Chimney Rock Creek Upslope Watershed Restoration Project (Project ID: 1727863) 2022

Introduction:

Trout Unlimited, Inc. (Permittee) will reduce sediment delivery from a legacy (abandoned) riparian/inner gorge logging road system and normalize the lower hillslope hydrology along Chimney Rock Creek. The project is designed to reduce sediment delivery, restore hillslope hydrology, and protect/improve fish habitat, by treating 34 specific sediment source features and 2.3 mi of abandoned riparian road through permanent road decommissioning and sediment source treatments preventing approximately 11,721 yd³ from directly entering Chimney Rock Creek, while treating approximately 9 acres of upslope and streamside areas.

This project is necessary because excessive sediment inputs from legacy forest management practices continue to adversely impact the channel geomorphology and fish habitat of the Chimney Rock Creek watershed in the form of intermittent channel stored sediments (often associated with stream crossing failures and road related landslides) within the upper main stem and its tributaries, and high turbidity levels during wet weather conditions (NMFS, 2008; PWA, 2018). Furthermore, altered hillside hydrology, along with a major deficiency of large wood in most of the channel system, has led to oversimplified channel geometry and diminished fish habitat in mainstem reaches. By reducing both chronic and episodic sediment delivery to the stream system, and normalizing the hillside hydrology, this project will greatly accelerate the natural recovery of anadromous fish in the watershed.

The Permittee shall not proceed with on the ground implementation until all necessary permits, consultations, and/or Notice to Proceed are secured. All habitat improvement(s) will follow techniques in the *California Salmonid Stream Habitat Restoration Manual Volume I, Part VII* https://www.wildlife.ca.gov/Grants/FRGP/Guidance)

Does the project involve the construction of beaver analogs? Yes \square or No \boxtimes	
s the project located in a tidally influenced California coastal zone? Yes \square or No \boxtimes	

Objective(s):

The objective of this project is to treat 34 specific sediment source features by permanently decommissioning 2.3 miles of abandoned, legacy streamside and

riparian road, including 13 stream crossings and 20 road fill failure features, resulting in approximately 11,721 yd3 of sediment from entering Chimney Rock Creek.

Project Description:

Location:

The Chimney Rock Creek Watershed is located west of Leggett, CA in the Usal Creek Watershed. Chimney Rock Creek intersects North Fork Usal Creek approximately 5.4 miles upstream of its confluence with the Pacific Ocean. The project area encompasses the riparian road from the confluence of Chimney Rock Creek and Fork Usal Creek for approximately 2.3 miles (12,144 feet) upstream. The project is located in the Piercy USGS 24k Quadrangle map, Townships 23 and 24 North, Range 18 West, and Sections 3 and 34. Project coordinates are: 39.88412 north latitude, -123.84866° west longitude at the center of the project work reach on mainstem Chimney Rock Creek.

Project Set Up:

The Permittee Project Manager will provide all grant and contract oversight and administration tasks including but not limited to obtaining permits, securing contracts (e.g. Premitees, subcontractors, landowner, etc.), project scheduling, implementation oversight, invoicing, reporting, and agency and landowner communications and coordination. All reporting and billing will be pursuant to the grant and regulatory guidelines. Upon final execution of the grant and prior to receiving a Final Notice to Proceed, Project Manager will deliver the landowner access agreement, subcontracts, and assure all permits are finalized. This task will occur throughout the life of the project.

Tasks:

Task 1 Pre-Project Layout and Equipment Mobilization

Exclusionary fencing for salmonids and other aquatic species will be installed at the confluence of flowing tributaries to prevent upstream migration into the construction areas as deemed necessary by the grant manager, PWA NR Specialist, and the PWA Associate Scientist. This component of the project may require fish and amphibian exclusion and relocation. Following approval by CDFW of site-specific design plans, PWA will flag heavy equipment access routes, construction boundaries, equipment exclusion areas, and spoils disposal sites for biologic, wetland, or cultural resource protection, and LWD staging areas. PWA will also document the existing conditions a subset of stream crossings and setup photo point monitoring stations at the construction locations for final reporting. Pre-construction documentation and monitoring will be performed by PWA in a manner consistent with CDFW guidelines and requirements for projects of this type.

PWA will work with Joe C. Rice heavy equipment operators to reopen the proposed road and treatment sites for equipment access and decommissioning treatments. All treatment prescriptions proposed in the project follow guidelines in the "Handbook for Forest, Ranch, and Rural Roads" (Weaver et al., 2015), and the "California Salmonid Stream Habitat Restoration Manual, Chapters IX and X (CDFW, 1998; Weaver et al., 2006). All equipment, vehicles and materials used to implement this project will be cleaned and treated in accordance with the TU Aguatic Invasive Species Decontamination Plan included in the supplemental documents with this proposal. Personal field gear and heavy equipment working in or near a stream will be decontaminated as well. Several methods will be employed to avoid the spread of invasive species during the implementation of the project. During this phase of the project, a qualified Biologist from PWA (NR Specialist), in coordination with the CDFW Project Manager, will install exclusionary fencing and remove any aquatic species from wetted channels where prudent. Water quality parameters will be measured during this component of the project, if prudent, to assure protection of downstream resources

Task 2 – Project Construction

This task will be completed by Joe C. Rice with direct oversight from PWA staff. Low bed trucks will be used to move heavy equipment in and out of the project area at the beginning and end of the work season; these will require two pilot cars to move through the public road system. An excavator and bulldozer will be used to reopen the road proposed for decommissioning by removing the vegetation and developing temporary stream crossings at two locations along the lower access road. A gas-powered water pump will be used to divert flow and protect water quality during decommissioning of live stream crossings; these will be managed by a laborer. The excavator and bulldozer will be used to remove road fill material from the proposed stream crossing decommissioning features and other site-specific features specified for treatment. This equipment will be used to treat and restore all road surface drainage. A water truck will be used for achieving soil compaction at spoils piles and dust abatement to protect water quality and riparian vegetation. Laborers will be used to spread seed and straw, and plant trees at completed construction sites. In accordance with the TU invasive species protocol included in this proposal, all heavy equipment will be cleaned before and after entering/leaving the work area.

Task 3 Post Construction Surveys and Revegetation

Post-construction monitoring, including photographic monitoring and selected stream crossing profiles, will be performed by PWA consistent with CDFW guidelines. PWA will conduct post-decommissioning surveys on a subset of the stream crossings and reoccupy photo points to document pre- and post-treatment conditions at the feature locations. Woodbenders will complete planting activities during the winter immediately following construction as soon as conditions allow.

Deliverables:

Treatment of 34 specific sediment source features and permanent decommissioning of 2.3 miles of road including 13 stream crossings and 20 road fill failure features.

Summary of performance measures by site, First Winter Observation Summary, as-built road log, before and after photos, stream crossing profiles. Native seed distributed on bare areas, Approx 500 trees (Sequoia sempervirens) planted in disturbed areas.

Timelines:

Task 1 Pre-Project Layout and Equipment Mobilization May 1, 2023 to May 31, 2024

Task 2 – Project Construction June 15, 2024 to October 31, 2025

Task 3 Post Construction Surveys and Revegetation November 3, 2025 to January 15, 2027

Additional Requirements:

The Permittee will not proceed with on the ground implementation until all necessary permits and consultations are secured. Work in flowing streams is restricted per the United States Army Corp of Engineers (USACE) Regional General Permit. Actual project start and end dates, within this timeframe, are at the discretion of the California Department of Fish and Wildlife (CDFW).

No equipment maintenance will be performed within or near the stream channel where pollutants (such as petroleum products) from the equipment may enter the channel via rainfall or runoff. Appropriate spill containment devices (e.g., oil absorbent pads, tarpaulins) will be used when refueling equipment. All equipment will be removed from the streambed and flood plain areas at the end of each workday.

All equipment and gear will be brushed with a stiff brush prior to leaving each stretch of stream to avoid the transport of aquatic invasive species (AIS). When transporting traps out of the area, each numbered trap will be bagged in its own bag to avoid cross contamination during transport in and out of the work area. All crew members will decontaminate equipment and shoes for AIS according to the

standards detailed in the CDFW Aquatic Invasive Species Decontamination Protocol.

During project activities, all trash that may attract predators will be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.

All habitat improvements will follow techniques described in the *California Salmonids Stream Habitat Restoration Manual*, Volume I and Volume II.

The Permittee shall notify the CDFW a minimum of five working days before the project site is de-watered and the stream flow diverted. The notification will provide a reasonable time for CDFW personnel to oversee the implementation of the water diversion plan and the safe removal and relocation of salmonids and other fish life from the project area. If the project requires dewatering of the site, and the relocation of salmonids, the Permittee will implement the following measures to minimize harm and mortality to listed salmonids:

- a. Fish dewatering and relocation activities shall only occur between June 15 and October 31 of each year.
- b. Additional measures to minimize injury and mortality of salmonids during fish relocation and dewatering activities shall be implemented as described in Part IX, pages 52 and 53 of the *California Salmonid Stream Habitat Restoration Manual*.
- c. The Grantee shall minimize the amount of wetted stream channel dewatered at each individual project site to the fullest extent possible as approved by the CDFW Grant Manager and pursuant to conditions in the USACE Regional General Permit and National Marine Fisheries Service (NMFS) Biological Opinion.
- d. All electrofishing shall be performed by a qualified fisheries biologist and conducted according to the NMFS, Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act, June 2000.
- e. USFWS Approved fisheries biologists will provide fish relocation data via the Permittee to the CDFW personnel on a form provided by CDFW.

All road decommissioning will be done in accordance with techniques described in the Handbook for Forest and Ranch Roads, (PWA, 1994c.) and the *California Salmonid Stream Habitat Restoration Manual*, Volume II, Part X. All road upgrade and decommissioning sites and techniques shall be approved by the CDFW personnel before any equipment work takes place.

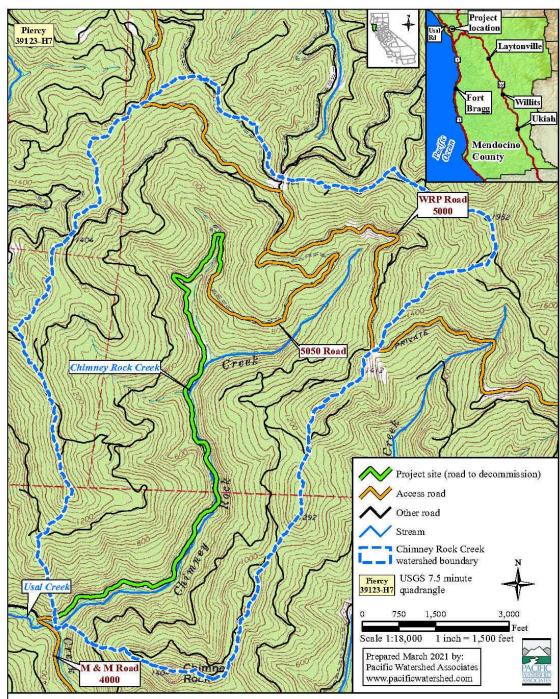
All crossings treated in fish bearing reaches of streams will follow the National Marine Fisheries Service (NMFS 2001) Guidelines for Salmonid Passage at Stream Crossings and the criteria for adult and juvenile salmonid fish passage as described in Volume II, Part IX of the *California Salmonid Stream Habitat*

Restoration Manual.

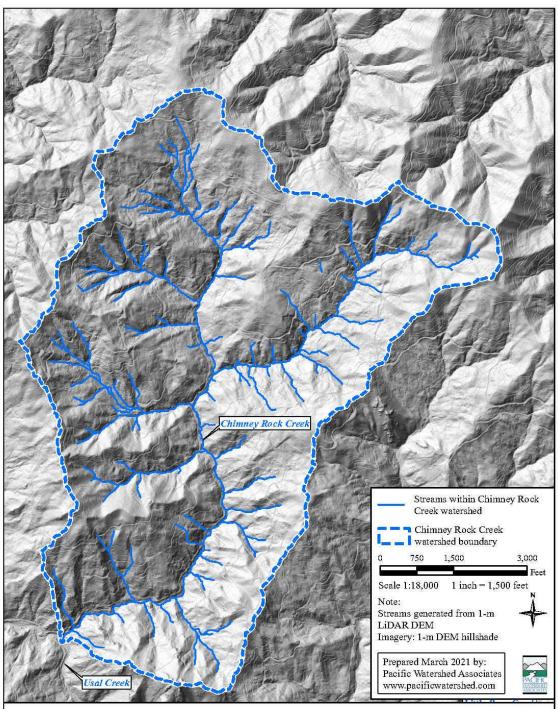
Seeding and mulching of all exposed soils shall be done for all slopes which may deliver sediment to a stream. Woody debris will be concentrated on finished slopes adjacent to stream crossings. The standard for success is 80% ground cover for broadcast planting of seed, after a period of three years. Mulching and seeding will take place as sites are completed to avoid unforeseen erosion. Planting of tree seedlings will take place after December 1 or when sufficient rainfall has occurred to insure the best chance of survival of the seedlings.

Sites that are expected to erode and deliver sediment to the stream are the only locations where work will be authorized for reimbursement under the terms of this agreement. Reimbursement will not be authorized for work done to improve aesthetics only.

The landowner or responsible party must sign an access agreement stating they agree to maintain the erosion control project for a period of not less than 10 years. Maintenance will consist of repair to the road or stream crossing to a level that will effectively reduce sediment from entering the stream. In the event of an act of nature which results in partial or complete failure of the project, the landowner or applicant will not be held responsible for costs incurred after the act of nature. Acts of nature include, but are not limited to floods, earthquakes, volcanic eruptions, and windstorms.



Map 1. Project location topographic map for the Chimney Rock Creek Upslope Watershed Restoration Project, Mendocino County, California. (Piercy USGS 7.5' topographic quadrangle)
Grantee/Applicant: Trout Unlimited



Map 2. Watershed map for the Chimney Rock Creek Upslope Watershed Restoration Project, Mendocino County, California. Grantee/Applicant: Trout Unlimited

CALIFORNIA DEPARTMENT OF

RareFind FISH and WILDLIFE

Query Summary:
Quad IS (Piercy (3912387) OR Bear Harbor (3912388) OR Noble Butte (3912386) OR Mistake Point (3912378) OR Hales Grove (3912377) OR Leggett (3912376) OR Briceland (4012318) OR Garberville (4012317) OR Harris (4012316))

	CNDDB Element Query Results											
Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Accipiter cooperii	Cooper's hawk	Birds	ABNKC12040	118	1	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC- Least Concern	Cismontane woodland, Riparian forest, Riparian woodland, Upper montane coniferous fores
Accipiter gentilis	northern goshawk	Birds	ABNKC12060	433	1	None	None	G5	S3	null	BLM_S-Sensitive, CDF_S-Sensitive, CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern, USFS_S-Sensitive	North coast coniferous forest, Subalpine coniferous forest, Upper montane coniferous fores
Anodonta californiensis	California floater	Mollusks	IMBIV04220	6	1	None	None	G3Q	S2?	null	USFS_S-Sensitive	Aquatic
Antrozous pallidus	pallid bat	Mammals	AMACC10010	420	2	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
Arabis mcdonaldiana	McDonald's rockcress	Dicots	PDBRA06150	27	5	Endangered	Endangered	G3	S3	1B.1	SB_BerrySB-Berry Seed Bank, SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden	Lower montane coniferous forest, Ultramafic, Upper montane coniferous forest
Arborimus pomo	Sonoma tree vole	Mammals	AMAFF23030	222	6	None	None	G3	S3	null	CDFW_SSC- Species of Special Concern, IUCN_NT- Near Threatened	North coast coniferous forest, Oldgrowth, Redwood
Arctostaphylos stanfordiana ssp. raichei	Raiche's manzanita	Dicots	PDERI041G2	13	2	None	None	G3T2	S2	1B.1	BLM_S-Sensitive, SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden, SB_USDA- US Dept of Agriculture	Chaparral, Lower montane coniferous forest, Ultramafic
Ascaphus truei	Pacific tailed frog	Amphibians	AAABA01010	491	10	None	None	G4	S3S4	null	CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern	Aquatic, Klamath/North coast flowing waters, Lower montane coniferous forest, North coast coniferous forest, Redwood, Riparian forest
Astragalus agnicidus	Humboldt County milk- vetch	Dicots	PDFAB0F080	69	7	None	Endangered	G2	S2	1B.1	SB_BerrySB-Berry Seed Bank, SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, North coast coniferous fores
Bombus caliginosus	obscure bumble bee	Insects	IIHYM24380	181	4	None	None	G2G3	S1S2	null	IUCN_VU- Vulnerable	null

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Bombus occidentalis	western bumble bee	Insects	IIHYM24250	306	6	None	None	G2G3	S1	null	USFS_S-Sensitive	null
Calamagrostis foliosa	leafy reed grass	Monocots	PMPOA170C0	22	2	None	Rare	G3	S3	4.2	null	Coastal bluff scrub, North coast coniferous forest
Cardamine angulata	seaside bittercress	Dicots	PDBRA0K010	38	1	None	None	G4G5	S3	2B.1	null	Lower montane coniferous forest, North coast coniferous forest, Wetland
Carex arcta	northern clustered sedge	Monocots	PMCYP030X0	13	1	None	None	G5	S1	2B.2	IUCN_LC-Least Concern	Bog & fen, Nort coast coniferous forest, Wetland
Castilleja litoralis	Oregon coast paintbrush	Dicots	PDSCR0D012	44	7	None	None	G3	S3	2B.2	null	Coastal bluff scrub, Coastal dunes, Coastal scrub
Castilleja mendocinensis	Mendocino Coast paintbrush	Dicots	PDSCR0D3N0	52	2	None	None	G2	S2	1B.2	BLM_S-Sensitive	Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub
Ceanothus foliosus var. vineatus	Vine Hill ceanothus	Dicots	PDRHA040D6	6	1	None	None	G3T1	S1	1B.1	null	Chaparral
Clarkia amoena ssp. whitneyi	Whitney's farewell-to- spring	Dicots	PDONA05025	8	1	None	None	G5T1	S1	1B.1	SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Coastal bluff scrub, Coastal scrub
Coptis laciniata	Oregon goldthread	Dicots	PDRAN0A020	122	3	None	None	G4?	S3?	4.2	null	Meadow & seep North coast coniferous forest, Wetland
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	635	3	None	None	G4	S2	null	BLM_S-Sensitive, CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean deser scrub, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1404	3	None	None	G3G4	\$3	null	BLM_S-Sensitive, CDFW_SSC- Species of Special Concern, IUCN_VU- Vulnerable, USFS_S-Sensitive	Aquatic, Artificia flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/Sa Joaquin flowing waters, Sacramento/Sa Joaquin standing waters South coast flowing waters, South coast flowing waters, South coast standing waters Wetland
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												coniferous forest, Lower montane coniferous forest, North coast coniferous forest, Upper montane coniferous forest
Eriogonum kelloggii	Kellogg's buckwheat	Dicots	PDPGN083A0	7	7	None	Endangered	G2	S2	1B.2	BLM_S-Sensitive	Lower montane coniferous forest, Ultramafic
Erythronium revolutum	coast fawn lily	Monocots	PMLIL0U0F0	172	4	None	None	G4G5	S3	2B.2	null	Bog & fen, Broadleaved upland forest, North coast coniferous forest, Wetland
Eumetopias jubatus	Steller sea lion	Mammals	AMAJC03010	38	2	Delisted	None	G3	S2	null	IUCN_EN- Endangered, MMC_SSC-Species of Special Concern	Marine intertidal & splash zone communities, Protected deepwater coastal communities, Rock shore
Gentiana setigera	Mendocino gentian	Dicots	PDGEN060S0	11	1	None	None	G2	S2	1B.2	BLM_S-Sensitive, USFS_S-Sensitive	Lower montane coniferous forest, Meadow & seep, Ultramafic, Wetland
Gilia capitata ssp. pacifica	Pacific gilia	Dicots	PDPLM040B6	91	1	None	None	G5T3	S2	1B.2	null	Chaparral, Coastal bluff scrub, Coastal prairie, Valley & foothill grassland
Hesperocyparis pygmaea	pygmy cypress	Gymnosperms	PGCUP04032	37	1	None	None	G1	S1	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden	Closed-cone coniferous forest
Horkelia marinensis	Point Reyes horkelia	Dicots	PDROS0W0B0	36	1	None	None	G2	S2	1B.2	null	Coastal dunes, Coastal prairie, Coastal scrub
Margaritifera falcata	western pearlshell	Mollusks	IMBIV27020	78	2	None	None	G4G5	S1S2	null	null	Aquatic
Mitellastra caulescens	leafy- stemmed mitrewort	Dicots	PDSAX0N020	21	2	None	None	G5	S4	4.2	null	Broadleaved upland forest, Lower montane coniferous forest, Meadow & seep, North coast coniferous forest
Montia howellii	Howell's montia	Dicots	PDPOR05070	123	2	None	None	G3G4	S2	2B.2	null	Meadow & seep, North coast coniferous forest, Vernal pool, Wetland
Myotis evotis	long-eared myotis	Mammals	AMACC01070	139	1	None	None	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_M-Medium Priority	null
Myotis thysanodes	fringed myotis	Mammals	AMACC01090	86	1	None	None	G4	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern, USFS_S- Sensitive, WBWG_H-High Priority	null
Myotis yumanensis	Yuma myotis	Mammals	AMACC01020	265	1	None	None	G5	S4	null	BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_LM-Low- Medium Priority	Lower montane coniferous forest, Riparian forest, Riparian woodland, Upper montane coniferous forest
Northern Interior Cypress Forest	Northern Interior Cypress Forest	Forest	CTT83220CA	22	1	None	None	G2	S2.2	null	null	Closed-cone coniferous forest
Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon /	Fish	AFCHA02032	10	3	Threatened	Threatened	G5T2Q	S2	null	AFS_TH- Threatened	Aquatic, Klamath/North coast flowing

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	northern California ESU											waters, Sacramento/San Joaquin flowing waters
Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	Fish	AFCHA0213B	20	1	None	Candidate Endangered	G5T4Q	S2	null	CDFW_SSC- Species of Special Concern	Aquatic, Klamath/North coast flowing waters, Sacramento/San Joaquin flowing waters
Pandion haliaetus	osprey	Birds	ABNKC01010	504	2	None	None	G5	S4	null	CDF_S-Sensitive, CDFW_WL-Watch List, IUCN_LC- Least Concern	Riparian forest
Pekania pennanti	Fisher	Mammals	AMAJF01020	555	3	None	None	G5	S2S3	null	BLM_S-Sensitive, CDFW_SSC- Species of Special Concern, USFS_S- Sensitive	North coast coniferous forest, Oldgrowth, Riparian forest
Piperia candida	white- flowered rein orchid	Monocots	PMORC1X050	222	42	None	None	G3?	S3	1B.2	null	Broadleaved upland forest, Lower montane coniferous forest, North coast coniferous forest, Ultramafic
Rana aurora	northern red- legged frog	Amphibians	AAABH01021	292	2	None	None	G4	S3	null	CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern, USFS_S-Sensitive	Klamath/North coast flowing waters, Riparian forest, Riparian woodland
Rana boylii	foothill yellow- legged frog	Amphibians	AAABH01050	2478	43	None	Endangered	G3	S 3	null	BLM_S-Sensitive, CDFW_SSC- Species of Special Concern, IUCN_NT- Near Threatened, USFS_S-Sensitive	Aquatic, Chaparral, Cismontane woodland, Coastal scrub, Klamath/North coast flowing waters, Lower montane coniferous forest, Meadow & seep, Riparian forest, Riparian woodland, Sacramento/San Joaquin flowing waters
Rhyacotriton variegatus	southern torrent salamander	Amphibians	AAAAJ01020	416	14	None	None	G3G4	S2S3	null	CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern, USFS_S-Sensitive	Lower montane coniferous forest, Oldgrowth, Redwood, Riparian forest
Sedum eastwoodiae	Red Mountain stonecrop	Dicots	PDCRA0A0L1	6	6	None	None	G5T2	S2	1B.2	BLM_S-Sensitive	Lower montane coniferous forest, Ultramafic
Sidalcea malachroides	maple-leaved checkerbloom	Dicots	PDMAL110E0	136	3	None	None	G3	S3	4.2	null	Broadleaved upland forest, Coastal prairie, Coastal scrub, North coast coniferous forest, Riparian forest
Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	Dicots	PDMAL110F9	60	2	None	None	G5T2	S2	1B.2	null	Coastal bluff scrub, Coastal prairie, North coast coniferous forest
Silene greenei ssp. angustifolia	Red Mountain catchfly	Dicots	PDCAR0U0A2	8	8	None	Endangered	G5T1	S1	1B.2	BLM_S-Sensitive	Chaparral, Lower montane coniferous forest, Ultramafic
Taricha rivularis	red-bellied newt	Amphibians	AAAAF02020	136	6	None	None	G2	S2	null	CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern	Broadleaved upland forest, North coast coniferous forest, Redwood, Riparian forest, Riparian woodland
Thermopsis	robust false	Dicots	PDFAB3Z0D0	104	2	None	None	G2	S2	1B.2	USFS_S-Sensitive	Broadleaved

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rob	ousta	lupine											upland forest, North coast coniferous forest, Ultramafic
Do	land uglas Fir rest	Upland Douglas Fir Forest	Forest	CTT82420CA	15	2	None	None	G4	S3.1	null	null	North coast coniferous forest
1 -	nea gissima	Methuselah's beard lichen	Lichens	NLLEC5P420	206	16	None	None	G4	S4	4.2	BLM_S-Sensitive	Broadleaved upland forest, North coast coniferous forest, Oldgrowth, Redwood
	ournum pticum	oval-leaved viburnum	Dicots	PDCPR07080	39	2	None	None	G4G5	S3?	2B.3	null	Chaparral, Cismontane woodland, Lower montane