Introduction:

The Smith River Alliance will remove a complete barrier to juvenile coho salmon that is currently limiting access to approximately one mile of non-natal rearing habitat in the Morrison Creek sub-basin. Grade controls will be installed to prevent incision upstream of the crossing and restore the incision caused by the undersized culvert being replaced. This project is necessary because the barrier was assessed and identified as a high priority project in the Smith River Plain Stream Restoration Plan (Parish Hanson 2018).

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* (Part IX and XII https://www.wildlife.ca.gov/Grants/FRGP/Guidance).

Objective(s):

The objective of the project is to improve upstream fish passage for adult and juvenile coho salmon (*Oncorhyncus kistuch*), and to reduce the potential for culvert failure and resulting sediment delivery to an unnamed tributary of Morrison Creek. Replacement will allow salmonids unimpeded access to 0.6 miles of good quality rearing habitat.

Project Description:

Location:

The project is located on an unnamed tributary of Morrison Creek (aka. Rawson creek) approximately 2,600 feet upstream of the confluence with Morrison Creek. The tributary meets Morrison Creek approximately 4,500 linear feet upstream of the Morrison Creek and Smith River confluence. The project area includes approximately 225 linear feet of stream, including the road prism and extends both upstream and downstream of the private road crossing to be replaced. Project coordinates are: 41.904168 North and -124.139326 West.

Project Set Up:

Smith River Alliance (SRA) staff will oversee the contract and manage the project (Task 1) with duties including but not limited to developing and securing contracts, scheduling, invoicing, reporting, and landowner communications. SRA staff will work with Pacific Watershed Associates (PWA) and Mike Love and Associates (MLA) to complete all needed surveys and permit applications to ensure compliance with CEQA and state regulations (Task 2). SRA will lead contractor selection (Task 3), assist with construction oversight (Task 4), and lead post project monitoring (Task 5). SRA personnel who will complete these

tasks include: Patty McCleary, Co-executive Director, will serve as the Project Director and conduct work under Task 1. Marisa Parish Hanson, Program Director, will serve as the Project Manager and conduct work under Tasks 1 - 5. Mike Love and Associates (MLA) staff will assist with permitting (Task 2) and contractor selection (Task 3). MLA will provide construction monitoring oversight and post project monitoring (Task 4 & 5). MLA personnel who will complete these tasks include: Michael Love, P.E., Principal Engineer. Mike will be assisted by a project engineer and staff engineer for all tasks. The senior geotechnical engineer from SHN will conduct construction oversight during preparation of the subgrade for bridge footings (Task 4) as a subcontractor under MLA. SHN personnel who will complete these tasks include: Gary Simpson, CGE, Senior Engineering Geologist Pacific Watershed Associates (PWA) will coordinate CEQA compliance environmental and cultural studies for rare plants, biological, paleontological, and archeological resources under Task 2. PWA personnel who will complete these tasks include: Danny Hagans, Georgia Hamer, Eileen Weppner, and Dimitra Zalarvis-Chase. An undetermined subcontractor will conduct heavy equipment operation, project construction, and maintenance of temporary fish barriers and flow diversion during construction (Task 4).

Materials:

A 30-foot Kernen bridge with a 16-foot wide deck, railings, and precast concrete strip footings will compose the new crossing structure. Geogrid stabilization mat with filter fabric will be placed under the bridge footings to meet design and model stabilization requirements. Aggregate: Seventy (70) ton rock slope protection (RSP) with a median diameter of 1.8 feet will be placed under the bridge to protect the embankment and bridge footings from scour and to maintain channel slope. Sixty (60) ton, 6-inch diameter rock will be used for road embankment backfill material. One hundred twenty (120) tons of Class II aggregate will be used for road surface and stabilization mat. Large Wood: Seven (7) logs with rootwad attached, diameter up to 2.5-foot diameter and minimum 15-foot length will be used to stabilize the channel bank upstream and downstream of the crossing. Five (5) logs without rootwad, 25-foot length and 2-foot diameter will be used to as channel spanning structures to re-establish channel slope and prevent channel incision or head-cutting. Riparian trees will be used after the crossing construction is complete to revegetate the project area. Stabilization materials (Seed, chips, silt fencing, fiber rolls) will be used as Best Management Practices (BMPs) during construction and to stabilize the site after completion of construction. Equipment including excavator, backhoe, loader, dump truck, roller compactor will be used to implement construction activities such as tree removal, laying and compacting fill, removing old crossing, and laying new crossing features. They will also be used to install design elements and grade the road and stream throughout project construction.

Tasks:

Task 1 - Project Management
Smith River Alliance (SRA) will provide project management, contract oversight, and administration. Task 1 includes, but is not limited to, contract oversight, scheduling, invoicing, preparing progress reports for submittal to CDFW, and coordination with stakeholders and members of the project team.

Task 2 - Permits and CEQA compliance
SRA will lead permit preparation and applications needed for CDFW Lake and Streambed Alteration Agreement, County Grading Permit, Coastal Grading Permit, and CEQA cultural surveys. Michael Love and Associates (MLA) will provide technical support on permit preparation. Permits will require information including metrics (i.e., length, area, volume) of impacts, equipment used, and BMPs. Post project implementation reports will be submitted as required in permit conditions. Pacific Watershed Associates (PWA) will perform all cultural surveys (i.e., botanical, paleontological, and archaeological) required to comply with CEQA regulations.

Task 3 - Contractor Selection
SRA will prepare and post a solicitation for potential contractors that outlines contractor's minimum qualifications, licenses, and experience needed to complete the project. MLA will provide guidance on solicitation preparation and selection of the project contractor. SRA and MLA will conduct site visits and answer questions posed by potential contractors.

Task 4 - Project Implementation
Project implementation includes all steps necessary to prepare the site, remove the culvert, build the new crossing as designed, replant the construction area, and implement necessary BMPs.

4.1. Pre-construction preparation includes pre-construction meeting with SRA, MLA, PWA, landowner, and the contractor. MLA will conduct construction staking prior to construction to define locations and stationing of the project components as defined in the approved project design.

4.2 Dewatering and Aquatic Relocation. Project implementation is anticipated to occur when no surface water is present. However, if water is present SRA will work with CDFW staff to remove and exclude all fish and aquatic life from the project work area prior to any in-channel work. The contractor will install water management features so that work is completed in dry conditions and meets permit and site constraints. Water management techniques will employ a clear water diversion system to bypass creek water around the work site (if water is present) and to remove any "nuisance" water (e.g. seepage) from within the work area

following methods outlined in the *California Salmonid Stream Habitat Restoration Manual*, Parts IV, IX and XII.
4.3 Site preparation involves the removal of all surface vegetation with backhoe, loader and/or excavator at the construction site. All construction materials and construction equipment will be delivered to the project site.
4.4 Crossing and channel construction. The exiting culvert will be removed, large woody debris installed, the stream channel and new bridge constructed as designed, and the road will be reconstructed. The water management and fish exclusion devices will be removed. The work area will be stabilized, and all project materials and equipment will be removed from the project site.

Task 5 - Monitoring
MLA's Project Engineer and SRA Project Manager will conduct post-construction monitoring during two fish passage flows in the fall or winter following construction and prior to the end of grant agreement to evaluate fish passage conditions through the stream simulation crossing and along the modified channel to document channel adjustments. The monitoring will occur at two flows that are within the fish migration flow range. Longitudinal profile, water depths, and water velocities will be surveyed within the project reach and within an adjacent reference reach. The measurements are intended to determine if the stream simulation channel produces similar hydraulic conditions as the reference reach. It is assumed that data collection and flow measurement will require a full day for each event.

MLA's Project Engineer and Principal Engineer will prepare a brief memorandum summarizing the methods and results of the post-construction fish passage monitoring.

Monitoring will be used to inform permit reports completed in Task 2.

Deliverables:

Task 1 - Invoices, contracts, progress reports, annual report, and final reports.

Task 2 - Approved permits, Archaeological, botanical and paleontological reports.

Task 3 - Contractor solicitation and contract.

Task 4 - Meeting minutes, Field logs, and Project letter of record.

Task 5 - Final reports for permits. MLA memo of post-construction fish passage monitoring.

Timelines:

Task 1 – 4/1/2020 to 11/30/2022

Task 2 – 4/1/2020 to 11/30/2022

Task 3 – 4/1/2020 to 8/31/2020

Task 4 – 8/1/2020 to 11/30/2021

Task 5 – 9/1/2020 to 11/30/2022

Additional Requirements:

The Grantee 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 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 California Department of Fish & Wildlife 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.

The Grantee shall notify the Grantor Project Manager 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 Grantor 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 Grantee 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 NMFS Biological Opinion.

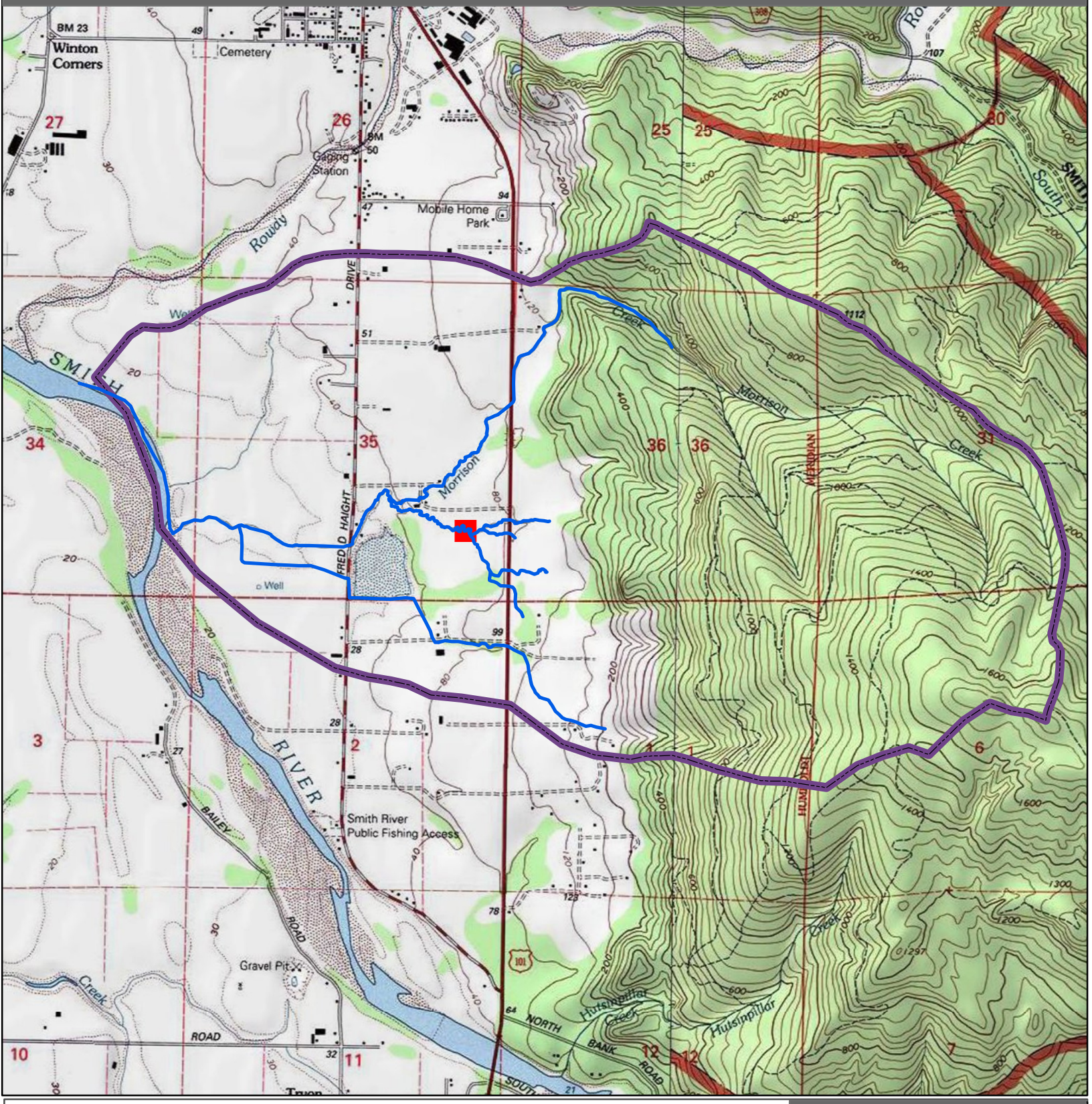
d. All electrofishing shall be performed by a qualified fisheries biologist and conducted according to the National Marine Fisheries Service, Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act, June 2000.

e. USFWS Approved fisheries biologists will provide fish relocation data via the Grantee to the CDFW Grant Manager on a form provided by CDFW.

The bridge (culvert) design and installation will meet flow carrying capacity required for a 100-year flood event as identified by specifications determined by National Oceanic and Atmospheric Administration (NOAA) Fisheries and the California Department of Fish and Wildlife (CDFW), for adult and juvenile salmonid fish passage. The project will follow the National Marine Fisheries Service (NMFS 2001) Guidelines for Salmonid Passage at Stream Crossings and criteria for fish passage as described in Volume II, Part IX, of the *California Salmonid Stream Habitat Restoration Manual*. The engineered plans for the bridge (culvert) installation shall be visually reviewed and authorized by NOAA Fisheries or California Department of Fish and Wildlife engineers prior to commencement of work.

All habitat improvements will follow techniques described in the *California Salmonid Stream Habitat Restoration Manual*, Volume I, and Volume II Part XI and Part XII. The Grantee/landowner will maintain the new crossing, inspect the crossing in a timely manner and remove debris as necessary during the storm season.

MORRISON CREEK TRIBUTARY BARRIER REMOVAL



Project Topographic Map

- Proposed Project Location
- Morrison Creek Streams
- Morrison Creek Watershed

SMITH RIVER ALLIANCE

Map Sources:
Imagery: USGS Quad Map
Imagery, roads, cities:
ESRI World Mapping Service

N

0 200 400 800 Meters

0 800 1,600 3,200 Feet

Map Location

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Smith River (4112482) OR High Divide (4112481) OR Hiouchi (4112471) OR Crescent City (4112472))

Possible species within the Smith River quad and surrounding quads for 3064 Morrison Creek Tributary Barrier Removal, Del Norte County

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abronia umbellata var. breviflora pink sand-verbena	PDNYC010N4	None	None	G4G5T2	S2	1B.1
Anthoxanthum nitens ssp. nitens vanilla-grass	PMPOA0F041	None	None	G5	S2	2B.3
Arabis aculeolata Waldo rockcress	PDBRA06010	None	None	G4	S2	2B.2
Arabis mcdonaldiana McDonald's rockcress	PDBRA06150	Endangered	Endangered	G3	S3	1B.1
Ardea alba great egret	ABNGA04040	None	None	G5	S4	
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Ascaphus truei Pacific tailed frog	AAABA01010	None	None	G4	S3S4	SSC
Asplenium trichomanes ssp. trichomanes maidenhair spleenwort	PPASP021K2	None	None	G5T5	S1	2B.1
Boechera koehleri Koehler's stipitate rockcress	PDBRA060Z0	None	None	G3G4	S3	1B.3
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
Bombus occidentalis western bumble bee	IIHYM24250	None	None	G2G3	S1	
Brachyramphus marmoratus marbled murrelet	ABNNN06010	Threatened	Endangered	G3G4	S1	
Branta hutchinsii leucopareia cackling (=Aleutian Canada) goose	ABNJB05035	Delisted	None	G5T3	S3	WL
Bryoria spiralifera twisted horsehair lichen	NLTEST5460	None	None	G3	S1S2	1B.1
Calamagrostis crassiglumis Thurber's reed grass	PMPOA17070	None	None	G3Q	S2	2B.1
Calicium adspersum spiral-spored gilded-head pin lichen	NLT0005640	None	None	G3G4	S1?	2B.2
Calystegia atriplicifolia ssp. buttensis Butte County morning-glory	PDCON04012	None	None	G5T3	S3	4.2
Cardamine angulata seaside bittercress	PDBRA0K010	None	None	G4G5	S3	2B.1
Cardamine nuttallii var. gemmata yellow-tubered toothwort	PDBRA0K0R3	None	None	G5T3Q	S2	3.3

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Carex arcta northern clustered sedge	PMCYP030X0	None	None	G5	S1	2B.2
Carex lenticularis var. limnophila lagoon sedge	PMCYP037A7	None	None	G5T5	S1	2B.2
Carex lyngbyei Lyngbye's sedge	PMCYP037Y0	None	None	G5	S3	2B.2
Carex praticola northern meadow sedge	PMCYP03B20	None	None	G5	S2	2B.2
Carex serpenticola serpentine sedge	PMCYP03KM0	None	None	G4	S3	2B.3
Carex viridula ssp. viridula green yellow sedge	PMCYP03EM5	None	None	G5T5	S2	2B.3
Cascadia nuttallii Nuttall's saxifrage	PDSAX0U160	None	None	G4?	S1	2B.1
Castilleja elata Siskiyou paintbrush	PDSCR0D213	None	None	G3	S2S3	2B.2
Castilleja litoralis Oregon coast paintbrush	PDSCR0D012	None	None	G3	S3	2B.2
Cerorhinca monocerata rhinoceros auklet	ABNNN11010	None	None	G5	S3	WL
Charadrius alexandrinus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
Circus hudsonius northern harrier	ABNKC11011	None	None	G5	S3	SSC
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Coastal Brackish Marsh Coastal Brackish Marsh	CTT52200CA	None	None	G2	S2.1	
Cochlearia groenlandica Greenland cochlearia	PDBRA0S020	None	None	G4	S1	2B.3
Coenonympha tullia yontockett Yontocket satyr	IILEPN6035	None	None	G5T1T2	S1	
Coptis laciniata Oregon goldthread	PDRAN0A020	None	None	G4?	S3?	4.2
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Cypseloides niger black swift	ABNUA01010	None	None	G4	S2	SSC
Downingia willamettensis Cascade downingia	PDCAM060E0	None	None	G4	S2	2B.2
Egretta thula snowy egret	ABNGA06030	None	None	G5	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Empetrum nigrum black crowberry	PDEMP03020	None	None	G5	S1?	2B.2
Empidonax traillii brewsteri little willow flycatcher	ABPAE33041	None	Endangered	G5T3T4	S1S2	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
Eriogonum pendulum Waldo wild buckwheat	PDPGN084Q0	None	None	G4	S2S3	2B.2
Erysimum concinnum bluff wallflower	PDBRA160E3	None	None	G3	S2	1B.2
Erythronium hendersonii Henderson's fawn lily	PMLIL0U070	None	None	G4	S2	2B.3
Erythronium howellii Howell's fawn lily	PMLIL0U080	None	None	G3G4	S2	1B.3
Erythronium oregonum giant fawn lily	PMLIL0U0C0	None	None	G4G5	S2	2B.2
Eucyclogobius newberryi tidewater goby	AFCQN04010	Endangered	None	G3	S3	SSC
Eumetopias jubatus Steller (=northern) sea-lion	AMAJC03010	Delisted	None	G3	S2	
Fissidens pauperculus minute pocket moss	NBMUS2W0U0	None	None	G3?	S2	1B.2
Fratercula cirrhata tufted puffin	ABNNN12010	None	None	G5	S1S2	SSC
Gentiana setigera Mendocino gentian	PDGEN060S0	None	None	G2	S2	1B.2
Gilia capitata ssp. pacifica Pacific gilia	PDPLM040B6	None	None	G5T3	S2	1B.2
Gilia millefoliata dark-eyed gilia	PDPLM04130	None	None	G2	S2	1B.2
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Hesperevax sparsiflora var. brevifolia short-leaved evax	PDASTE5011	None	None	G4T3	S2	1B.2
Juga chacei Chace juga	IMGASK4180	None	None	G1	S1	
Kopsiopsis hookeri small groundcone	PDORO01010	None	None	G4?	S1S2	2B.3

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G5	S3S4	
Lasthenia californica ssp. macrantha perennial goldfields	PDAST5L0C5	None	None	G3T2	S2	1B.2
Lathyrus japonicus seaside pea	PDFAB250C0	None	None	G5	S2	2B.1
Lathyrus palustris marsh pea	PDFAB250P0	None	None	G5	S2	2B.2
Lewisia oppositifolia opposite-leaved lewisia	PDPOR040B0	None	None	G3	S2	2B.2
Lilium occidentale western lily	PMLIL1A0G0	Endangered	Endangered	G1	S1	1B.1
Limnephilus atercus Fort Dick limnephilus caddisfly	IITRI15020	None	None	G3G4	S1	
Lysimachia europaea arctic starflower	PDPRI0A020	None	None	G5	S1	2B.2
Margaritifera falcata western pearlshell	IMBIV27020	None	None	G4G5	S1S2	
Martes caurina humboldtensis Humboldt marten	AMAJF01012	None	Endangered	G5T1	S1	SSC
Mitellastra caulescens leafy-stemmed mitrewort	PDSAX0N020	None	None	G5	S4	4.2
Monadenia fidelis pronotis rocky coast Pacific sideband	IMGASC7032	None	None	G4G5T1	S1	
Moneses uniflora woodnymph	PDPYR02010	None	None	G5	S2	2B.2
Monotropa uniflora ghost-pipe	PDMON03030	None	None	G5	S2	2B.2
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Northern Coastal Salt Marsh Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Oceanodroma furcata fork-tailed storm-petrel	ABNDC04010	None	None	G5	S1	SSC
Oenothera wolfii Wolf's evening-primrose	PDONA0C1K0	None	None	G2	S1	1B.1
Oncorhynchus clarkii clarkii coast cutthroat trout	AFCHA0208A	None	None	G4T4	S3	SSC
Oncorhynchus mykiss irideus pop. 36 summer-run steelhead trout	AFCHA0213B	None	None	G5T4Q	S2	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Packera bolanderi var. bolanderi seacoast ragwort	PDAST8H0H1	None	None	G4T4	S2S3	2B.2
Pandion haliaetus osprey	ABNKC01010	None	None	G5	S4	WL
Pekania pennanti fisher - West Coast DPS	AMAJF01021	None	Threatened	G5T2T3Q	S2S3	SSC
Phacelia argentea sand dune phacelia	PDHYD0C070	None	None	G2	S1	1B.1
Phalacrocorax auritus double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
Pinguicula macroceras horned butterwort	PDLNT01040	None	None	G4	S2	2B.2
Piperia candida white-flowered rein orchid	PMORC1X050	None	None	G3	S3	1B.2
Plethodon elongatus Del Norte salamander	AAAAD12050	None	None	G4	S3	WL
Polemonium carneum Oregon polemonium	PDPLM0E050	None	None	G3G4	S2	2B.2
Polites mardon mardon skipper	IILEP66030	None	None	G2G3	S1	
Potamogeton foliosus ssp. fibrillosus fibrous pondweed	PMPOT030B1	None	None	G5T2T4	S1S2	2B.3
Pyrrocoma racemosa var. congesta Del Norte pyrrocoma	PDASTDT0F4	None	None	G5T4	S2	2B.3
Ramalina thrausta angel's hair lichen	NLLEC3S340	None	None	G5	S2?	2B.1
Rana aurora northern red-legged frog	AAABH01021	None	None	G4	S3	SSC
Rana boylii foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
Rhyacotriton variegatus southern torrent salamander	AAAAJ01020	None	None	G3G4	S2S3	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Romanzoffia tracyi Tracy's romanzoffia	PDHYD0E030	None	None	G4	S2	2B.3
Sabulina howellii Howell's sandwort	PDCAR0G0F0	None	None	G4	S3	1B.3
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Sanguisorba officinalis great burnet	PDROS1L060	None	None	G5?	S2	2B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sidalcea malachroides maple-leaved checkerbloom	PDMAL110E0	None	None	G3	S3	4.2
Sidalcea malviflora ssp. patula Siskiyou checkerbloom	PDMAL110F9	None	None	G5T2	S2	1B.2
Sidalcea oregana ssp. eximia coast checkerbloom	PDMAL110K9	None	None	G5T1	S1	1B.2
Silene serpentinicola serpentine catchfly	PDCAR0U2B0	None	None	G3	S3	1B.2
Speyeria zerene hippolyta Oregon silverspot butterfly	IILEPJ6087	Threatened	None	G5T1	S1	
Streptanthus howellii Howell's jewelflower	PDBRA2G0N0	None	None	G2G3	S2	1B.2
Thaleichthys pacificus eulachon	AFCHB04010	Threatened	None	G5	S3	
Usnea longissima Methuselah's beard lichen	NLLEC5P420	None	None	G4	S4	4.2
Vaccinium scoparium little-leaved huckleberry	PDERI180Y0	None	None	G5	S3	2B.2
Viola langsdorffii Langsdorf's violet	PDVIO04100	None	None	G4	S1	2B.1
Viola palustris alpine marsh violet	PDVIO041G0	None	None	G5	S1S2	2B.2
Viola primulifolia ssp. occidentalis western white bog violet	PDVIO040Y2	None	None	G5T2	S2	1B.2

Record Count: 115