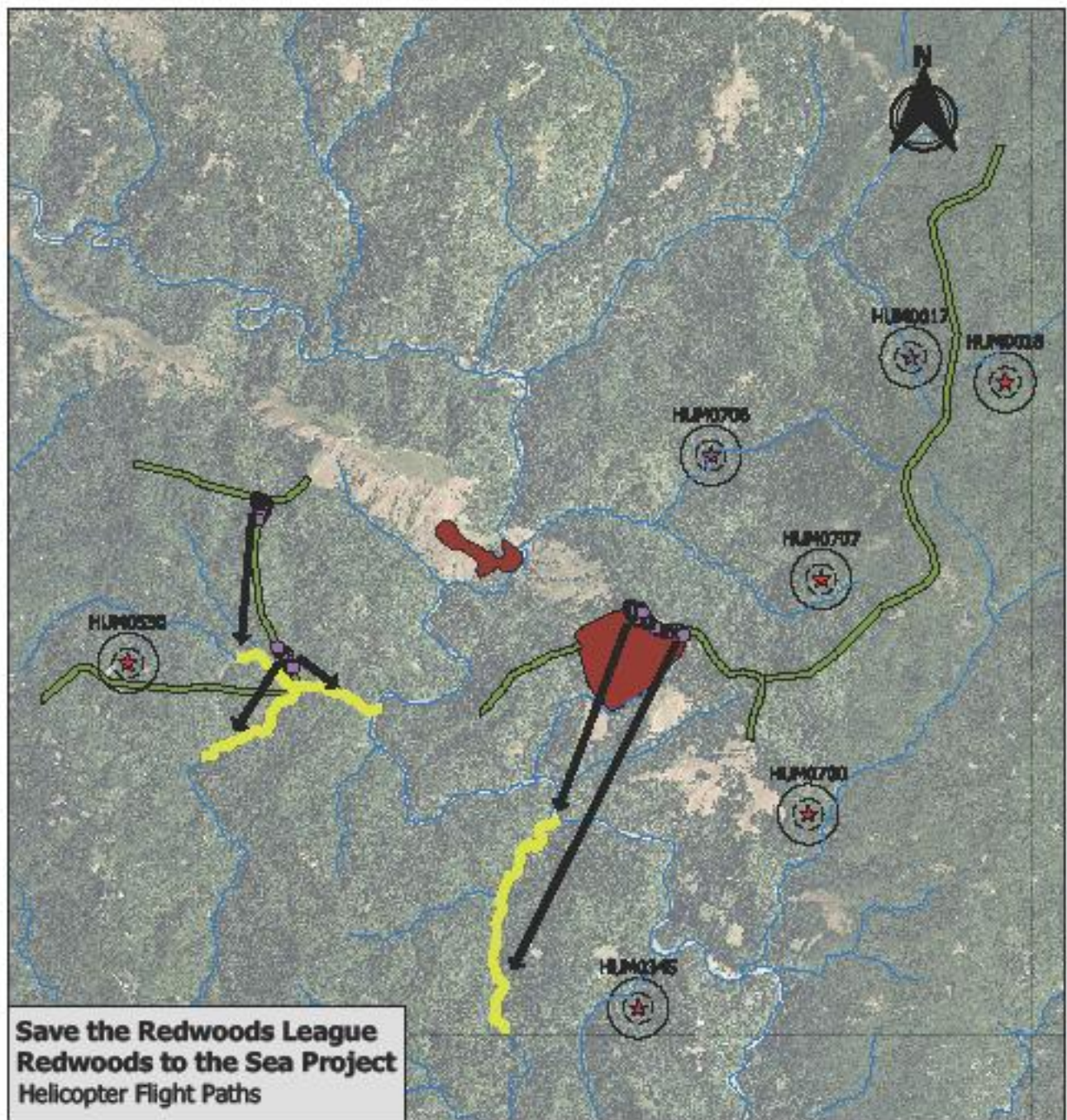
U.S.G.S. 7.5 Minute Topographical Map: Honeydew Quadrangle  
Section 08, 09, 16, 17, 20, 21 of T3S, R1E of Humboldt B&M  
Published Date: January 1, 1959



RX BURN UNITS - GGRF  
Corridor from the Redwoods to the Sea

*Save The Redwoods*  
L E A G U E





**Save the Redwoods League  
Redwoods to the Sea Project  
Helicopter Flight Paths**

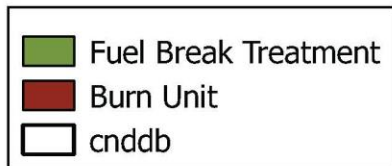
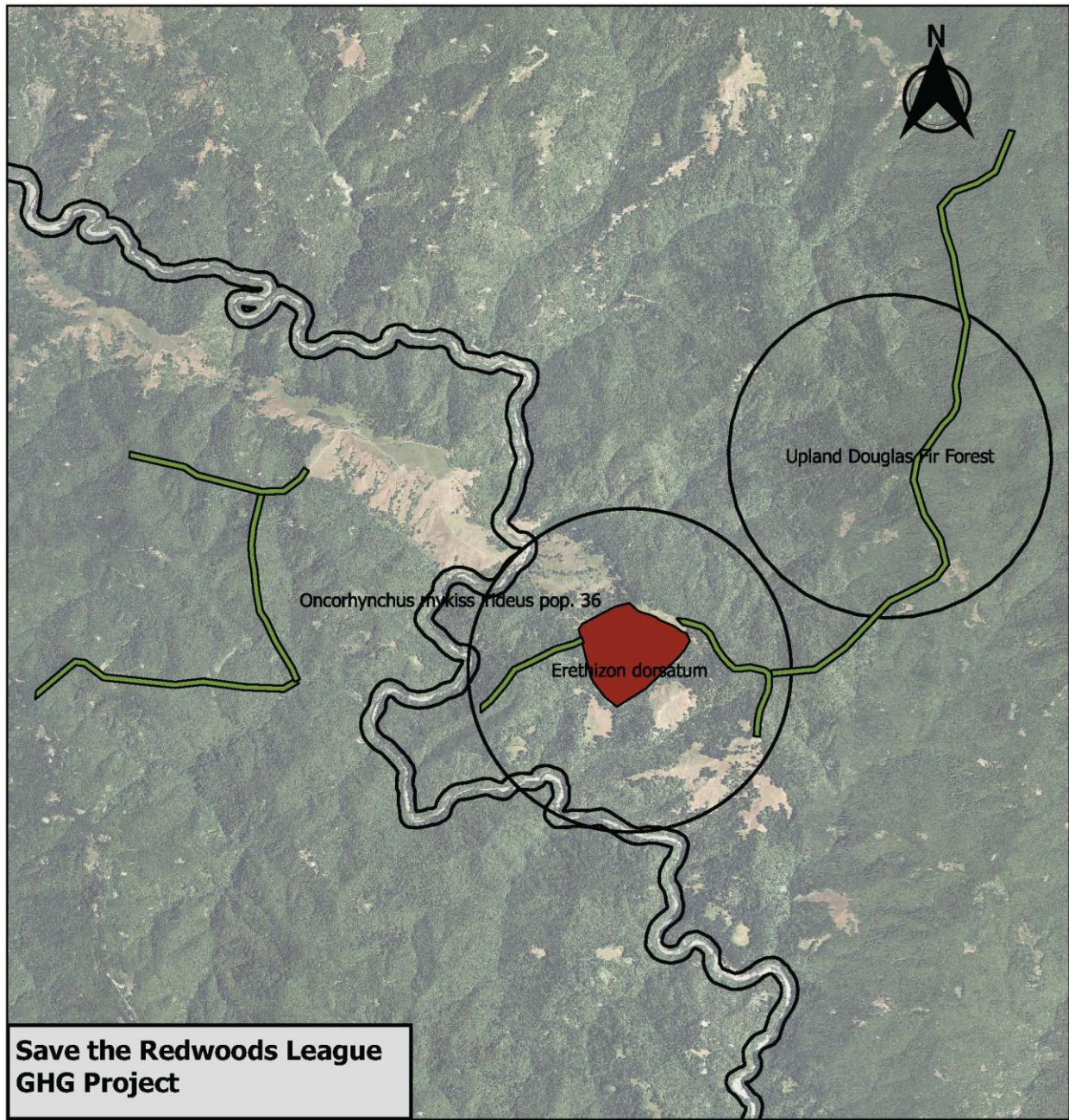
Sections 8,9,16,17,20,21 T3S R1E  
H.B.&M, Humboldt County, CA  
Honeydew USGS 7.5' Quad

0 2500 5000 7500 ft

**1:63000**

- |                       |                         |
|-----------------------|-------------------------|
| Fuels Break           | Helicopter Flight Paths |
| Burn Units            | NSO Activity Center     |
| Tree Source Locations | 500' Buffer             |
| Tree Placement Sites  | 1000' Buffer            |

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NAD 83

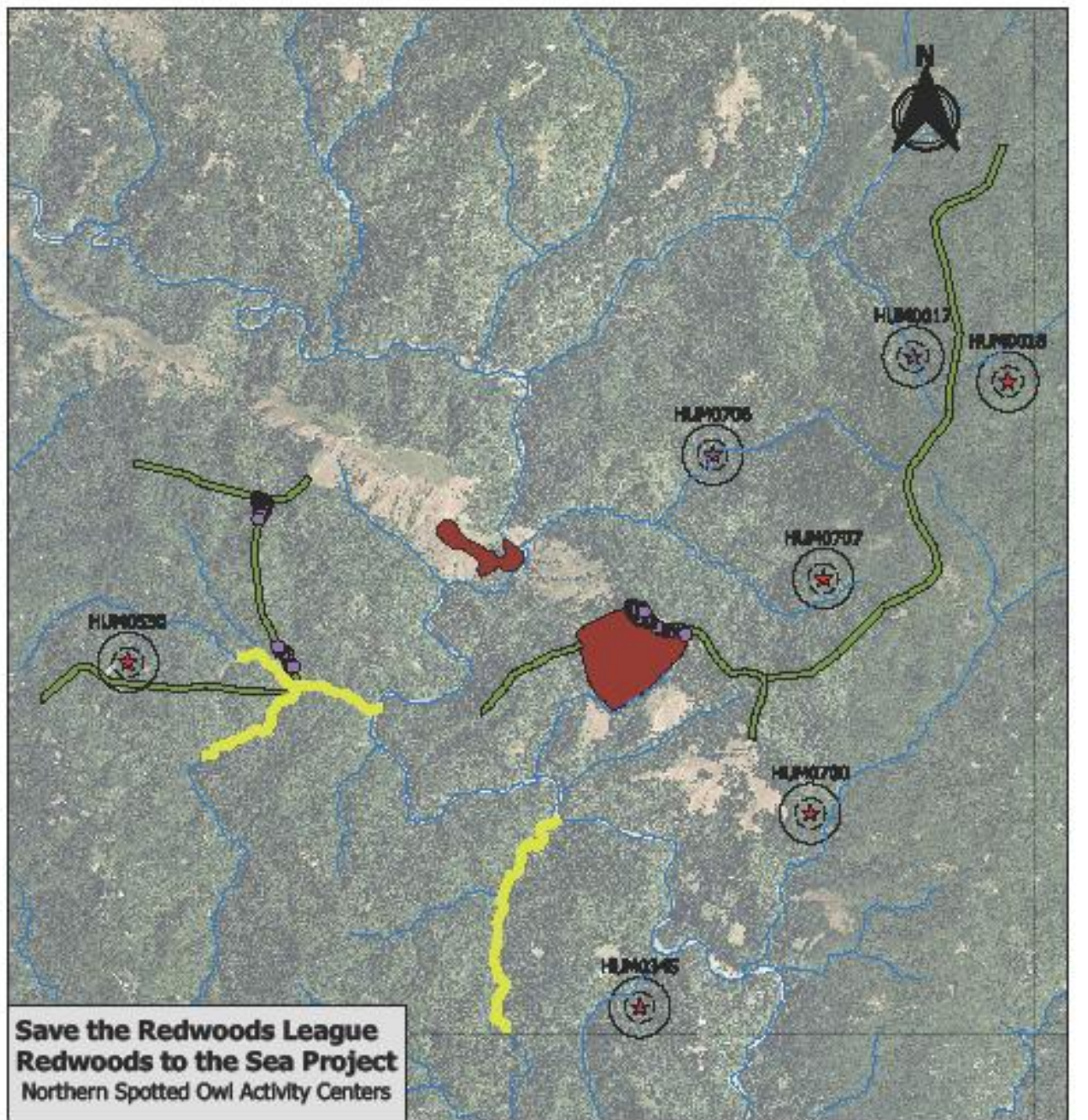


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Honeydew USGS 7.5' Quad

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Produced by: G. Renzullo  
5/29/2019  
NAD83

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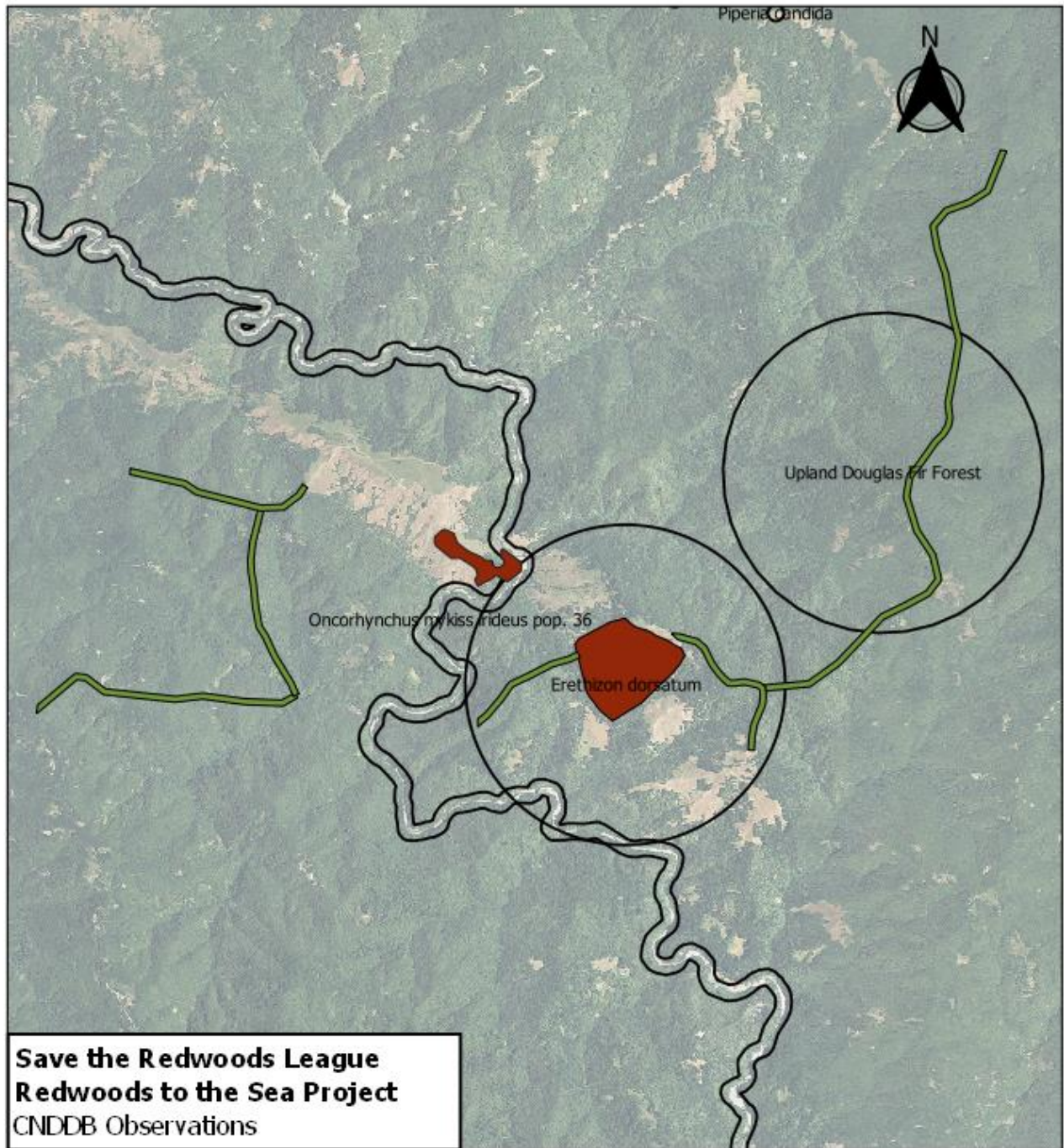
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H.B.&M, Humboldt County, CA  
Honeydew USGS 7.5' Quad

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- |                       |                     |
|-----------------------|---------------------|
| Fuels Break           | NSO Activity Center |
| Burn Units            | 500' Buffer         |
| Tree Placement        | 1000' Buffer        |
| Tree Source Locations |                     |

Produced By: BBW  
NAD 83



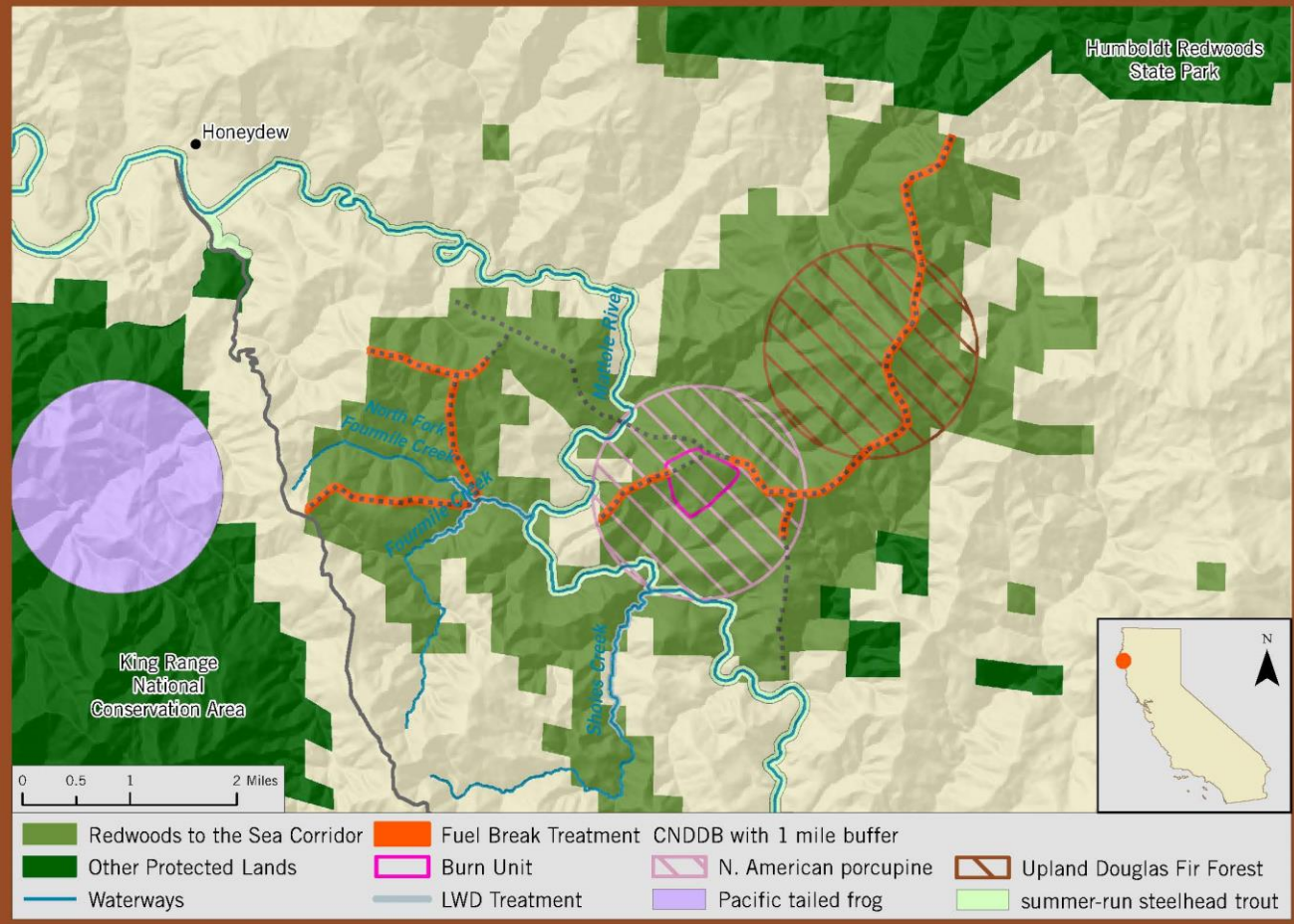
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H.B.&M, Humboldt County, CA  
Honeydew USGS 7.5' Quad

0 2500 5000 7500 ft

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- Fuel Break Treatment
- Burn Units
- CNDDDB Observations

Produced by: BBW  
NAD83

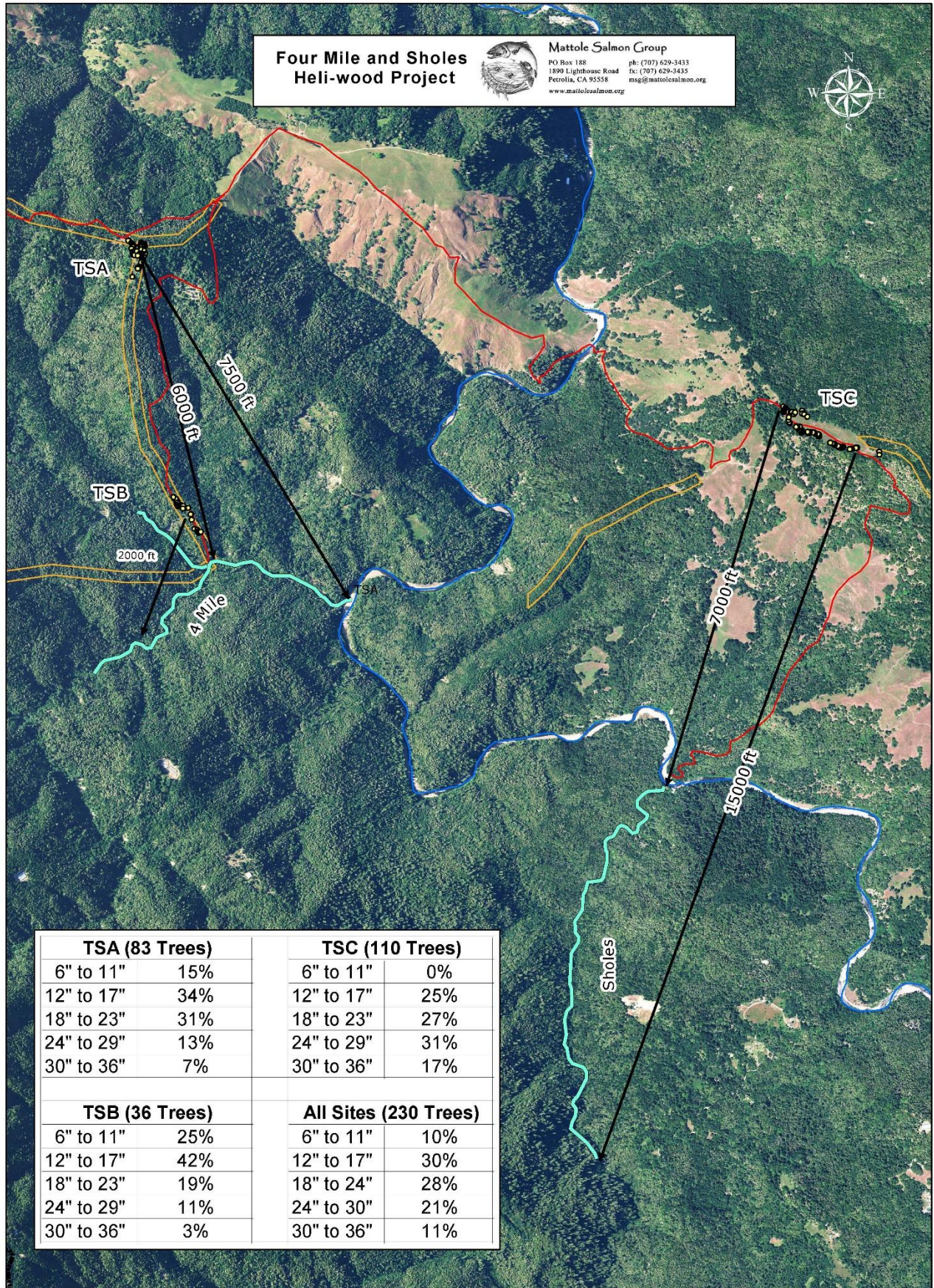


# Four Mile and Sholes Heli-wood Project



**Mattole Salmon Group**

PO Box 188 ph: (707) 629-3433  
1890 Lighthouse Road fx: (707) 629-3435  
Petrolia, CA 95558 ms@mattolesalmon.org  
www.mattolesalmon.org



TSA (83 Trees)		TSC (110 Trees)	
6" to 11"	15%	6" to 11"	0%
12" to 17"	34%	12" to 17"	25%
18" to 23"	31%	18" to 23"	27%
24" to 29"	13%	24" to 29"	31%
30" to 36"	7%	30" to 36"	17%
TSB (36 Trees)		All Sites (230 Trees)	
6" to 11"	25%	6" to 11"	10%
12" to 17"	42%	12" to 17"	30%
18" to 23"	19%	18" to 24"	28%
24" to 29"	11%	24" to 30"	21%
30" to 36"	3%	30" to 36"	11%

Native Ecosystems, Inc  
457 Conklin Creek Road  
Petrolia CA, 95558-0114  
707.629.3617 office  
406.546.2053 cell  
hugh@nat-eco.net

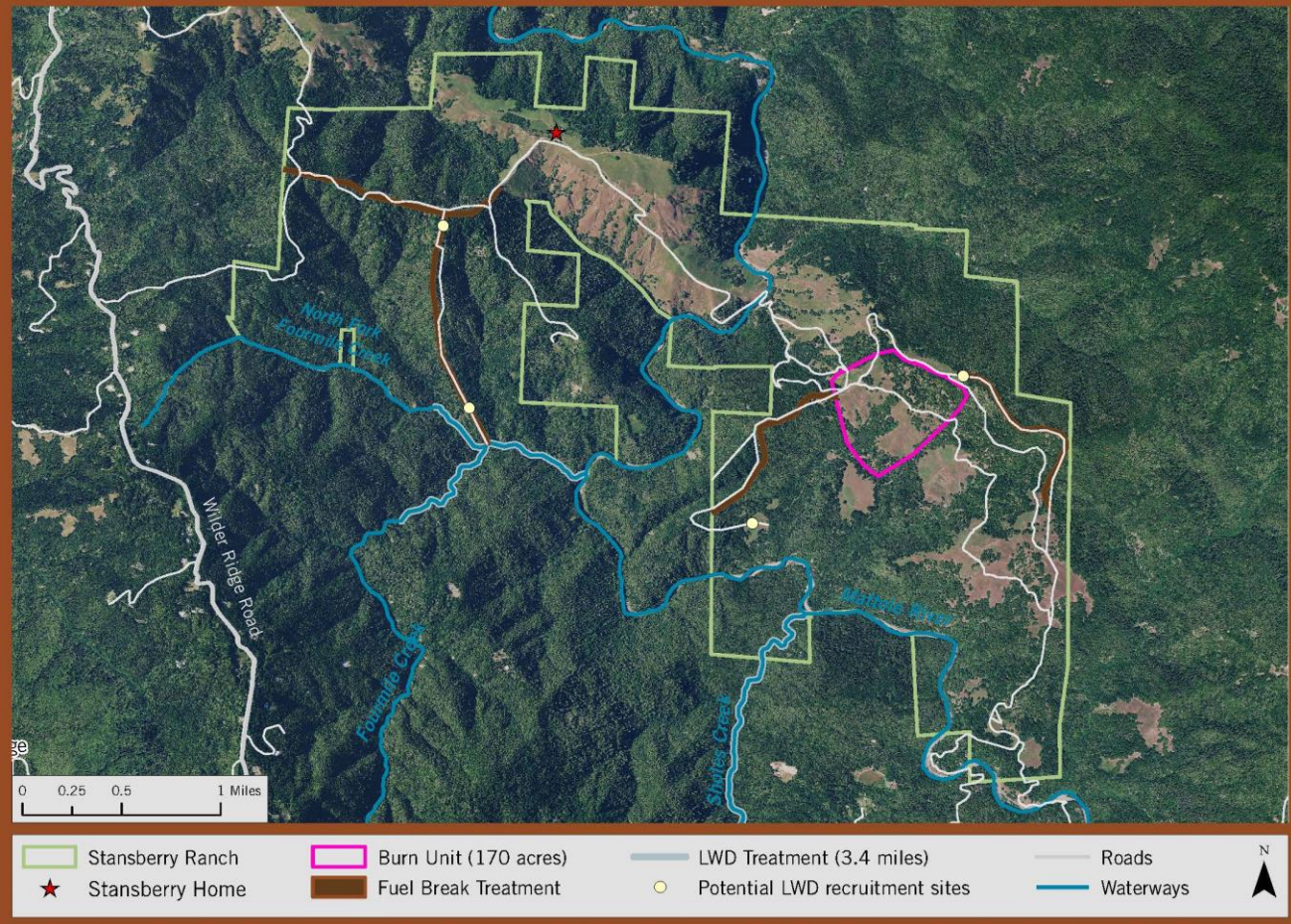
- Tree Sources Areas
- Access Roads
- Wood Placement Reach
- Mattole River
- Fuel Break

Four Mile Sholes Heliwood Project  
Client: Mattole Salmon Group  
Address: PO Box Petrolia, CA 95545

0 1,900 3,800 Feet

1 inch = 1,667 feet

Imagery: 2016 NAIP



### Project Area Photos



Helicopter landing location-area will be grazed prior. No site grading will occur.



Example of riparian-zone to receive LWD-Fourmile Creek



Fuelbreak road-Stansberry Ranch



Prescribed fire grassy area on Stansberry ranch