

Robinson Creek Instream Habitat Enhancement (Project ID: 1727801) 2022

Introduction:

The Permittee will address forest legacy impacts by installing 38 instream features, containing 106 (49 key) pieces of properly sized large wood (LW) throughout 1.72 miles (9,100 feet) of Robinson Creek. The project will increase habitat complexity, pool frequency, pool depth, high-flow refugia, and over-summer rearing habitat. These structures will be used to create habitat diversity and flow complexity for Coho Salmon, steelhead trout, and Chinook Salmon to improve both summer and winter rearing conditions. Currently the project reach has 0 key pieces. This project will bring the key piece count to a "Good" rating for quantity of wood in the project reach, as outlined in the NOAA Fisheries Final Recovery Plan for Central California Coast Coho Salmon Evolutionarily Significant Unit with at least 1.8 key pieces per 100 M. Additionally, 57 non-key pieces will be added, of which 77% will have rootwads attached. All non-key pieces shall be 22 feet or greater in diameter and 33 or greater in length where feasible.

This project is necessary due to decades of forest legacy impacts from historic timber practices and stream clearing efforts in the 1960s-1980s that left the watershed lacking in adequate salmonid habitat complexity. The addition of LW will promote pool formation by increasing scour and sorting gravels. Instream LW will rack and retain existing large and small woody materials further enhancing instream shelter and habitat complexity while also providing velocity refugia during peak winter flows, increasing retention of summer flows, and sorting of spawning sized gravels.

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, Section VII).

Does the project involve the construction of beaver analogs?

Yes or No

Is the project located in a tidally influenced [California coastal zone](#)?

Yes or No

Objective(s):

This project will increase stream habitat complexity, pool frequency, pool depth, high-flow refugia, and over-summer rearing habitat for Coho Salmon and

steelhead trout. To increase spawning habitat, 106 project pieces of large woody debris will be placed at 38 features.

Project Description:

Location:

The project is located along a section of Robinson creek, in the northfork sub-basin, located in the county of Mendocino, State of California. The downstream end of the project reach is approximately 2,270 feet upstream of the confluence with North Fork Big River. The project reach extends 9,100 feet upstream. The center point for the project reach is 38.845041 ° north latitude and -123.392021° west longitude; Township 12 North, Range 14 West, and Section 35 and 36 on the McGuire Ridge 7.5 Minute U.S. Geological Survey (USGS) Quadrangle map.

Project Set Up:

The Permittee Program Manager and Forester will provide all grant and contract oversight and administration tasks including obtaining permits, securing contracts, scheduling, implementation oversight, agency communications, reporting and invoicing. The BWM Project Manager and BWM Technician will assist with final reporting tasks.

Subcontractor: Humboldt State University, Cultural Resource Facility (HSU CRF): HSU CRF will complete CEQA assessments and reports required for this project, including cultural resource investigations, records searches, tribal consultations, paleontological investigation and summary reports. The HSU CRF Botanist will complete a floristic survey, CNDDDB records search, and botanical resources reports. A biologist will be available to conduct Foothill Yellow Legged Frog and/or California Red Legged Frog initial surveys and on-site monitoring work.

Blencowe Watershed Management (BWM). The BWM Project Manager and BWM Technician will complete final site layout prior to construction. Pre-construction surveys to be completed include: Upstream and downstream photo points taken at all project features, conduct Modified Level II DFW habitat typing survey of individual habitat units where features are to be installed at an existing pool or if pool is expected to be formed. Complete a representative pre/post project implementation longitudinal profile approximately 1200-1400 feet. Install at least one cross-section at representative feature location.

BWM Project Manager and Technician will direct the installation of at least 106 pieces of large wood throughout the project reach. BWM Chainsaw Operator will complete all falling/chainsaw activities. A subcontracted Excavator will be provided as partner cost-share from Andrei Karkar (neighboring property owner) for loading and unloading logs and implementing features on the Karkar property.

Post-Construction Surveys: Post-construction surveys to be completed include: Revisit/reconduct longitudinal profile reach and all cross-sections. Post implementation photo point monitoring and wood quantification. Tag all project wood for future monitoring/log tracking. Documentation of as-built feature conditions.

Materials:

106 pieces of large wood for implementation of LW features.

Straw for erosion control

Personal protective equipment (PPE) earplugs and gloves. Used to prevent and/or treat personal injuries.

Metal tags, nails, braided metal choker, 1 inch all thread for bolting LW, flat washers, nylock nuts. These materials are essential for setting logs and LW anchoring operations.

Tasks:

Task 1 - Pre-Implementation Survey and Design

Following CDFW notice to proceed, BWM will complete final site layout and flagging of access routes. Pre-implementation surveys will be completed. Final feature locations and designs will be prepared if stream channel conditions have changed, and applicable metrics will be collected

Task 2 - Implementation

Upon approval from the CDFW Project Manager, construction will begin on 38 LW features under the direction of the BWM Project Manager and Technician. At least 106 pieces of large wood will be installed throughout the project reach. The BWM Chainsaw Operator will complete all falling/chainsaw activities. A subcontracted tracked full sized excavator (sub equipment 1 in BWM budget) will be used for digging up trees with rootwads and wood placement. A BWM rubber-tired skidder will be used for wood placement, including winching, and log skidding to feature location. A subcontracted tracked bulldozer (D-6 or smaller) (sub equipment 2 in BWM budget) will be used for skidding to feature location (primarily key pieces with rootwads). A subcontracted low boy truck and trailer (sub trucking logs in BWM budget) will be used for moving key pieces with rootwads short distances from where they are generated on TCF lands to actual feature location. A subcontracted Excavator will be provided as partner cost-share from Andrei Karkar for loading and unloading logs that are generated on TCF lands and for implementing the features on the Karkar stream reach.

Task 3 - Post-Implementation Surveys

Following implementation BWM will conduct post-construction surveys, including photographic monitoring, wood inventory and tagging, documentation of as-built conditions, cross- sections, and post-project longitudinal profile assessments. and First Winter Observations Summary survey work, as stated in the FRGP PSN

Deliverables:

Construction of 38 features with at least 106 pieces of large wood in Robinson creek

Timelines:

Task 1 – Pre-Implementation Survey and Design: June 2, 2023 to July 1, 2025

Task 2 – Implementation: July 10, 2023 to October 31, 2025

Task 3– Post Implementation Surveys: November 1, 2024 to February 15, 2026

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 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.

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. Any and 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.

Final structure design and placement will be determined by field consultation between the Permittee staff and the CDFW Project Manager.

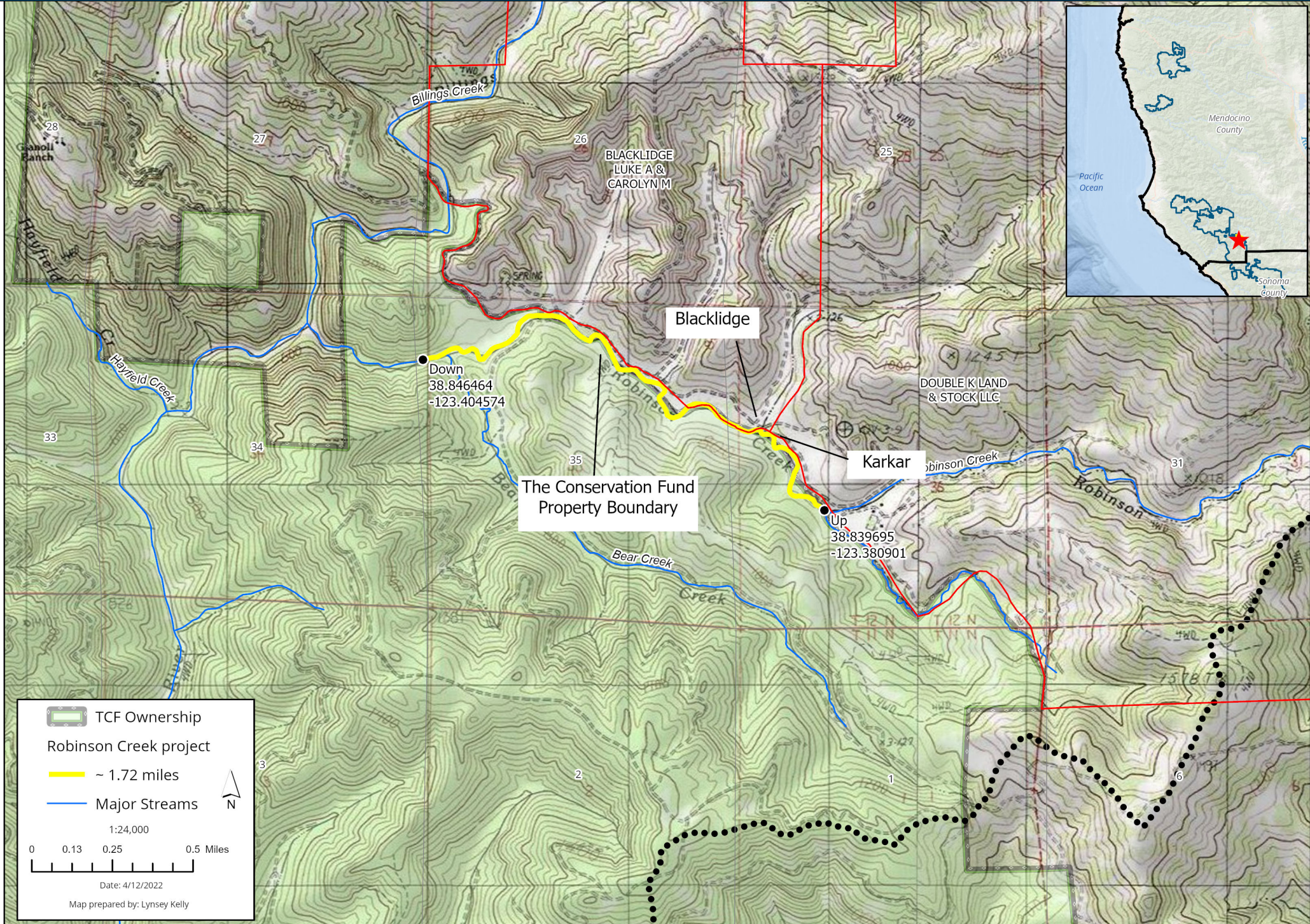
All habitat improvements will follow techniques described in the *California Salmonid Stream Habitat Restoration Manual*, Volume I and Volume II.

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.

Robinson Creek Instream Habitat Enhancement McGuire Ridge Quadrangle USGS Topographic Map

THE
CONSERVATION FUND



The Conservation Fund
Property Boundary


Blacklidge

Karkar


DOUBLE K LAND
& STOCK LLC


Down
38.846464
-123.404574


Up
38.839695
-123.380901

 TCF Ownership

Robinson Creek project

 ~ 1.72 miles

 Major Streams

 N

1:24,000

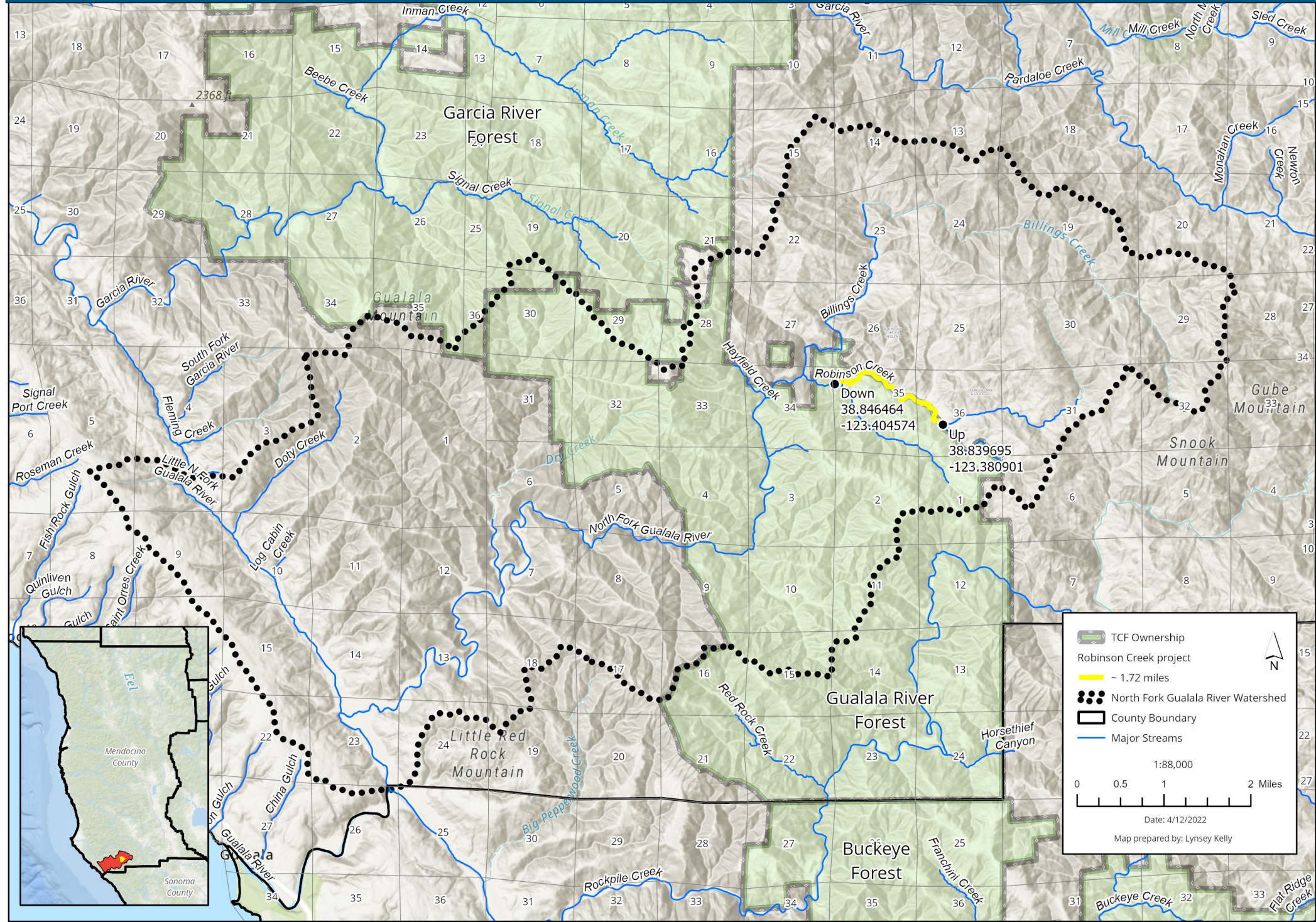
0 0.13 0.25 0.5 Miles

Date: 4/12/2022

Map prepared by: Lynsey Kelly

Robinson Creek Instream Habitat Enhancement North Fork Gualala River - Mendocino County

THE
CONSERVATION FUND



CALIFORNIA DEPARTMENT OF
FISH and WILDLIFE RareFind

Query Summary:

Quad IS (McGuire Ridge (3812374) OR Gualala (3812375) OR Gube Mountain (3812373) OR Eureka Hill (3812385) OR Zeni Ridge (3812384) OR Ormbaun Valley (3812383)
 OR Stewarts Point (3812364) OR Annapolis (3812363))

Print

Close

CNDDDB 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 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 forest
Agrostis blasdalei	Blasdale's bent grass	Monocots	PMPOA04060	62	6	None	None	G2G3	S2	1B.2	BLM_S-Sensitive, SB_UCSC-JC Santa Cruz	Coastal bluff scrub, Coastal dunes, Coastal prairie
Ammodramus savannarum	grasshopper sparrow	Birds	ABPBXA0020	27	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Valley & foothill grassland
Arborimus pomo	Sonoma tree vole	Mammals	AMAFF23030	222	29	None	None	G3	S3	null	CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	North coast coniferous forest, Oldgrowth, Redwood
Ascaphus truei	Pacific tailed frog	Amphibians	AAABA01010	491	5	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	4	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 forest
Bombus caliginosus	obscure bumble bee	Insects	IIHYM24380	181	4	None	None	G2G3	S1S2	null	IUCN_VU-Vulnerable	null
Brachyramphus marmoratus	marbled murrelet	Birds	ABNNN06010	110	1	Threatened	Endangered	G3	S2	null	CDF_S-Sensitive, IUCN_EN-Endangered, NABCI_RWL-Red Watch List	Lower montane coniferous forest, Oldgrowth, Redwood
Brasenia schreberi	watershield	Dicots	PDCAB01010	43	1	None	None	G5	S3	2B.3	IUCN_LC-Least Concern	Marsh & swamp, Wetland
Calystegia purpurata ssp. saxicola	coastal bluff morning-glory	Dicots	PDCON040D2	42	8	None	None	G4T2T3	S2S3	1B.2	BLM_S-Sensitive	Coastal bluff scrub, Coastal dunes, Coastal scrub, North coast coniferous forest
Campanula californica	swamp harebell	Dicots	PDCAM02060	155	48	None	None	G3	S3	1B.2	BLM_S-Sensitive	Bog & fen, Closed-cone coniferous forest, Coastal prairie, Marsh & swamp, Meadow & seep, North coast coniferous forest, Wetland
Carex californica	California sedge	Monocots	PMCYP032D0	41	7	None	None	G5	S2	2B.2	null	Bog & fen, Closed-cone coniferous forest, Coastal prairie, Freshwater marsh, Marsh & swamp,

												Meadow & seep, Wetland
Carex saliniformis	deceiving sedge	Monocots	PMCYP03BY0	18	3	None	None	G2	S2	1B.2	null	Coastal prairie, Coastal scrub, Marsh & swamp, Meadow & seep, Wetland
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
Cerorhinca monocerata	rhinoceros auklet	Birds	ABNNN11010	10	2	None	None	G5	S3	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	null
Coastal Brackish Marsh	Coastal Brackish Marsh	Marsh	CTT52200CA	30	1	None	None	G2	S2.1	null	null	Marsh & swamp, Wetland
Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	Marsh	CTT52410CA	60	1	None	None	G3	S2.1	null	null	Marsh & swamp, Wetland
Coptis laciniata	Oregon goldthread	Dicots	PDRAN0A020	122	1	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 desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland
Cuscuta pacifica var. papillata	Mendocino dodder	Dicots	PDCUS011A2	5	1	None	None	G5T1	S1	1B.2	null	Coastal dunes
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	383	9	Candidate	None	G4T2T3	S2S3	null	IUCN_EN-Endangered, USFS_S-Sensitive	Closed-cone coniferous forest
Dicamptodon ensatus	California giant salamander	Amphibians	AAAAH01020	234	28	None	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Aquatic, Meadow & seep, North coast coniferous forest, Riparian forest
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1404	1	None	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Erethizon dorsatum	North American porcupine	Mammals	AMAFJ01010	523	1	None	None	G5	S3	null	IUCN_LC-Least Concern	Broadleaved upland forest, Cismontane woodland,

													Closed-cone coniferous forest, Lower montane coniferous forest, North coast coniferous forest, Upper montane coniferous forest
Erigeron supplex	supple daisy	Dicots	PDAST3M3Z0	21	10	None	None	G2	S2	1B.2	SB_UCBG-UC Botanical Garden at Berkeley	Coastal bluff scrub, Coastal prairie	
Erysimum concinnum	bluff wallflower	Dicots	PDBRA160E3	30	1	None	None	G3	S2	1B.2	BLM_S-Sensitive	Coastal bluff scrub, Coastal dunes, Coastal prairie	
Fratercula cirrhata	tufted puffin	Birds	ABNNN12010	17	1	None	None	G5	S1S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Protected deepwater coastal communities	
Fritillaria roderickii	Roderick's fritillary	Monocots	PMLIL0V0M0	8	2	None	Endangered	G1Q	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal bluff scrub, Coastal prairie, Valley & foothill grassland	
Gilia capitata ssp. pacifica	Pacific gilia	Dicots	PDPLM040B6	91	2	None	None	G5T3	S2	1B.2	null	Chaparral, Coastal bluff scrub, Coastal prairie, Valley & foothill grassland	
Gilia capitata ssp. tomentosa	woolly-headed gilia	Dicots	PDPLM040B9	18	1	None	None	G5T2	S2	1B.1	null	Coastal bluff scrub, Riparian woodland, Ultramafic, Valley & foothill grassland	
Glyceria grandis	American manna grass	Monocots	PMPOA2Y080	10	1	None	None	G5	S3	2B.3	null	Bog & fen, Marsh & swamp, Meadow & seep, Wetland	
Haliaeetus leucocephalus	bald eagle	Birds	ABNKC10010	332	1	Delisted	Endangered	G5	S3	null	BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern, USFS_S-Sensitive	Lower montane coniferous forest, Oldgrowth	
Hesperovax sparsiflora var. brevifolia	short-leaved evax	Dicots	PDASTE5011	72	3	None	None	G4T3	S3	1B.2	BLM_S-Sensitive	Coastal bluff scrub, Coastal dunes, Coastal prairie	
Hesperocyparis pygmaea	pygmy cypress	Gymnosperms	PGCUP04032	37	6	None	None	G1	S1	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Closed-cone coniferous forest	
Hesperoleucus parvipinnis	Gualala roach	Fish	AFCJB19025	4	3	None	None	G3	S3	null	CDFW_SSC-Species of Special Concern	Aquatic, Klamath/North coast flowing waters	
Horkelia marinensis	Point Reyes horkelia	Dicots	PDROS0W0B0	36	1	None	None	G2	S2	1B.2	null	Coastal dunes, Coastal prairie, Coastal scrub	
Horkelia tenuiloba	thin-lobed horkelia	Dicots	PDROS0W0E0	27	13	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, Chaparral, Valley & foothill grassland	
Kopsiopsis hookeri	small groundcone	Dicots	PDORO01010	21	1	None	None	G4?	S1S2	2B.3	null	North coast coniferous forest	
Lasthenia californica ssp. bakeri	Baker's goldfields	Dicots	PDAST5L0C4	19	1	None	None	G3T1	S1	1B.2	null	Closed-cone coniferous forest, Coastal scrub, Marsh & swamp, Meadow & seep	
Lasthenia californica ssp. macrantha	perennial goldfields	Dicots	PDAST5L0C5	59	3	None	None	G3T2	S2	1B.2	BLM_S-Sensitive	Coastal bluff scrub, Coastal dunes, Coastal scrub	
Lathyrus palustris	marsh pea	Dicots	PDFAB250P0	13	2	None	None	G5	S2	2B.2	null	Bog & fen, Coastal prairie, Coastal scrub,	

												Lower montane coniferous forest, Marsh & swamp, North coast coniferous forest, Wetland
Lilium maritimum	coast lily	Monocots	PMLIL1A0C0	84	25	None	None	G2	S2	1B.1	BLM_S-Sensitive, SB_BerrySB-Berry Seed Bank, SB_UCBG-UC Botanical Garden at Berkeley	Broadleaved upland forest, Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Marsh & swamp, North coast coniferous forest
Lycopodium clavatum	running-pine	Ferns	PPLYC01080	120	1	None	None	G5	S3	4.1	null	Lower montane coniferous forest, Marsh & swamp, North coast coniferous forest, Wetland
Oncorhynchus kisutch pop. 4	coho salmon - central California coast ESU	Fish	AFCHA02034	23	2	Endangered	Endangered	G5T2Q	S2	null	AFS_EN-Endangered	Aquatic
Oncorhynchus mykiss irideus pop. 16	steelhead - northern California DPS	Fish	AFCHA0209Q	12	3	Threatened	None	G5T2T3Q	S2S3	null	AFS_TH-Threatened	Aquatic, Klamath/North coast flowing waters
Piperia candida	white-flowered rein orchid	Monocots	PMORC1X050	222	13	None	None	G3?	S3	1B.2	null	Broadleaved upland forest, Lower montane coniferous forest, North coast coniferous forest, Ultramafic
Potamogeton epihydrus	Nuttall's ribbon-leaved pondweed	Monocots	PMPOT03080	25	1	None	None	G5	S2S3	2B.2	IUCN_LC-Least Concern	Marsh & swamp, Wetland
Rana boylei	foothill yellow-legged frog	Amphibians	AAABH01050	2478	59	None	Endangered	G3	S3	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
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1671	3	Threatened	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable	Aquatic, Artificial flowing waters, Artificial standing waters, Freshwater marsh, Marsh & swamp, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Sidalcea calycosa ssp. rhizomata	Point Reyes checkerbloom	Dicots	PDMAL11012	34	5	None	None	G5T2	S2	1B.2	null	Freshwater marsh, Marsh & swamp, Wetland
Sidalcea malachroides	maple-leaved checkerbloom	Dicots	PDMAL110E0	136	8	None	None	G3	S3	4.2	null	Broadleaved upland forest, Coastal prairie, Coastal scrub, North coast coniferous forest, Riparian forest
Sidalcea	purple-	Dicots	PDMAL110FL	19	2	None	None	G5T1	S1	1B.2	BLM_S-Sensitive	Broadleaved

malviflora ssp. purpurea	stemmed checkerbloom											upland forest, Coastal prairie
Speyeria zerene behrensii	Behren's silverspot butterfly	Insects	IILEPJ6088	12	3	Endangered	None	G5T1	S1	null	null	Coastal prairie
Sulcaria spiralifera	twisted horsehair lichen	Lichens	NLT0042560	18	1	None	None	G3G4	S2	1B.2	BLM_S-Sensitive	Coastal dunes, North coast coniferous forest
Taricha rivularis	red-bellied newt	Amphibians	AAAAF02020	136	10	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
Taxidea taxus	American badger	Mammals	AMAJF04010	594	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, lone formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
Trifolium buckwestiorum	Santa Cruz clover	Dicots	PDFAB402W0	64	28	None	None	G2	S2	1B.1	BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden, SB_UCSC-UC Santa Cruz, SB_USDA-US Dept of Agriculture	Broadleaved upland forest, Cismontane woodland, Coastal prairie
Trifolium trichocalyx	Monterey clover	Dicots	PDFAB402J0	6	3	Endangered	Endangered	G1	S1	1B.1	SB_USDA-US Dept of Agriculture	Closed-cone coniferous forest
Usnea longissima	Methusehah's beard lichen	Lichens	NLLEC5P420	206	5	None	None	G4	S4	4.2	BLM_S-Sensitive	Broadleaved upland forest, North coast coniferous forest,

