

## **APPENDIX C-2**

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# Terrestrial and Freshwater Species Considered for the Proposed Project



# Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Santa Cruz (3612281) OR Davenport (3712212) OR Felton (3712211) OR Laurel (3712118) OR Soquel (3612188) OR Loma Prieta (3712117) OR Watsonville West (3612187) OR Moss Landing (3612177))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Adela oplerella</i> Opler's longhorn moth	IILEE0G040	None	None	G2	S2	
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
<i>Agrostis blasdalei</i> Blasdale's bent grass	PMPOA04060	None	None	G2	S2	1B.2
<i>Ambystoma californiense</i> California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
<i>Ambystoma macrodactylum croceum</i> Santa Cruz long-toed salamander	AAAAA01082	Endangered	Endangered	G5T1T2	S1S2	FP
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	PDBOR01070	None	None	G2G3	S2S3	1B.2
<i>Aneides niger</i> Santa Cruz black salamander	AAAAD01070	None	None	G3	S3	SSC
<i>Anniella pulchra</i> northern California legless lizard	ARACC01020	None	None	G3	S3	SSC
<i>Anomobryum julaceum</i> slender silver moss	NBMUS80010	None	None	G5?	S2	4.2
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Arctostaphylos andersonii</i> Anderson's manzanita	PDERI04030	None	None	G2	S2	1B.2
<i>Arctostaphylos glutinosa</i> Schreiber's manzanita	PDERI040G0	None	None	G1	S1	1B.2
<i>Arctostaphylos hookeri ssp. hookeri</i> Hooker's manzanita	PDERI040J1	None	None	G3T2	S2	1B.2
<i>Arctostaphylos ohloneana</i> Ohlone manzanita	PDERI042Y0	None	None	G1	S1	1B.1
<i>Arctostaphylos pajaroensis</i> Pajaro manzanita	PDERI04100	None	None	G1	S1	1B.1
<i>Arctostaphylos silvicola</i> Bonny Doon manzanita	PDERI041F0	None	None	G1	S1	1B.2
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Arenaria paludicola</i> marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1



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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Asio flammeus</i></b> short-eared owl	ABNSB13040	None	None	G5	S3	SSC
<b><i>Athene cunicularia</i></b> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<b><i>Bombus caliginosus</i></b> obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
<b><i>Bombus occidentalis</i></b> western bumble bee	IIHYM24250	None	None	G2G3	S1	
<b><i>Brachyramphus marmoratus</i></b> marbled murrelet	ABNNN06010	Threatened	Endangered	G3G4	S1	
<b><i>Calyptridium parryi var. hesseae</i></b> Santa Cruz Mountains pussypaws	PDPOR09052	None	None	G3G4T2	S2	1B.1
<b><i>Campanula californica</i></b> swamp harebell	PDCAM02060	None	None	G3	S3	1B.2
<b><i>Carex comosa</i></b> bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
<b><i>Carex saliniformis</i></b> deceiving sedge	PMCYP03BY0	None	None	G2	S2	1B.2
<b><i>Ceanothus ferrisiae</i></b> Coyote ceanothus	PDRHA041N0	Endangered	None	G1	S1	1B.1
<b>Central Dune Scrub</b> Central Dune Scrub	CTT21320CA	None	None	G2	S2.2	
<b><i>Centromadia parryi ssp. congdonii</i></b> Congdon's tarplant	PDAST4R0P1	None	None	G3T2	S2	1B.1
<b><i>Charadrius alexandrinus nivosus</i></b> western snowy plover	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
<b><i>Chorizanthe pungens var. hartwegiana</i></b> Ben Lomond spineflower	PDPGN040M1	Endangered	None	G2T1	S1	1B.1
<b><i>Chorizanthe pungens var. pungens</i></b> Monterey spineflower	PDPGN040M2	Threatened	None	G2T2	S2	1B.2
<b><i>Chorizanthe robusta var. hartwegii</i></b> Scotts Valley spineflower	PDPGN040Q1	Endangered	None	G2T1	S1	1B.1
<b><i>Chorizanthe robusta var. robusta</i></b> robust spineflower	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
<b><i>Cicindela hirticollis gravida</i></b> sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
<b><i>Cicindela ohlone</i></b> Ohlone tiger beetle	IICOL026L0	Endangered	None	G1	S1	
<b><i>Clarkia concinna ssp. automixa</i></b> Santa Clara red ribbons	PDONA050A1	None	None	G5?T3	S3	4.3
<b>Coastal and Valley Freshwater Marsh</b> Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	



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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b>Coastal Brackish Marsh</b> Coastal Brackish Marsh	CTT52200CA	None	None	G2	S2.1	
<b>Coelus globosus</b> globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
<b>Collinsia multicolor</b> San Francisco collinsia	PDSCR0H0B0	None	None	G2	S2	1B.2
<b>Cordylanthus rigidus ssp. littoralis</b> seaside bird's-beak	PDSCR0J0P2	None	Endangered	G5T2	S2	1B.1
<b>Corynorhinus townsendii</b> Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
<b>Coturnicops noveboracensis</b> yellow rail	ABNME01010	None	None	G4	S1S2	SSC
<b>Cypseloides niger</b> black swift	ABNUA01010	None	None	G4	S2	SSC
<b>Dacryophyllum falcifolium</b> tear drop moss	NBMUS8Z010	None	None	G2	S2	1B.3
<b>Danaus plexippus pop. 1</b> monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
<b>Dicamptodon ensatus</b> California giant salamander	AAAAH01020	None	None	G3	S2S3	SSC
<b>Dipodomys venustus venustus</b> Santa Cruz kangaroo rat	AMAFD03042	None	None	G4T1	S1	
<b>Elanus leucurus</b> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<b>Emys marmorata</b> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<b>Eriogonum nudum var. decurrens</b> Ben Lomond buckwheat	PDPGN08492	None	None	G5T1	S1	1B.1
<b>Erysimum ammophilum</b> sand-loving wallflower	PDBRA16010	None	None	G2	S2	1B.2
<b>Erysimum teretifolium</b> Santa Cruz wallflower	PDBRA160N0	Endangered	Endangered	G1	S1	1B.1
<b>Eucyclogobius newberryi</b> tidewater goby	AFCQN04010	Endangered	None	G3	S3	SSC
<b>Euphilotes enoptes smithi</b> Smith's blue butterfly	IILEPG2026	Endangered	None	G5T1T2	S1S2	
<b>Falco peregrinus anatum</b> American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
<b>Fissidens pauperculus</b> minute pocket moss	NBMUS2W0U0	None	None	G3?	S2	1B.2
<b>Fissilicreagris imperialis</b> Empire Cave pseudoscorpion	ILARAE5010	None	None	G1	S1	



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<b><i>Geothlypis trichas sinuosa</i></b> saltmarsh common yellowthroat	ABPBX1201A	None	None	G5T3	S3	SSC
<b><i>Gilia tenuiflora ssp. arenaria</i></b> Monterey gilia	PDPLM041P2	Endangered	Threatened	G3G4T2	S2	1B.2
<b><i>Hesperocyparis abramsiana var. abramsiana</i></b> Santa Cruz cypress	PGCUP04081	Threatened	Endangered	G1T1	S1	1B.2
<b><i>Hoita strobilina</i></b> Loma Prieta hoita	PDFAB5Z030	None	None	G2	S2	1B.1
<b><i>Holocarpha macradenia</i></b> Santa Cruz tarplant	PDAST4X020	Threatened	Endangered	G1	S1	1B.1
<b><i>Horkelia cuneata var. sericea</i></b> Kellogg's horkelia	PDROS0W043	None	None	G4T1?	S1?	1B.1
<b><i>Horkelia marinensis</i></b> Point Reyes horkelia	PDROS0W0B0	None	None	G2	S2	1B.2
<b><i>Lasiurus cinereus</i></b> hoary bat	AMACC05030	None	None	G5	S4	
<b><i>Lasthenia californica ssp. macrantha</i></b> perennial goldfields	PDAST5L0C5	None	None	G3T2	S2	1B.2
<b><i>Laterallus jamaicensis coturniculus</i></b> California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
<b><i>Lessingia micradenia var. glabrata</i></b> smooth lessingia	PDAST5S062	None	None	G2T2	S2	1B.2
<b><i>Linderiella occidentalis</i></b> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<b><i>Lytta moesta</i></b> moestan blister beetle	IICOL4C020	None	None	G2	S2	
<b><i>Malacothamnus arcuatus</i></b> arcuate bush-mallow	PDMAL0Q0E0	None	None	G2Q	S2	1B.2
<b><i>Margaritifera falcata</i></b> western pearlshell	IMBIV27020	None	None	G4G5	S1S2	
<b>Maritime Coast Range Ponderosa Pine Forest</b> Maritime Coast Range Ponderosa Pine Forest	CTT84132CA	None	None	G1	S1.1	
<b><i>Meta dolloff</i></b> Dolloff Cave spider	ILARA17010	None	None	G1	S1	
<b><i>Microseris paludosa</i></b> marsh microseris	PDAST6E0D0	None	None	G2	S2	1B.2
<b><i>Mielichhoferia elongata</i></b> elongate copper moss	NBMUS4Q022	None	None	G5	S4	4.3
<b><i>Monardella sinuata ssp. nigrescens</i></b> northern curly-leaved monardella	PDLAM18162	None	None	G3T2	S2	1B.2
<b><i>Monolopia gracilens</i></b> woodland woollythreads	PDAST6G010	None	None	G3	S3	1B.2



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<b>Monterey Pine Forest</b> Monterey Pine Forest	CTT83130CA	None	None	G1	S1.1	
<b>Neochthonius imperialis</b> Empire Cave pseudoscorpion	ILARAD1010	None	None	G1	S1	
<b>Neotoma fuscipes annectens</b> San Francisco dusky-footed woodrat	AMAFF08082	None	None	G5T2T3	S2S3	SSC
<b>North Central Coast Drainage Sacramento Sucker/Roach River</b> North Central Coast Drainage Sacramento Sucker/Roach River	CARA2623CA	None	None	GNR	SNR	
<b>North Central Coast Short-Run Coho Stream</b> North Central Coast Short-Run Coho Stream	CARA2632CA	None	None	GNR	SNR	
<b>Northern Coastal Salt Marsh</b> Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
<b>Northern Interior Cypress Forest</b> Northern Interior Cypress Forest	CTT83220CA	None	None	G2	S2.2	
<b>Northern Maritime Chaparral</b> Northern Maritime Chaparral	CTT37C10CA	None	None	G1	S1.2	
<b>Oncorhynchus kisutch pop. 4</b> coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	G4	S2?	
<b>Oncorhynchus mykiss irideus pop. 8</b> steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	
<b>Oncorhynchus mykiss irideus pop. 9</b> steelhead - south-central California coast DPS	AFCHA0209H	Threatened	None	G5T2Q	S2	
<b>Pandion haliaetus</b> osprey	ABNKC01010	None	None	G5	S4	WL
<b>Pedicularis dudleyi</b> Dudley's lousewort	PDSCR1K0D0	None	Rare	G2	S2	1B.2
<b>Penstemon rattanii var. kleei</b> Santa Cruz Mountains beardtongue	PDSCR1L5B1	None	None	G4T2	S2	1B.2
<b>Pentachaeta bellidiflora</b> white-rayed pentachaeta	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
<b>Philanthus nasalis</b> Antioch specid wasp	IIHYM20010	None	None	G1	S1	
<b>Pinus radiata</b> Monterey pine	PGPIN040V0	None	None	G1	S1	1B.1
<b>Piperia candida</b> white-flowered rein orchid	PMORC1X050	None	None	G3	S3	1B.2
<b>Piperia yadonii</b> Yadon's rein orchid	PMORC1X070	Endangered	None	G1	S1	1B.1
<b>Plagiobothrys chorisianus var. chorisianus</b> Choris' popcornflower	PDBOR0V061	None	None	G3T2Q	S2	1B.2
<b>Plagiobothrys diffusus</b> San Francisco popcornflower	PDBOR0V080	None	Endangered	G1Q	S1	1B.1



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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Polygonum hickmanii</i></b> Scotts Valley polygonum	PDPGN0L310	Endangered	Endangered	G1	S1	1B.1
<b><i>Polyphylla barbata</i></b> Mount Hermon (=barbate) June beetle	IICOL68030	Endangered	None	G1	S1	
<b><i>Rallus obsoletus obsoletus</i></b> California Ridgway's rail	ABNME05016	Endangered	Endangered	G5T1	S1	FP
<b><i>Rana boylei</i></b> foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
<b><i>Rana draytonii</i></b> California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
<b><i>Reithrodontomys megalotis distichlis</i></b> Salinas harvest mouse	AMAFF02032	None	None	G5T1	S1	
<b><i>Riparia riparia</i></b> bank swallow	ABPAU08010	None	Threatened	G5	S2	
<b><i>Senecio aphanactis</i></b> chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
<b><i>Sidalcea malachroides</i></b> maple-leaved checkerbloom	PDMAL110E0	None	None	G3	S3	4.2
<b><i>Spirinchus thaleichthys</i></b> longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	SSC
<b><i>Stebbinsoseris decipiens</i></b> Santa Cruz microseris	PDAST6E050	None	None	G2	S2	1B.2
<b><i>Stygobromus mackenziei</i></b> Mackenzie's Cave amphipod	ICMAL05530	None	None	G1	S1	
<b><i>Taxidea taxus</i></b> American badger	AMAJF04010	None	None	G5	S3	SSC
<b><i>Thaleichthys pacificus</i></b> eulachon	AFCHB04010	Threatened	None	G5	S3	
<b><i>Trifolium buckwestiorum</i></b> Santa Cruz clover	PDFAB402W0	None	None	G2	S2	1B.1
<b><i>Trifolium hydrophilum</i></b> saline clover	PDFAB400R5	None	None	G2	S2	1B.2
<b><i>Trimerotropis infantilis</i></b> Zayante band-winged grasshopper	IIORT36030	Endangered	None	G1	S1	
<b><i>Tryonia imitator</i></b> mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	

Record Count: 121



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Ventura Fish And Wildlife Office  
2493 Portola Road, Suite B  
Ventura, CA 93003-7726  
Phone: (805) 644-1766 Fax: (805) 644-3958

In Reply Refer To:

January 02, 2018

Consultation Code: 08EVEN00-2017-SLI-0059

Event Code: 08EVEN00-2018-E-00380

Project Name: Soquel Creek Water District Groundwater Replenishment? Pure Water Soquel

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed list identifies species listed as threatened and endangered, species proposed for listing as threatened or endangered, designated and proposed critical habitat, and species that are candidates for listing that may occur within the boundary of the area you have indicated using the U.S. Fish and Wildlife Service's (Service) Information Planning and Conservation System (IPaC). The species list fulfills the requirements under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the species list should be verified after 90 days. We recommend that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists following the same process you used to receive the enclosed list. Please include the Consultation Tracking Number in the header of this letter with any correspondence about the species list.

Due to staff shortages and excessive workload, we are unable to provide an official list more specific to your area. Numerous other sources of information are available for you to narrow the list to the habitats and conditions of the site in which you are interested. For example, we recommend conducting a biological site assessment or surveys for plants and animals that could help refine the list.

If a Federal agency is involved in the project, that agency has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a major construction project\*, the Federal agency has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If the Federal agency determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a



written request for formal consultation. During this review process, the Federal agency may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

Federal agencies are required to confer with the Service, pursuant to section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). A request for formal conference must be in writing and should include the same information that would be provided for a request for formal consultation. Conferences can also include discussions between the Service and the Federal agency to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

When a proposed species or proposed critical habitat may be affected by an action, the lead Federal agency may elect to enter into formal conference with the Service even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the Federal agency may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Only listed species receive protection under the Act. However, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Wildlife's Natural Diversity Data Base. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

[\*A Biological Assessment is required for construction projects (or other undertakings having

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similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.]

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Ventura Fish And Wildlife Office**

2493 Portola Road, Suite B

Ventura, CA 93003-7726

(805) 644-1766

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## Project Summary

Consultation Code: 08EVEN00-2017-SLI-0059

Event Code: 08EVEN00-2018-E-00380

Project Name: Soquel Creek Water District Groundwater Replenishment? Pure Water Soquel

Project Type: WATER SUPPLY / DELIVERY

Project Description: Soquel Creek Water District proposes to construct an advanced purified groundwater replenishment project to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Facilities would include water treatment facilities; a pump station and pipelines for conveyance of source water, purified water and brine effluent; and injection wells. Facilities would be built in Santa Cruz, Capitola, Live Oak, Aptos and Soquel. The project facilities would be built over approximately 36 months, with an expected construction period of spring 2019 through fall 2021.

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/36.9667597786716N121.98562261044185W>



Counties: Santa Cruz, CA

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## Endangered Species Act Species

There is a total of 17 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

### Mammals

NAME	STATUS
Southern Sea Otter <i>Enhydra lutris nereis</i> No critical habitat has been designated for this species. <b><i>This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.</i></b> Species profile: <a href="https://ecos.fws.gov/ecp/species/8560">https://ecos.fws.gov/ecp/species/8560</a>	Threatened

### Birds

NAME	STATUS
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a>	Endangered
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered
Marbled Murrelet <i>Brachyramphus marmoratus</i> Population: U.S.A. (CA, OR, WA) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4467">https://ecos.fws.gov/ecp/species/4467</a>	Threatened
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered
Western Snowy Plover <i>Charadrius alexandrinus nivosus</i> Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8035">https://ecos.fws.gov/ecp/species/8035</a>	Threatened

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## Reptiles

NAME	STATUS
San Francisco Garter Snake <i>Thamnophis sirtalis tetrataenia</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5956">https://ecos.fws.gov/ecp/species/5956</a>	Endangered

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	Threatened
Santa Cruz Long-toed Salamander <i>Ambystoma macrodactylum croceum</i> There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/7405">https://ecos.fws.gov/ecp/species/7405</a>	Endangered

## Fishes

NAME	STATUS
Tidewater Goby <i>Eucyclogobius newberryi</i> There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/57">https://ecos.fws.gov/ecp/species/57</a>	Endangered

## Insects

NAME	STATUS
Ohlone Tiger Beetle <i>Cicindela ohlone</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8271">https://ecos.fws.gov/ecp/species/8271</a>	Endangered
Zayante Band-winged Grasshopper <i>Trimerotropis infantilis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1036">https://ecos.fws.gov/ecp/species/1036</a>	Endangered

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## Flowering Plants

NAME	STATUS
Marsh Sandwort <i>Arenaria paludicola</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2229">https://ecos.fws.gov/ecp/species/2229</a>	Endangered
Santa Cruz Tarplant <i>Holocarpha macradenia</i> There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6832">https://ecos.fws.gov/ecp/species/6832</a>	Threatened
Scotts Valley Polygonum <i>Polygonum hickmanii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3222">https://ecos.fws.gov/ecp/species/3222</a>	Endangered
Scotts Valley Spineflower <i>Chorizanthe robusta var. hartwegii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7108">https://ecos.fws.gov/ecp/species/7108</a>	Endangered

## Critical habitats

There are 2 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Santa Cruz Tarplant <i>Holocarpha macradenia</i> <a href="https://ecos.fws.gov/ecp/species/6832#crithab">https://ecos.fws.gov/ecp/species/6832#crithab</a>	Final
Tidewater Goby <i>Eucyclogobius newberryi</i> <a href="https://ecos.fws.gov/ecp/species/57#crithab">https://ecos.fws.gov/ecp/species/57#crithab</a>	Final

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## Plant List

### Inventory of Rare and Endangered Plants

57 matches found. *Click on scientific name for details*

#### Search Criteria

Found in Quads 3712212, 3712211, 3712118 3612281 and 3612188;

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Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
<a href="#">Agrostis blasdalei</a>	Blasdale's bent grass	Poaceae	perennial rhizomatous herb	May-Jul	1B.2	S2	G2
<a href="#">Amsinckia lunaris</a>	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	1B.2	S2S3	G2G3
<a href="#">Anomobryum julaceum</a>	slender silver moss	Bryaceae	moss		4.2	S2	G5?
<a href="#">Arabis blepharophylla</a>	coast rockcress	Brassicaceae	perennial herb	Feb-May	4.3	S4	G4
<a href="#">Arctostaphylos andersonii</a>	Anderson's manzanita	Ericaceae	perennial evergreen shrub	Nov-May	1B.2	S2	G2
<a href="#">Arctostaphylos glutinosa</a>	Schreiber's manzanita	Ericaceae	perennial evergreen shrub	(Nov)Mar-Apr	1B.2	S1	G1
<a href="#">Arctostaphylos ohloneana</a>	Ohlone manzanita	Ericaceae	evergreen shrub	Feb-Mar	1B.1	S1	G1
<a href="#">Arctostaphylos pajaroensis</a>	Pajaro manzanita	Ericaceae	perennial evergreen shrub	Dec-Mar	1B.1	S1	G1
<a href="#">Arctostaphylos silvicola</a>	Bonny Doon manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar	1B.2	S1	G1
<a href="#">Arenaria paludicola</a>	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	1B.1	S1	G1
<a href="#">Calandrinia breweri</a>	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	4.2	S4	G4
<a href="#">Calyptridium parryi var. hesseae</a>	Santa Cruz Mountains pussypaws	Montiaceae	annual herb	May-Aug	1B.1	S2	G3G4T2
<a href="#">Campanula californica</a>	swamp harebell	Campanulaceae	perennial rhizomatous herb	Jun-Oct	1B.2	S3	G3
<a href="#">Carex comosa</a>	bristly sedge	Cyperaceae		May-Sep	2B.1	S2	G5



			perennial rhizomatous herb				
<u>Carex saliniformis</u>	deceiving sedge	Cyperaceae	perennial rhizomatous herb	Jun(Jul)	1B.2	S2	G2
<u>Castilleja ambigua</u> <u>var. ambigua</u>	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)	Mar-Aug	4.2	S4	G4T5
<u>Chorizanthe</u> <u>pungens var.</u> <u>hartwegiana</u>	Ben Lomond spineflower	Polygonaceae	annual herb	Apr-Jul	1B.1	S1	G2T1
<u>Chorizanthe robusta</u> <u>var. hartwegii</u>	Scotts Valley spineflower	Polygonaceae	annual herb	Apr-Jul	1B.1	S1	G2T1
<u>Chorizanthe robusta</u> <u>var. robusta</u>	robust spineflower	Polygonaceae	annual herb	Apr-Sep	1B.1	S1	G2T1
<u>Collinsia multicolor</u>	San Francisco collinsia	Plantaginaceae	annual herb	(Feb)Mar- May	1B.2	S2	G2
<u>Cypripedium</u> <u>fasciculatum</u>	clustered lady's- slipper	Orchidaceae	perennial rhizomatous herb	Mar-Aug	4.2	S4	G4
<u>Cypripedium</u> <u>montanum</u>	mountain lady's- slipper	Orchidaceae	perennial rhizomatous herb	Mar-Aug	4.2	S4	G4
<u>Dacryophyllum</u> <u>falcifolium</u>	tear drop moss	Hypnaceae	moss		1B.3	S2	G2
<u>Elymus californicus</u>	California bottle- brush grass	Poaceae	perennial herb	May-Aug (Nov)	4.3	S4	G4
<u>Eriogonum nudum</u> <u>var. decurrens</u>	Ben Lomond buckwheat	Polygonaceae	perennial herb	Jun-Oct	1B.1	S1	G5T1
<u>Erysimum</u> <u>teretifolium</u>	Santa Cruz wallflower	Brassicaceae	perennial herb	Mar-Jul	1B.1	S1	G1
<u>Fissidens</u> <u>pauperculus</u>	minute pocket moss	Fissidentaceae	moss		1B.2	S2	G3?
<u>Grindelia hirsutula</u> <u>var. maritima</u>	San Francisco gumplant	Asteraceae	perennial herb	Jun-Sep	3.2	S1	G5T1Q
<u>Hesperocyparis</u> <u>abramsiana var.</u> <u>abramsiana</u>	Santa Cruz cypress	Cupressaceae	perennial evergreen tree		1B.2	S1	G1T1
<u>Hoita strobilina</u>	Loma Prieta hoita	Fabaceae	perennial herb	May-Jul (Aug-Oct)	1B.1	S2	G2
<u>Holocarpha</u> <u>macradenia</u>	Santa Cruz tarplant	Asteraceae	annual herb	Jun-Oct	1B.1	S1	G1
<u>Horkelia cuneata</u> <u>var. sericea</u>	Kellogg's horkelia	Rosaceae	perennial herb	Apr-Sep	1B.1	S1?	G4T1?
<u>Horkelia marinensis</u>	Point Reyes horkelia	Rosaceae	perennial herb	May-Sep	1B.2	S2	G2
<u>Lasthenia californica</u> <u>ssp. macrantha</u>	perennial goldfields	Asteraceae	perennial herb	Jan-Nov	1B.2	S2	G3T2
	smooth lessingia	Asteraceae	annual herb		1B.2	S2	G2T2

<a href="#"><u>Lessingia micradenia var. glabrata</u></a>				(Apr-Jun) Jul-Nov			
<a href="#"><u>Malacothamnus arcuatus</u></a>	arcuate bush-mallow	Malvaceae	perennial evergreen shrub	Apr-Sep	1B.2	S2	G2Q
<a href="#"><u>Micropus amphibolus</u></a>	Mt. Diablo cottonweed	Asteraceae	annual herb	Mar-May	3.2	S3S4	G3G4
<a href="#"><u>Microseris paludosa</u></a>	marsh microseris	Asteraceae	perennial herb	Apr-Jun (Jul)	1B.2	S2	G2
<a href="#"><u>Mielichhoferia elongata</u></a>	elongate copper moss	Mielichhoferiaceae	moss		4.3	S4	G5
<a href="#"><u>Mimulus rattanii ssp. decurtatus</u></a>	Santa Cruz County monkeyflower	Phrymaceae	annual herb	May-Jul	4.2	S1S3	G4T1T3Q
<a href="#"><u>Monardella sinuata ssp. nigrescens</u></a>	northern curly-leaved monardella	Lamiaceae	annual herb	(Apr)May-Jul(Aug-Sep)	1B.2	S2	G3T2
<a href="#"><u>Monolopia gracilens</u></a>	woodland woollythreads	Asteraceae	annual herb	(Feb)Mar-Jul	1B.2	S3	G3
<a href="#"><u>Pedicularis dudleyi</u></a>	Dudley's lousewort	Orobanchaceae	perennial herb	Apr-Jun	1B.2	S2	G2
<a href="#"><u>Penstemon rattanii var. kleei</u></a>	Santa Cruz Mountains beardtongue	Plantaginaceae	perennial herb	May-Jun	1B.2	S2	G4T2
<a href="#"><u>Pentachaeta bellidiflora</u></a>	white-rayed pentachaeta	Asteraceae	annual herb	Mar-May	1B.1	S1	G1
<a href="#"><u>Pinus radiata</u></a>	Monterey pine	Pinaceae	perennial evergreen tree		1B.1	S1	G1
<a href="#"><u>Piperia candida</u></a>	white-flowered rein orchid	Orchidaceae	perennial herb	(Mar)May-Sep	1B.2	S3	G3
<a href="#"><u>Plagiobothrys chorisianus var. chorisianus</u></a>	Choris' popcornflower	Boraginaceae	annual herb	Mar-Jun	1B.2	S2	G3T2Q
<a href="#"><u>Plagiobothrys diffusus</u></a>	San Francisco popcornflower	Boraginaceae	annual herb	Mar-Jun	1B.1	S1	G1Q
<a href="#"><u>Polygonum hickmanii</u></a>	Scotts Valley polygonum	Polygonaceae	annual herb	May-Aug	1B.1	S1	G1
<a href="#"><u>Ranunculus lobbii</u></a>	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	Feb-May	4.2	S3	G4
<a href="#"><u>Sanicula hoffmannii</u></a>	Hoffmann's sanicle	Apiaceae	perennial herb	Mar-May	4.3	S3	G3
<a href="#"><u>Senecio aphanactis</u></a>	chaparral ragwort	Asteraceae	annual herb	Jan-Apr (May)	2B.2	S2	G3
<a href="#"><u>Sidalcea malachroides</u></a>	maple-leaved checkerbloom	Malvaceae	perennial herb	(Mar)Apr-Aug	4.2	S3	G3
<a href="#"><u>Silene verecunda ssp. verecunda</u></a>	San Francisco campion	Caryophyllaceae	perennial herb	(Feb)Mar-Jun(Aug)	1B.2	S1	G5T1
<a href="#"><u>Stebbinsoseris decipiens</u></a>	Santa Cruz microseris	Asteraceae	annual herb	Apr-May	1B.2	S2	G2

[Trifolium  
buckwestiorum](#)

Santa Cruz clover Fabaceae

annual herb

Apr-Oct

1B.1

S2

G2

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### Questions and Comments

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**Fish Species Recorded in Kelp Forest Transects off Terrace Point, Santa Cruz County**

Scientific Name	Common Name
<b>Coastal Pelagic FMP</b>	
<i>Atherinopsis californiensis</i>	Jacksmelt
<b>Pacific Groundfish FMP</b>	
<i>Hexagrammos decagrammus</i>	Kelp greenling
<i>Ophiodon elongatus</i>	Lingcod
<i>Sebastes atrovirens</i>	Kelp rockfish
<i>Sebastes atrovirens/ S. caranatus/ S. chrysomelas</i> (yoy)	Kelp/gopher/black-and-yellow rockfish
<i>Sebastes caurinus</i>	Copper rockfish
<i>Sebastes chrysomelas</i>	Black-and-yellow rockfish
<i>Sebastes melanops</i>	Black rockfish
<i>Sebastes miniatus</i>	Vermilion rockfish
<i>Sebastes mystinus</i>	Blue rockfish
<i>Sebastes paucispinis</i>	Boccacio
<i>Sebastes pinniger</i>	Canary rockfish
<i>Seabastes serranoides/ S. flavidus/ S. melanops</i> (yoy)	Olive/yellowtail/black rockfish
<i>Scorpaenichthys marmoratus</i>	Cabezon
<b>Other Fish Species</b>	
<i>Syngnathus</i> spp.	Pipefish
<i>Zalemnius rosaceus</i>	Pink surfperch
<i>Aulorhynchus flavidus</i>	Tubesnout
<i>Brachyisius frenatus</i>	Kelp surfperch
<i>Citharichthys stigmaeus</i>	Speckled sanddab
<i>Cymatogaster aggregate</i>	Shiner surfperch
<i>Embiotoca jacksoni</i>	Black surfperch
<i>Embiotoca lateralis</i>	Striped surfperch
<i>Hexagrammos lagocephalus</i>	Rock greenling
<i>Hyperprosopon ellipticum</i>	Silver surfperch
<i>Hypsurus caryi</i>	Rainbow surfperch
<i>Lepidogobius Lepidus</i>	Bay goby
<i>Oxyjulis californica</i>	Senorita
<i>Oxylebius pictus</i>	Painted greenling
<i>Paralichthys californicus</i>	California halibut
<i>Phanerodon furcatus</i>	White surfperch
<i>Rhacohilus toxotes</i>	Rubberlip surfperch
<i>Rhacochilus vacca</i>	Pile perch
<i>Rhinogobiops nicholsi</i>	Blackeye goby

**Source: URS, 2013**