

Freshwater Off-Channel Habitat: Phase 2 Implementation (Orchard Pond) (Project ID: 1730137) 2023

Introduction:

The Redwood Community Action Agency (Grantee) will create off-channel winter rearing habitat and refugia for juvenile salmonids in Freshwater Creek and provide high-flow velocity refugia within the constructed pond, safe egress from the pond during winter and spring baseflow conditions to reduce risk of stranding, suitable water quality conditions within the constructed pond during winter and spring, channel bank stability at the confluence of the pond with Freshwater Creek, usage of the remaining pasture adjacent to the pond site, and a vehicular crossing at the pond mouth for mowing and maintenance.

The Grantee 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 sections I. Salmon and Steelhead Habitat Restoration in California, VII. Project Implementation, and VIII. Project Evaluation and Monitoring*, <https://www.wildlife.ca.gov/Grants/FRGP/Guidance>.

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

Project Description:

Location:

The project area is located in the middle reach of Freshwater Creek watershed, east of Humboldt Bay, and 4 miles east of Eureka, California. The site is located approximately 7.3 miles upstream from the confluence with Humboldt Bay, 2.2 miles upstream from Myrtle Avenue at Freshwater Corners, and 0.35 miles downstream from Howard Heights Bridge. The town of Freshwater is 0.67 miles southeast of the project area.. Project coordinates are: 40.76592 north latitude, -124.06997 west longitude.

Project Set Up:

The Grantee will implement the following tasks: project management, revegetation, and photo and water quality monitoring.

Michael Love & Associates, Inc. (MLA) will serve as the project engineers. The MLA principal engineer (Michael Love) is the responsible engineer for the project and will oversee project activities to ensure the project is built as intended, participate in project meetings, and assist with writing of the Monitoring Report.

William Rich & Associates (WRA) will conduct a Cultural Resource Investigation to assess cultural significance at the proposed project site.

A licensed contractor will be selected for construction. Construction for the project will be conducted using standard heavy equipment, including but not limited to excavators, loaders, bulldozers, dump trucks, and water trucks.

Materials:

A 65 foot long, 6 foot culvert, rock slope protection (RSP), three (3) large wood (LW) structures, boulders for ballast, wetland and riparian plants will all be utilized for the project.

Tasks:

Task 1: Project Management and Administration

RCAA's Division Director will take the lead on project management and administration with assistance from the RCAA Project Manager and Planner.

Task 2: Environmental Permitting and Compliance

RCAA, with the assistance of MLA, will complete any permits that are required. WRA will also conduct a cultural resource investigation.

Task 3: Construction

The selected contractor will perform maintenance of erosion and sediment control, water management and dewatering, all construction work, and will provide all material certifications.

Task 4: Revegetation

RCAA will install native freshwater wetland plants in the pond, and mixed riparian plants around the pond perimeter. RCAA will broadcast seed with a pasture mix and native seed mix. RCAA will maintain the plants for 1-3 years depending on the species.

Deliverables:

This project will create a self-maintaining off-channel pond rearing habitat for juvenile salmonids along Freshwater Creek. As-built plans will be prepared after construction using red-line markups of the construction documents with any changes that occurred during construction. Elevations will be surveyed at critical locations to verify the project was built as designed. As-Built elevations will be included on the red-line markup. A brief technical memorandum will accompany the As-built plans.

Timelines:

Project will start April 2024 and extend through March 2027.

The seasonal work window for construction will be June 15 to October 31.

Revegetation work window will be from December 1 through April 1.

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 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.

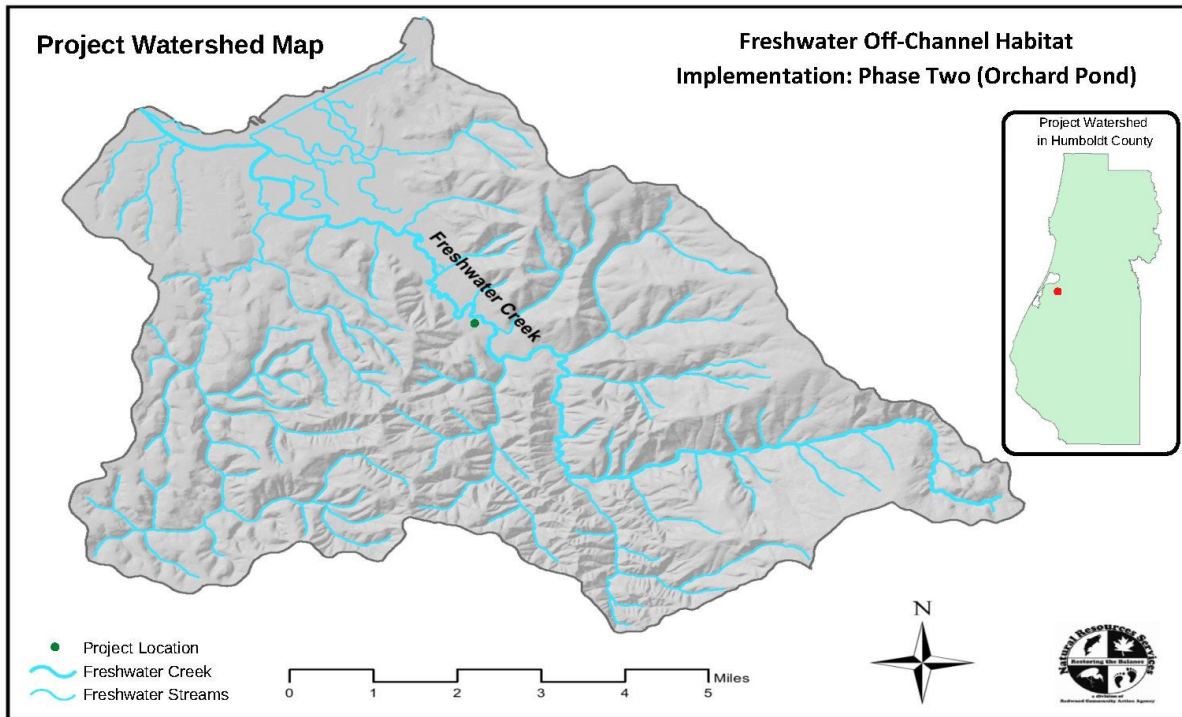
All equipment and gear will be brushed with a stiff brush prior to leaving each stretch of stream to avoid the transport of aquatic invasive species (AIS). When transporting traps out of the area, each numbered trap will be bagged in its own bag to avoid cross contamination during transport in and out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

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

Watershed (or county) Map



CDFW RAREFIND

Query Summary:

Quad IS (Iaqua Buttes (4012368) OR Arcata South (4012471) OR Eureka (4012472) OR Korbel (4012378) OR Tye City (4012482) OR Arcata North (4012481) OR Blue Lake (4012388) OR McWhinney Creek (4012461) OR Fields Landing (4012462))

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
<i>Abronia umbellata</i> var. <i>breviflora</i>	pink sand-verbena	Dicots	PDNYC010N4	61	16	None	None	G4G5T2	S2	1B.1	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal dunes
<i>Accipiter cooperii</i>	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 forest
<i>Accipiter striatus</i>	sharp-shinned hawk	Birds	ABNKC12020	22	5	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Cismontane woodland, Lower montane coniferous forest, Riparian forest, Riparian woodland
<i>Acipenser medirostris</i> pop. 1	green sturgeon - southern DPS	Fish	AFCAA01031	14	1	Threatened	None	G2T1	S1	null	AFS_VU-Vulnerable, IUCN_EN-Endangered	Aquatic, Estuary, Marine bay, Sacramento/San Joaquin flowing waters
<i>Anodonta californiensis</i>	California floater	Mollusks	IMBIV04220	6	1	None	None	G3Q	S2?	null	USFS_S-Sensitive	Aquatic
<i>Aplodontia rufa humboldtiana</i>	Humboldt mountain beaver	Mammals	AMAF01017	28	16	None	None	G5TNR	SNR	null	null	Coastal scrub, Redwood, Riparian forest
<i>Aquila chrysaetos</i>	golden eagle	Birds	ABNKC22010	325	1	None	None	G5	S3	null	BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, CDFW_WL-Watch List, IUCN_LC-Least Concern	Broadleaved upland forest, Cismontane woodland, Coastal prairie, Great Basin grassland, Great Basin scrub, Lower montane coniferous forest, Pinon & juniper woodlands, Upper montane coniferous forest, Valley & foothill grassland
<i>Arborimus albipes</i>	white-footed vole	Mammals	AMAFF23010	3	2	None	None	G3G4	S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	North coast coniferous forest, Redwood, Riparian forest
<i>Arborimus pomus</i>	Sonoma tree vole	Mammals	AMAFF23030	222	25	None	None	G3	S3	null	CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	North coast coniferous forest, Oldgrowth, Redwood
<i>Ardea alba</i>	great egret	Birds	ABNGA04040	43	5	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland
<i>Ardea herodias</i>	great blue heron	Birds	ABNGA04010	156	12	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater

													marsh, Marsh & swamp, Riparian forest, Wetland
<i>Ascaphus truei</i>	Pacific tailed frog	Amphibians	AAABA01010	491	30	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	
<i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i>	coastal marsh milk-vech	Dicots	PDFAB0F7B2	24	1	None	None	G2T2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Coastal dunes, Coastal scrub, Marsh & swamp, Wetland	
<i>Bombus caliginosus</i>	obscure bumble bee	Insects	IIHYM24380	181	10	None	None	G2G3	S1S2	null	IUCN_VU-Vulnerable	null	
<i>Bombus crotchii</i>	Crotch bumble bee	Insects	IIHYM24480	437	1	None	Candidate Endangered	G2	S2	null	IUCN_EN-Endangered	null	
<i>Bombus occidentalis</i>	western bumble bee	Insects	IIHYM24252	306	9	None	Candidate Endangered	G3	S1	null	IUCN_VU-Vulnerable, USFS_S-Sensitive	null	
<i>Brachyramphus marmoratus</i>	marbled murrelet	Birds	ABNNN06010	110	9	Threatened	Endangered	G3	S2	null	CDF_S-Sensitive, IUCN_EN-Endangered	Lower montane coniferous forest, Oldgrowth, Redwood	
<i>Cardamine angulata</i>	seaside bittercress	Dicots	PDBRA0K010	38	1	None	None	G4G5	S3	2B.1	null	Lower montane coniferous forest, North coast coniferous forest, Wetland	
<i>Carex arcta</i>	northern clustered sedge	Monocots	PMCYP030X0	13	2	None	None	G5	S1	2B.2	IUCN_LC-Least Concern	Bog & fen, North coast coniferous forest, Wetland	
<i>Carex leptalea</i>	bristle-stalked sedge	Monocots	PMCYP037E0	8	1	None	None	G5	S1	2B.2	IUCN_LC-Least Concern	Bog & fen, Freshwater marsh, Marsh & swamp, Meadow & seep, Wetland	
<i>Carex lyngbyei</i>	Lyngbye's sedge	Monocots	PMCYP037Y0	37	16	None	None	G5	S3	2B.2	IUCN_LC-Least Concern	Marsh & swamp, Wetland	
<i>Carex praticola</i>	northern meadow sedge	Monocots	PMCYP03B20	14	1	None	None	G5	S2	2B.2	null	Meadow & seep, Wetland	
<i>Castilleja ambigua</i> var. <i>humboldtensis</i>	Humboldt Bay owl's-clover	Dicots	PDSCR0D402	31	18	None	None	G4T2	S2	1B.2	BLM_S-Sensitive, SB_UCBG-UC Botanical Garden at Berkeley	Marsh & swamp, Salt marsh, Wetland	
<i>Castilleja litoralis</i>	Oregon coast paintbrush	Dicots	PDSCR0D012	44	2	None	None	G3	S3	2B.2	null	Coastal bluff scrub, Coastal dunes, Coastal scrub	
<i>Charadrius montanus</i>	mountain plover	Birds	ABNNB03100	90	2	None	None	G3	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened, USFWS_BCC-Birds of Conservation Concern	Chenopod scrub, Valley & foothill grassland	
<i>Charadrius nivosus nivosus</i>	western snowy plover	Birds	ABNNB03031	138	5	Threatened	None	G3T3	S3	null	CDFW_SSC-Species of Special Concern	Great Basin standing waters, Sand shore, Wetland	
<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes salty bird's-beak	Dicots	PDSCR0J0C3	80	15	None	None	G4?T2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Marsh & swamp, Salt marsh, Wetland	
<i>Cicindela hirticollis gravida</i>	sandy beach tiger beetle	Insects	IICOL02101	34	1	None	None	G5T2	S2	null	null	Coastal dunes	

Circus hudsonius	northern harrier	Birds	ABNKC11011	54	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Coastal scrub, Great Basin grassland, Marsh & swamp, Riparian scrub, Valley & foothill grassland, Wetland
Collinsia corymbosa	round-headed collinsia	Dicots	PDSCR0H060	13	1	None	None	G1	S1	1B.2	SB_CaIBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal dunes
Coptis laciniata	Oregon goldthread	Dicots	PDRAN0A020	122	13	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	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
Coturnicops noveboracensis	yellow rail	Birds	ABNME01010	45	3	None	None	G4	S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Meadow & seep
Egretta thula	snowy egret	Birds	ABNGA06030	20	3	None	None	G5	S4	null	IUCN_LC-Least Concern	Marsh & swamp, Meadow & seep, Riparian forest, Riparian woodland, Wetland
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	184	3	None	None	G5	S3S4	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern	Cismontane woodland, Marsh & swamp, Riparian woodland, Valley & foothill grassland, Wetland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1477	10	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
Entosphenus tridentatus	Pacific lamprey	Fish	AFBAA02100	9	5	None	None	G4	S3	null	AFS_VU-Vulnerable, BLM_S-Sensitive, CDFW_SSC-Species of Special	Aquatic, Klamath/North coast flowing waters, Sacramento/San

											Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Joaquin flowing waters, South coast flowing waters
Erethizon dorsatum	North American porcupine	Mammals	AMAFJ01010	523	10	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
Erysimum menziesii	Menzies' wallflower	Dicots	PDBRA160R0	19	5	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Coastal dunes
Erythronium oregonum	giant fawn lily	Monocots	PMLIL0U0C0	37	2	None	None	G5	S2	2B.2	SB_UCSC-UC Santa Cruz	Cismontane woodland, Meadow & seep, Ultramafic
Erythronium revolutum	coast fawn lily	Monocots	PMLIL0U0F0	172	23	None	None	G4G5	S3	2B.2	SB_UCSC-UC Santa Cruz	Bog & fen, Broadleaved upland forest, North coast coniferous forest, Wetland
Eucyclogobius newberryi	tidewater goby	Fish	AFCQN04010	127	8	Endangered	None	G3	S3	null	AFS_EN-Endangered, IUCN_NT-Near Threatened	Aquatic, Klamath/North coast flowing waters, Sacramento/San Joaquin flowing waters, South coast flowing waters
Falco peregrinus anatum	American peregrine falcon	Birds	ABNKD06071	73	8	Delisted	Delisted	G4T4	S3S4	null	CDF_S-Sensitive	null
Fissidens pauperculus	minute pocket moss	Bryophytes	NBMUS2W0U0	22	3	None	None	G3?	S2	1B.2	USFS_S-Sensitive	North coast coniferous forest, Redwood
Gilia capitata ssp. pacifica	Pacific gilia	Dicots	PDPLM040B6	91	6	None	None	G5T3	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Coastal bluff scrub, Coastal prairie, Valley & foothill grassland
Gilia millefoliata	dark-eyed gilia	Dicots	PDPLM04130	54	11	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal dunes
Haliaeetus leucocephalus	bald eagle	Birds	ABNKC10010	332	4	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
Hesperivax sparsiflora var. brevifolia	short-leaved evax	Dicots	PDASTE5011	72	4	None	None	G4T3	S3	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal bluff scrub, Coastal dunes, Coastal prairie
Iliamna latibracteata	California globe mallow	Dicots	PDMAL0K040	40	1	None	None	G2G3	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Lower montane coniferous forest, North coast coniferous forest, Riparian scrub
Lampetra richardsoni	western brook lamprey	Fish	AFBAA02180	4	4	None	None	G4G5	S3S4	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	null

<i>Lasthenia californica</i> ssp. <i>macrantha</i>	perennial goldfields	Dicots	PDAST5L0C5	59	1	None	None	G3T2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal bluff scrub, Coastal dunes, Coastal scrub
<i>Lathyrus japonicus</i>	seaside pea	Dicots	PDFAB250C0	24	3	None	None	G5	S2	2B.1	IUCN_LC-Least Concern	Coastal dunes
<i>Lathyrus palustris</i>	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
<i>Layia carnosa</i>	beach layia	Dicots	PDAST5N010	25	6	Threatened	Endangered	G2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Coastal dunes, Coastal scrub
<i>Lilium occidentale</i>	western lily	Monocots	PMLIL1A0G0	16	8	Endangered	Endangered	G1G2	S1	1B.1	SB_BerrySB-Berry Seed Bank	Bog & fen, Coastal bluff scrub, Coastal prairie, Coastal scrub, Freshwater marsh, Marsh & swamp, North coast coniferous forest, Wetland
<i>Lycopodium clavatum</i>	running-pine	Ferns	PPLYC01080	120	61	None	None	G5	S3	4.1	null	Lower montane coniferous forest, Marsh & swamp, North coast coniferous forest, Wetland
<i>Margaritifera falcata</i>	western pearlshell	Mollusks	IMBIV27020	78	2	None	None	G4G5	S1S2	null	IUCN_NT-Near Threatened	Aquatic
<i>Martes caurina humboldtensis</i>	Humboldt marten	Mammals	AMAJF01012	44	1	Threatened	Endangered	G4G5T1	S1	null	CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	North coast coniferous forest, Oldgrowth, Redwood
<i>Mitellastra caulescens</i>	leafy-stemmed mitrewort	Dicots	PDSAX0N020	21	3	None	None	G5	S4	4.2	null	Broadleaved upland forest, Lower montane coniferous forest, Meadow & seep, North coast coniferous forest
<i>Monotropa uniflora</i>	ghost-pipe	Dicots	PDMON03030	115	1	None	None	G5	S2	2B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, North coast coniferous forest
<i>Montia howellii</i>	Howell's montia	Dicots	PDPOR05070	123	23	None	None	G3G4	S2	2B.2	null	Meadow & seep, North coast coniferous forest, Vernal pool, Wetland
<i>Myotis evotis</i>	long-eared myotis	Mammals	AMACC01070	139	2	None	None	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern	null
<i>Nannopterum auritum</i>	double-crested cormorant	Birds	ABNFD01020	39	1	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Riparian forest, Riparian scrub, Riparian woodland
<i>Noccaea fendleri</i> ssp. <i>californica</i>	Kneeland Prairie pennycress	Dicots	PDBRA2P041	1	1	Endangered	None	G5?T1	S1	1B.1	SB_UCSC-UC Santa Cruz	Broadleaved upland forest, Coastal prairie, Ultramafic
Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	Marsh	CTT52110CA	53	8	None	None	G3	S3.2	null	null	Marsh & swamp, Wetland
Northern Foredune Grassland	Northern Foredune Grassland	Dune	CTT21211CA	1	1	None	None	G1	S1.1	null	null	Coastal dunes
<i>Nycticorax nycticorax</i>	black-crowned night heron	Birds	ABNGA11010	37	8	None	None	G5	S4	null	IUCN_LC-Least Concern	Marsh & swamp, Riparian forest, Riparian

												woodland, Wetland
Oenothera wolfii	Wolf's evening-primrose	Dicots	PDONA0C1K0	29	2	None	None	G2	S1	1B.1	SB_BerrySB-Berry Seed Bank	Coastal bluff scrub, Coastal dunes, Coastal prairie
Oncorhynchus clarkii clarkii	coast cutthroat trout	Fish	AFCHA0208A	45	16	None	None	G5T4	S3	null	AFS_VU-Vulnerable, CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Aquatic, Klamath/North coast flowing waters
Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	Fish	AFCHA02032	10	6	Threatened	Threatened	G5T2Q	S2	null	AFS_TH-Threatened	Aquatic, Klamath/North coast flowing waters, Sacramento/San Joaquin flowing waters
Oncorhynchus mykiss irideus pop. 48	steelhead - northern California DPS summer-run	Fish	AFCHA0213P	10	2	Threatened	Endangered	G5T2Q	S2	null	AFS_TH-Threatened	Aquatic, Estuary, Klamath/North coast flowing waters
Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	Fish	AFCHA0213Q	96	11	Threatened	None	G5T3Q	S3	null	AFS_TH-Threatened	Aquatic, Estuary, Klamath/North coast flowing waters
Packera bolanderi var. bolanderi	seacoast ragwort	Dicots	PDAST8H0H1	72	2	None	None	G4T4	S2S3	2B.2	null	Coastal scrub, North coast coniferous forest
Pandion haliaetus	osprey	Birds	ABNKC01010	504	81	None	None	G5	S4	null	CDF_S-Sensitive, CDFW_WL-Watch List, IUCN_LC-Least Concern	Riparian forest
Pekania pennanti	Fisher	Mammals	AMAJF01020	555	8	None	None	G5	S2S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	North coast coniferous forest, Oldgrowth, Riparian forest
Piperia candida	white-flowered rein orchid	Monocots	PMORC1X050	222	1	None	None	G3?	S3	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, Lower montane coniferous forest, North coast coniferous forest, Ultramafic
Platismatia lacunosa	crinkled rag lichen	Lichens	NLLEC2Q010	4	1	None	None	G4	S1	2B.3	null	North coast coniferous forest, Riparian woodland
Plethodon elongatus	Del Norte salamander	Amphibians	AAAAD12050	151	9	None	None	G4	S3	null	CDFW_WL-Watch List, IUCN_NT-Near Threatened	Oldgrowth
Rallus obsoletus obsoletus	California Ridgway's rail	Birds	ABNME05011	99	2	Endangered	Endangered	G3T1	S2	null	CDFW_FP-Fully Protected	Brackish marsh, Marsh & swamp, Salt marsh, Wetland
Rana aurora	northern red-legged frog	Amphibians	AAABH01021	292	79	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 boylei pop. 1	foothill yellow-legged frog - north coast DPS	Amphibians	AAABH01051	1608	32	None	None	G3T4	S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Aquatic, Klamath/North coast flowing waters, Riparian forest, Riparian scrub, Riparian woodland
Rhyacotriton variegatus	southern torrent salamander	Amphibians	AAAAJ01020	416	53	None	None	G3?	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Lower montane coniferous forest, Oldgrowth, Redwood, Riparian forest
Riparia riparia	bank swallow	Birds	ABPAU08010	299	4	None	Threatened	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Riparian scrub, Riparian woodland

Scaphinotus behrensi	Behrens' snail-eating beetle	Insects	IICOL4L070	4	1	None	None	G2G4	S2S4	null	null	North coast coniferous forest
Sidalcea malachroides	maple-leaved checkerbloom	Dicots	PDMAL110E0	136	43	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	10	None	None	G5T2	S2	1B.2	SB_UCSC-UC Santa Cruz	Coastal bluff scrub, Coastal prairie, North coast coniferous forest
Sidalcea oregana ssp. eximia	coast checkerbloom	Dicots	PDMAL110K9	19	5	None	None	G5T1	S1	1B.2	null	Lower montane coniferous forest, Meadow & seep, North coast coniferous forest, Wetland
Silene scouleri ssp. scouleri	Scouler's catchfly	Dicots	PDCAR0U1MC	23	1	None	None	G5T4T5	S2S3	2B.2	null	Coastal bluff scrub, Coastal prairie, Valley & foothill grassland
Spergularia canadensis var. occidentalis	western sand-spurrey	Dicots	PDCAR0W032	4	4	None	None	G5T4	S1	2B.1	null	Marsh & swamp, Wetland
Spirinchus thaleichthys	longfin smelt	Fish	AFCHB03010	46	6	Candidate	Threatened	G5	S1	null	IUCN_LC-Least Concern	Aquatic, Estuary
Sulcaria spiralifera	twisted horsehair lichen	Lichens	NLT0042560	18	3	None	None	G3G4	S2	1B.2	BLM_S-Sensitive	Coastal dunes, North coast coniferous forest
Thaleichthys pacificus	eulachon	Fish	AFCHB04010	10	2	Threatened	None	G5	S1	null	IUCN_LC-Least Concern	Aquatic, Klamath/North coast flowing waters
Trichodon cylindricus	cylindrical trichodon	Bryophytes	NBMUS7N020	14	1	None	None	G4G5	S2	2B.2	null	Broadleaved upland forest, Meadow & seep, Upper montane coniferous forest
Upland Douglas Fir Forest	Upland Douglas Fir Forest	Forest	CTT82420CA	15	1	None	None	G4	S3.1	null	null	North coast coniferous forest
Usnea longissima	Methuselah's beard lichen	Lichens	NLLEC5P420	206	26	None	None	G4	S4	4.2	BLM_S-Sensitive	Broadleaved upland forest, North coast coniferous forest, Oldgrowth, Redwood
Viola palustris	alpine marsh violet	Dicots	PDVIO041G0	10	2	None	None	G5	S1S2	2B.2	null	Bog & fen, Coastal scrub, Wetland