#### **Introduction:**

Trout Unlimited, Inc. (TU) will implement the Potrero Creek Fish Passage Project (Project) with the purpose of providing fish passage and improving flood conveyance while providing and maintaining safe vehicle access across Potrero Creek to existing commercial facilities at the Carmel Valley Athletic Club (CVAC). The project is designed to remove a set of perched 48-inch corrugated metal culverts and concrete aprons and replace them with a single multi-plate arched culvert. The arched culvert will be approximately 23 feet long, have a 12-foot-10inch span, 8-foot-4-inch rise and will provide a 16-foot roadway width. The culvert will be embedded approximately 3.5 feet below the channel grade and backfilled with native streambed material to maintain a natural channel bottom that will provide passage opportunities similar to adjoining reaches of the channel.

The Potrero Creek watershed is an important, but underutilized steelhead spawning and rearing tributary of the Carmel River watershed. The confluence of Potrero Creek and Carmel River is approximately four miles from the Pacific Ocean and Potrero Creek is the first tributary available to steelhead after migrating upstream from the ocean. The lower reaches of this stream are impacted by the over-drafting of the Carmel River riparian aguifer and similar to the mainstem Carmel River, dries down in late spring through the summer. High flows associated with winter storms re-water these lower reaches and provide migration opportunities for all life stages of steelhead trout (Oncorhynchus mykiss) into and out of the mid- and upper portion of Potrero Creek, which remain perennial and cool, even in the drought years.

In 2016, TU staff met with the several landowners in the lower Potrero Creek area including Quail Lodge and Golf Club, CVAC and the Santa Lucia Conservancy. Each landowner agreed to cooperate with TU on a project to fully assess the identified barriers and to allow restoration design engineers to offer projects which remediate each barrier. Based on those discussions, the California Coastal Conservancy awarded a Plan/Design grant of Carmel River Settlement Fund dollars to TU to assess and design projects at four locations including this project's perched culverts.

Over the past two winters, the design team has observed migration flows at each of the barriers. It is their determination, based on field work, hydraulic modeling and visual assessments, that because of velocity, jump height and an asphalt splash at the outlet, the perched culverts at CVAC is the most severe limiting migration barrier and is a full barrier. Each of the other barriers provide passage at some winter migration flows. Based on that determination, this CVAC culvert became the initial priority. Design plans, specifications, Technical Memorandum and Engineer's Estimate are currently at a 65% design phase. One hundred percent designs and specifications will be completed by July 2019, funded by the

### Potrero Creek Fish Passage Project – Carmel 2019 Valley Athletic Club, Carmel Valley

Carmel River Settlement Funds, administrated by the California Coastal Conservancy.

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 and Volume II Inttps://www.wildlife.ca.gov/Grants/FRGP/Guidancel.

#### Objective(s):

Remove an existing set of perched corrugated metal culverts and concrete aprons which are full barriers to fish passage on Potrero Creek, and replace it with a multi-plate arched culvert to provide fish passage, improve flood conveyance and allow landowner access across the creek.

#### **Project Description:**

#### **Location:**

Project site is located on Potrero Creek, tributary to the Carmel River in Monterey County, in unincorporated Carmel Valley. Project area is located on the CVAC property approximately 0.5 river miles upstream of the confluence of Potrero Creek and the mainstem of the Carmel River, the confluence being approximately four river miles from the Pacific Ocean.

Access to the site is from county-maintained Rancho San Carlos Road approximately one mile from Carmel Valley Road. The culvert/road crossing serves as the pedestrian and automobile access across Potrero Creek to offices and athletic club facilities.

Project coordinates at center of the Project area are: Latitude 36.528938; Longitude -121.86733.

#### **Project Set Up:**

TU staff members will act as the Project Manager and Grant Administrator. TU will hire and oversee subcontractors (Waterways Consulting Inc., Alnus Ecological, Resource Conservation District of Monterey County (RCD), and Cultural Resources contractor to be selected), will select and contract with the construction contractor, coordinate grant reporting, invoicing and communications between landowner, CDFW and subcontractors. TU will additionally conduct photo monitoring and follow up Post Project monitoring. Tim Frahm, TU Central Coast Steelhead Coordinator, will act as Project Manager and Valerie Wasem, TU California Grant Accountant, will act as the TU Grant Assistant, Matt Clifford TU Staff Attorney, will review all sub-contracts and compliance documents and TU Project Coordinator Ben Cook will provide on-site monitoring of construction activities. Tasks 1,2,3,4.

Waterways Consulting Inc. and their sub-contractor team of Streeter Group and CMAG Engineering Inc. (the Project design team consisting of registered civil engineers, structural and geotechnical engineers), will be sub-contracted for construction staking, construction site management and As-Built Drawings. Tasks 2.3.4.

Alnus Ecological will be subcontracted to conduct and oversee biological services such as site de-watering and diversion (if needed) and re-watering of the stream. In addition, Alnus Ecological staff will conduct contractor education regarding sensitive and listed species and provide avoidance measures and will rescue and relocate fish prior to dewatering activities. Tasks 2,3.

RCD Executive Director Paul Robins will secure local and state permits as needed. Task 2.

Cultural Resource Survey Contractor (TBD) with experience in the preparation of a Cultural Resources Survey (Archaeological, Botanical and Paleontological) consistent with the requirements of CEQA will be selected and sub-contracted for the subject project site. Task 2.

Construction Contractor (TBD) with experience working on stream and stream restoration projects will be selected and sub-contracted for all construction related items including removal of the existing culverts, construction of the arched culvert alternative and all associated activities pertaining to the approved design plans. Task 3.

#### Materials:

Multi Plate Arched culvert. Additional materials such as concrete, structural rebar, rock slope protection, erosion fabric, structural fill and other will be provided by selected construction contractor per bid.

#### Tasks:

#### Task 1: Project Management and Administration

Trout Unlimited will provide project management which includes preparing and submitting invoices and progress reports, preparing Annual Reports, developing and managing subcontracts, convening project team meetings, developing

project information. coordinating with funders and partners, coordinating with landowners during the project and disseminating project materials and results.

#### Task 2: Project Pre-Construction Activities and Surveys

#### Task 2.1. Permit Acquisition

TU will contract with the RCD to secure all necessary permits, not provided by FRGP, including CDFW 1600 Lake and Streambed Alteration Agreement (LSAA), any county or local permits and any other permit or authorization required for capturing and handling steelhead trout and California red-legged frogs (Rana draytonii). A hard copy of all permits and resolutions obtained for the project will be submitted to the Grant Manager prior to the commencement of construction.

#### Task 2.2. Submission of Work Schedule

Grantee will submit a hard and electronic copy of final work schedule within two (2) weeks after execution of the grant, to Grant Manager and Grantor Engineer.

#### Task 2.3. Resource Surveys

Alnus Ecological will conduct pre-construction surveys following US Fish and Wildlife guidance protocol (2005). Surveys will be conducted by a qualified biologist (one holding appropriate permit) at least two weeks before the onset of construction activities. If needed, Alnus Ecological will move California redlegged frog and steelhead trout from the construction area and relocate them to appropriate habitat. In addition, monitoring of the channel will be conducted by a qualified biologist, permitted to handle the species, during the installation of coffer dams (or other dewatering structures) and during construction.

Selected consultant (TBD) will prepare the Cultural Resources Surveys including the archaeological, botanical and paleontological surveys, consistent with the requirements of CEQA for the subject site.

#### Task 2.4. Staging and Mobilization

TU and Waterways Consulting Inc. will conduct site preparation surveys to inform on-site operations, for the safe movement of personnel, equipment, supplies, and incidentals to the work site. The selected construction subcontractor will conduct site preparation for the establishment of all offices and other facilities necessary for work on the project and for all other work and operation which must be performed to complete tasks.

TU will establish Photo points which will be used throughout the project to document work site conditions.

#### **Task 3: Construction**

All construction will be done according to the accepted project specifications and accepted Final Engineering Plans. The Grantee will hold a pre-construction meeting with the Grant Manager, Grantor Engineer, and sub-contractor representatives to establish roles and responsibilities and set expectations for record keeping, scheduling, monitoring, safety, sensitive species and invasive species protocols.

The Grantee will notify the Grant Manager a minimum of two weeks prior to the start of construction to enable the Grant Manager to begin monitoring of the project. Once each week during construction, the Grantee shall electronically submit to the Grant Manager and the Grantor Engineer a construction progress report and required photos.

Grantee shall provide a dewatering plan, at least one month before the commencement to dewatering, to the Grant Manager for review and acceptance. All materials used for dewatering shall be removed and disposed of appropriately off site at the completion of the project.

Alnus Ecological will conduct the following:

- De-watering and fish relocation (Note: it is expected that the stream will be dry during construction which will eliminate the need for fish relocation).
- Re-watering/diversion removal.

Constructor Subcontractor TBD will conduct the following:

- Clearing and grubbing of vegetation and removal of debris from the construction site. All material removed shall be disposed of in accordance with all local regulations. Vegetation located beyond the limits for clearing and grubbing shall be protected from damage.
- Construct temporary vehicle access across road to ongoing commercial activities at CVAC.
- Demolish existing culvert/road crossing. Demolition will be done in accordance with all local regulations.
- Excavation and sub-grade preparation.
- Cast in place concrete foundations.
- Culvert installation and road re-constructed.
- Channel to be restored and rock slope protection to stabilize the banks and provide protection for newly installed culverts.
- Re-location of utilities.

Waterways Consulting will conduct the following:

As-Built Plans and Longitudinal Profile.

#### Task 4: Post Construction Riparian Restoration and Monitoring

TU, Waterways Consulting Inc. and selected construction contractor will, upon completion of construction during the following fall and winter, restore disturbed riparian habitat (e.g. stream banks in the vicinity disturbed area). This will include installation of erosion control fabric, and revegetation with native seeding, plants and live stakes (per Revegetation Plan shown on Construction design drawing in Supplemental Information) and will be maintained to a minimum of eighty five percent (85%) coverage of the seeded area three years after the revegetation is complete. TU will monitor revegetation success and re-plant as needed.

Photo points established during Pre-construction Activities will be used throughout the project to document work site conditions. Visual inspection of site and stability of project will be conducted after storm events.

#### **Deliverables:**

#### Task 1: Project Management and Administration

- -Invoices
- -Progress Reports
- -Annual Reports
- -Subcontractor Contracts
- -Final Landowner Access Agreements
- -Draft Final Report, Final Report
- -Data generated as a result of this project

#### Task 2: Project Pre-Construction Activities and Surveys

- -Copies of all permits secured by the Grantee
- -Final Work Schedule
- -Cultural Resources Survey Report
- -Steelhead trout and California red-legged frog surveys reports
- -Pre-project photo documentation

#### **Task 3: Construction**

- -Notification of the construction start date
- -Construction inspection checklist and weekly monitoring photo documentation
- -Completed construction and final report of permits condition compliance
- -As-Built Surveys and Plans

#### Task 4: Post Construction Riparian Restoration and Monitoring

- -Re-vegetation plan
- -Re-vegetation of construction site and staging area
- -Reports of visual inspections after storm events and final photo monitoring documentation

#### Timelines:

#### Task 1: Project Management and Administration

- -Project management will begin once grant agreement is finalized and will be ongoing during life of the grant. June 15, 2020 July 15, 2022.
- -Invoices (June 15, 2020 to July 15, 2022)
- -Progress Reports (monthly from July 15, 2020 to July 15, 2022)
- -Annual Reports (December 1, 2020; December 1, 2021)
- -Subcontractor Contracts (June 15, 2020 to July 1, 2020)
- -Final Landowner Access Agreements (Due by July 1, 2020)
- -Draft Final Report (May 15, 2021 to June 15, 2021)
- -Final Report (June 15, 2021 to July 1, 2022)
- -Data generated as a result of this project (June 15, 2020 July 1, 2022)

#### Task 2: Preconstruction Activities and Surveys

- -Final Work Schedule (June 15, 2020 July 1, 2020)
- -Permits, Photo documentation, Species Survey Reports, Cultural Resource Survey Report and Site Preparation with Photo Documentation (August 3, 2020 August 1, 2021).

#### **Task 3: Construction**

- -Construction activities will take place from August 2, 2021 October 31, 2021
- -Notification of the construction start date (Two weeks prior to construction approximately July 15, 2020)
- -Construction inspection checklist and weekly monitoring photo documentation (August 2, 2021 to November 1, 2021)
- -Completed construction and final report of permits condition compliance (December 1, 2021)
- -As-Built Surveys and Plans (December 1, 2021)

#### Task 4: Post Construction Riparian Restoration and Monitoring

# Potrero Creek Fish Passage Project – Carmel Valley Athletic Club, Carmel Valley

**2019** 

- -Revegetation on-the-ground activities will take place from November 1, 2021 June 15, 2022
- -Revegetation Plan submitted with final designs (June 15, 2020 to July 1, 2020)
- -Revegetation Report (November 1, 2021 to July 15, 2022)
- -Reports of visual inspections after storm events and final photo monitoring documentation (November 1, 2021 to June 15, 2022)

<u>Additional Requirements:</u> 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.

If fish relocation will be required, 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.

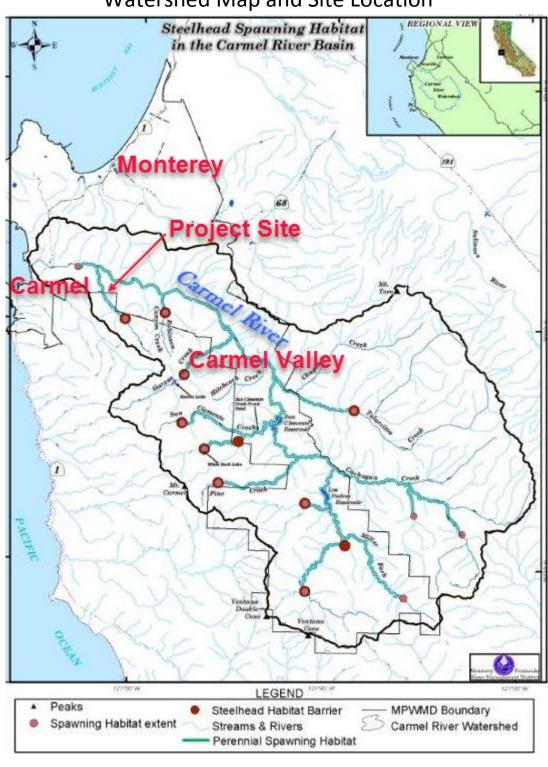
The bridge (culvert) design and installation will meet flow carrying capacity required for a 100-year flood event as identified by specifications determined by National Oceanic and Atmospheric Administration (NOAA) Fisheries and the California Department of Fish and Wildlife (CDFW), for adult and juvenile 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.

# POTRERO CREEK FISH PASSAGE PROJECT Carmel Valley Athletic Club

Proposal Number: 03035 Proposal Type: FP Fish Passage

# Supplemental Information Watershed Map and Site Location





## California Department of Fish and Wildlife California Natural Diversity Database



**Query Criteria:** 

Quad<span style='color:Red'> IS </span>(Seaside (3612157)<span style='color:Red'> OR </span>Salinas (3612166)<span style='color:Red'> OR </span>Spreckels (3612156)<span style='color:Red'> OR </span>Carmel Valley (3612146)<span style='color:Red'> OR </span>Mt. Carmel (3612147)<span style='color:Red'> OR </span>Soberanes Point (3612148)<span style='color:Red'> OR </span>Monterey (3612158)<span style='color:Red'> OR </span>Marina (3612167))

Possible species within the Seaside and surrounding quads for 3035 Potrero Creek Fish Passage Project - Carmel Valley Athletic Club, Carmel Valley, Monterey County

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
tricolored blackbird	ABI BABOOZO	140110	Threatened	0200	0102	000
Agrostis lacuna-vernalis	PMPOA041N0	None	None	G1	S1	1B.1
vernal pool bent grass	1 1111 0/10 11110	140110	110110	0.	0.	
Allium hickmanii	PMLIL02140	None	None	G2	S2	1B.2
Hickman's onion				-	-	
Ambystoma californiense	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
California tiger salamander						
Anniella pulchra	ARACC01020	None	None	G3	S3	SSC
northern California legless lizard						
Arctostaphylos edmundsii	PDERI04260	None	None	G2	S2	1B.2
Little Sur manzanita						
Arctostaphylos hookeri ssp. hookeri	PDERI040J1	None	None	G3T2	S2	1B.2
Hooker's manzanita						
Arctostaphylos montereyensis	PDERI040R0	None	None	G2?	S2?	1B.2
Toro manzanita						
Arctostaphylos pajaroensis	PDERI04100	None	None	G1	S1	1B.1
Pajaro manzanita						
Arctostaphylos pumila	PDERI04180	None	None	G1	S1	1B.2
sandmat manzanita						
Astragalus tener var. tener	PDFAB0F8R1	None	None	G2T1	S1	1B.2
alkali milk-vetch						
Astragalus tener var. titi	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
coastal dunes milk-vetch						
Athene cunicularia	ABNSB10010	None	None	G4	S3	SSC
burrowing owl						
Bombus caliginosus	IIHYM24380	None	None	G4?	S1S2	
obscure bumble bee						
Bombus occidentalis	IIHYM24250	None	None	G2G3	S1	
western bumble bee						
Bryoria spiralifera	NLTEST5460	None	None	G3	S1S2	1B.1
twisted horsehair lichen						
Buteo regalis	ABNKC19120	None	None	G4	S3S4	WL
ferruginous hawk						
Castilleja ambigua var. insalutata	PDSCR0D403	None	None	G4T2	S2	1B.1
pink Johnny-nip						
Central Dune Scrub	CTT21320CA	None	None	G2	S2.2	
Central Dune Scrub						



# California Department of Fish and Wildlife California Natural Diversity Database



Overtice	Flow 10 :	Fadamil Or r	01-1- 6: 1	Obstact 5	04-4-5	Rare Plant Rank/CDFW
Species	Element Code	Federal Status	State Status	Global Rank	State Rank	SSC or FP
Central Maritime Chaparral  Central Maritime Chaparral	CTT37C20CA	None	None	G2	S2.2	
Centromadia parryi ssp. congdonii	PDAST4R0P1	None	None	G3T1T2	S1S2	1B.1
Congdon's tarplant	1 0/314/(01 1	None	NOTIC	031112	3132	10.1
Charadrius alexandrinus nivosus	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
western snowy plover	7.5.11.1500001	rinoatorioa	110110	3010	0200	000
Chorizanthe minutiflora	PDPGN04100	None	None	G1	S1	1B.2
Fort Ord spineflower						
Chorizanthe pungens var. pungens	PDPGN040M2	Threatened	None	G2T2	S2	1B.2
Monterey spineflower						
Clarkia jolonensis	PDONA050L0	None	None	G2	S2	1B.2
Jolon clarkia						
Coelus globosus	IICOL4A010	None	None	G1G2	S1S2	
globose dune beetle						
Collinsia multicolor	PDSCR0H0B0	None	None	G2	S2	1B.2
San Francisco collinsia						
Cordylanthus rigidus ssp. littoralis	PDSCR0J0P2	None	Endangered	G5T2	S2	1B.1
seaside bird's-beak						
Corynorhinus townsendii	AMACC08010	None	None	G3G4	S2	SSC
Townsend's big-eared bat						
Coturnicops noveboracensis	ABNME01010	None	None	G4	S1S2	SSC
yellow rail						
Cypseloides niger	ABNUA01010	None	None	G4	S2	SSC
black swift						
Danaus plexippus pop. 1	IILEPP2012	None	None	G4T2T3	S2S3	
monarch - California overwintering population						
Delphinium californicum ssp. interius	PDRAN0B0A2	None	None	G3T3	S3	1B.2
Hospital Canyon larkspur						
Delphinium hutchinsoniae	PDRAN0B0V0	None	None	G2	S2	1B.2
Hutchinson's larkspur						.= -
Delphinium umbraculorum	PDRAN0B1W0	None	None	G3	S3	1B.3
umbrella larkspur				0001		
Emys marmorata	ARAAD02030	None	None	G3G4	S3	SSC
western pond turtle	ABBAT00044			05740	0.4	14.0
Eremophila alpestris actia  California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
	DDACT2L000	Nana	Nana	CO	CO	4D 4
Ericameria fasciculata  Eastwood's goldenbush	PDAST3L080	None	None	G2	S2	1B.1
	DDDCN00470	None	None	G2	S2	1B.3
Eriogonum nortonii Pinnacles buckwheat	PDPGN08470	None	None	GZ	32	ID.J
Erysimum ammophilum	PDBRA16010	None	None	G2	S2	1B.2
sand-loving wallflower	LDDKW10010	INOTIC	NOHE	G2	<b>3</b> 2	10.2
Sanu-ioving walliowel						



# California Department of Fish and Wildlife California Natural Diversity Database



						Rare Plant Rank/CDFW
Species	Element Code	Federal Status	State Status	Global Rank	State Rank	SSC or FP
Erysimum menziesii	PDBRA160R0	Endangered	Endangered	G1	S1	1B.1
Menzies' wallflower						
Eucyclogobius newberryi	AFCQN04010	Endangered	None	G3	S3	SSC
tidewater goby						
Euphilotes enoptes smithi	IILEPG2026	Endangered	None	G5T1T2	S1S2	
Smith's blue butterfly						
Falco mexicanus	ABNKD06090	None	None	G5	S4	WL
prairie falcon				_		_
Fritillaria liliacea	PMLIL0V0C0	None	None	G2	S2	1B.2
fragrant fritillary						
Gilia tenuiflora ssp. arenaria	PDPLM041P2	Endangered	Threatened	G3G4T2	S2	1B.2
Monterey gilia						
Hesperocyparis goveniana	PGCUP04031	Threatened	None	G1	S1	1B.2
Gowen cypress						
Hesperocyparis macrocarpa	PGCUP04060	None	None	G1	S1	1B.2
Monterey cypress						
Horkelia cuneata var. sericea	PDROS0W043	None	None	G4T1?	S1?	1B.1
Kellogg's horkelia						
Horkelia marinensis	PDROS0W0B0	None	None	G2	S2	1B.2
Point Reyes horkelia						
Lasiurus cinereus	AMACC05030	None	None	G5	S4	
hoary bat						
Lasthenia conjugens	PDAST5L040	Endangered	None	G1	S1	1B.1
Contra Costa goldfields						
Laterallus jamaicensis coturniculus	ABNME03041	None	Threatened	G3G4T1	S1	FP
California black rail						
Layia carnosa	PDAST5N010	Endangered	Endangered	G2	S2	1B.1
beach layia						
Legenere limosa	PDCAM0C010	None	None	G2	S2	1B.1
legenere						
Linderiella occidentalis	ICBRA06010	None	None	G2G3	S2S3	
California linderiella						
Lupinus tidestromii	PDFAB2B3Y0	Endangered	Endangered	G1	S1	1B.1
Tidestrom's lupine						
Malacothamnus palmeri var. involucratus	PDMAL0Q0B1	None	None	G3T2Q	S2	1B.2
Carmel Valley bush-mallow						
Malacothrix saxatilis var. arachnoidea	PDAST660C2	None	None	G5T2	S2	1B.2
Carmel Valley malacothrix						
Meconella oregana	PDPAP0G030	None	None	G2G3	S2	1B.1
Oregon meconella						
Microseris paludosa	PDAST6E0D0	None	None	G2	S2	1B.2
marsh microseris						
	PDASTGEODO	None	None	G2	32	10.2



# California Department of Fish and Wildlife California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Monardella sinuata ssp. nigrescens	PDLAM18162	None	None	G3T2	S2	1B.2
northern curly-leaved monardella						
Monolopia gracilens	PDAST6G010	None	None	G3	S3	1B.2
woodland woollythreads						
Monterey Cypress Forest	CTT83150CA	None	None	G1	S1.2	
Monterey Cypress Forest						
Monterey Pine Forest	CTT83130CA	None	None	G1	S1.1	
Monterey Pine Forest						
Monterey Pygmy Cypress Forest	CTT83162CA	None	None	G1	S1.1	
Monterey Pygmy Cypress Forest						
Northern Bishop Pine Forest	CTT83121CA	None	None	G2	S2.2	
Northern Bishop Pine Forest						
Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
Northern Coastal Salt Marsh						
Oceanodroma homochroa	ABNDC04030	None	None	G2	S2	SSC
ashy storm-petrel						
Oncorhynchus mykiss irideus pop. 9	AFCHA0209H	Threatened	None	G5T2Q	S2	
steelhead - south-central California coast DPS						
Pelecanus occidentalis californicus	ABNFC01021	Delisted	Delisted	G4T3T4	S3	FP
California brown pelican						
Phrynosoma blainvillii	ARACF12100	None	None	G3G4	S3S4	SSC
coast horned lizard						
Pinus radiata	PGPIN040V0	None	None	G1	S1	1B.1
Monterey pine						
Piperia yadonii	PMORC1X070	Endangered	None	G1	S1	1B.1
Yadon's rein orchid						
Plagiobothrys chorisianus var. chorisianus	PDBOR0V061	None	None	G3T1Q	S1	1B.2
Choris' popcornflower						
Plagiobothrys uncinatus	PDBOR0V170	None	None	G2	S2	1B.2
hooked popcornflower				_		
Potentilla hickmanii	PDROS1B0U0	Endangered	Endangered	G1	S1	1B.1
Hickman's cinquefoil						
Ramalina thrausta	NLLEC3S340	None	None	G5	S2?	2B.1
angel's hair lichen	=					
Rana boylii	AAABH01050	None	Candidate Threatened	G3	S3	SSC
foothill yellow-legged frog	A A A DI 104 000	Theresia	Maria	0000	0000	000
Rana draytonii	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California red-legged frog	4844 FF00000	Maria	Mana	0574	04	
Reithrodontomys megalotis distichlis	AMAFF02032	None	None	G5T1	S1	
Salinas harvest mouse	ADDALIOSOAS	Nana	Throatered	C.F.	CO	
Riparia riparia	ABPAU08010	None	Threatened	G5	S2	
bank swallow						



# California Department of Fish and Wildlife California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Rosa pinetorum	PDROS1J0W0	None	None None	G2	S2	1B.2
pine rose				_		
Sidalcea malachroides	PDMAL110E0	None	None	G3	S3	4.2
maple-leaved checkerbloom						
Sorex ornatus salarius	AMABA01105	None	None	G5T1T2	S1S2	SSC
Monterey shrew						
Spea hammondii	AAABF02020	None	None	G3	S3	SSC
western spadefoot						
Stebbinsoseris decipiens	PDAST6E050	None	None	G2	S2	1B.2
Santa Cruz microseris						
Taricha torosa	AAAAF02032	None	None	G4	S4	SSC
Coast Range newt						
Taxidea taxus	AMAJF04010	None	None	G5	S3	SSC
American badger						
Thamnophis hammondii	ARADB36160	None	None	G4	S3S4	SSC
two-striped gartersnake						
Tortula californica	NBMUS7L090	None	None	G2G3	S2S3	1B.2
California screw moss						
Trifolium buckwestiorum	PDFAB402W0	None	None	G2	S2	1B.1
Santa Cruz clover						
Trifolium hydrophilum	PDFAB400R5	None	None	G2	S2	1B.2
saline clover						
Trifolium polyodon	PDFAB402H0	None	Rare	G1	S1	1B.1
Pacific Grove clover						
Trifolium trichocalyx	PDFAB402J0	Endangered	Endangered	G1	S1	1B.1
Monterey clover						
Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
Valley Needlegrass Grassland						

**Record Count: 96**