

APPENDIX B

Summary of the Service's Mitigation Policy, as it applies to the proposed action.

APPENDIX B. Application of the U. S. Fish and Wildlife Service's Mitigation Policy within this FWCA report.

The recommendations provided in this Fish and Wildlife Coordination Act report for the protection of fish and wildlife resources were developed in conformance with the U. S. Fish and Wildlife Service's (Service) Mitigation Policy, as published in the Federal Register (46:15) on January 23, 1981.

The Mitigation Policy guides Service personnel in making recommendations to protect or conserve fish and wildlife resources. The policy helps ensure consistent and effective Service recommendations, while allowing agencies and developers to anticipate Service recommendations and plan early for mitigation needs. One goal of the policy is to ensure protection and conservation of the Nation's more important and valuable fish and wildlife resources, while still allowing reasonable and balanced use of those resources.

Under the Mitigation Policy, resources are assigned to one of four distinct Resource Categories, each having a mitigation planning goal which is consistent with the fish and wildlife values involved. The Resource Categories cover a range of habitat values from those considered to be unique and irreplaceable (i.e., very high value) to those believed to be much more common and of relatively lesser value to fish and wildlife.

In applying the Mitigation policy during a habitat impact assessment, each specific habitat or cover-type which may be impacted by the project is identified and described. Evaluation species which utilize each of these habitats or cover-types are then selected. Selection of evaluation species can be based on several rationales, including: (a) species known to be sensitive to specific land- and water-use actions; (b) species playing key roles in nutrient cycling or energy flow; (c) species utilizing a common environmental resource; or (d) species associated with important resource problems, such as anadromous fish and migratory birds, as designated by the Director or Regional Directors of the Service. Evaluation species used for Resource Category determinations may or may not be the same evaluation species used in an application of the Service's Habitat Evaluation Procedures (HEP), if HEP is being conducted. Lastly, based on the relative importance of each specific habitat to its selected evaluation species, and the habitat's relative abundance, the appropriate Resource Category and associated mitigation planning goal are determined.

Mitigation planning goals range from "no loss of existing habitat value" (Resource Category 1) to "minimize loss of habitat value" (Resource Category 4). The goal for Resource Category 2 is "no net loss of in-kind habitat value"; to achieve this goal, any unavoidable losses would need to be replaced in-kind. As defined in the Mitigation Policy, "in-kind replacement" means providing or managing substitute resources to replace the habitat value of the resources lost, where such

substitute resources are physically and biologically the same as, or closely approximate, those lost.

In addition to mitigation goals based on habitat values, as defined by Resource Categories in the Mitigation Policy, Region 1 of the Service has adopted a goal of "no net loss of wetlands acreage or habitat values, whichever is greater." The Service applies this goal for all proposed Federal and non-Federal water development or flood control activities in California that may affect wetlands habitats.

In recommending mitigation for adverse impacts to wetlands or other habitats, the Service follows the same sequential mitigation steps as given in the Council on Environmental Quality's guidelines. These mitigation steps (in order of preference) are: avoidance measures; minimization measures; rectification measures; measures to reduce or eliminate impacts over time; and compensation measures.

Exclusions to the Mitigation Policy are that it does not apply to: (a) threatened or endangered species; (b) projects permitted or licensed prior to Service authorities; or (c) Service recommendations related to enhancement of fish and wildlife resources.

The Mitigation Policy does provide some latitude in Service guidelines for meeting the goal of in-kind replacement of habitat value, as prescribed by Resource Category 1. In particular, deviations from exact "in-kind" replacement may be recommended when either (a) different habitats and species available for replacement are determined to be of greater value than those lost, or (b) in-kind replacement is not physically or biologically attainable in the ecoregion.

APPENDIX C

**Species list and general Section 7 requirements under ESA, as provided to the Corps
during October 2002**



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

IN REPLY REFER TO
1-1-03-SP-0063

October 16, 2002

Chief, Environmental Planning Division
(Attn: Chris Eng)
U.S. Army Corps of Engineers
San Francisco District
333 Market Street-7th Floor
San Francisco, California 94105-2197

Subject: Species List for Llagas Creek Flood Control Project

Dear Sir or Madam:

Richard DeHaven of this office requested that we send you this updated information about endangered and threatened species (Enclosure A). The list covers the U.S. Geological Survey 7.5 minute quads within which your project is planned.

GILROY (406D)
MORGAN HILL (406B)
MT. MADONNA (406C)

The animal species on the Enclosure A quad list are those species we believe may occur within, *or be affected by projects within*, the USGS quads within which your project is planned. Any plants on the quad list are ones *that have actually been observed* in the project quad(s). Plants may occur in a quad without having been observed there. Therefore we have included a species list for the whole county in which your project occurs. We recommend that you survey for any relevant plants shown on this list.

Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them. Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents. Executive Order 13186, January 17, 2001, directs Federal agencies to take specific steps to conserve migratory birds. *Species of Concern* (see below) are specifically mentioned in this Executive Order. Birds are shown on our species lists regardless of whether they are resident or migratory.

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If a species has been listed as threatened or endangered by the State of California, but not by us nor by the National Marine Fisheries Service, it will appear on your list as a Species of Concern. *However you must contact the California Department of Fish and Game for official information about these species.* Call (916) 322-2493 or write Marketing Manager, California Department of Fish and Game, Natural Diversity Data Base, 1416 Ninth Street, Sacramento, California 95814.

Some of the species listed in Enclosure A may not be affected by the proposed action. A trained biologist or botanist, familiar with the habitat requirements of the listed species, should determine whether these species or habitats suitable for them may be affected. For plants, we recommend using the enclosed Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Species (Enclosure C).

Some pertinent information concerning the distribution, life history, habitat requirements, and published references for the listed species is available upon request. This information may be helpful in preparing the biological assessment for this project, if one is required. Please see Enclosure B for a discussion of the responsibilities Federal agencies have under Section 7(c) of the Act and the conditions under which a biological assessment must be prepared by the lead Federal agency or its designated non-Federal representative.

Formal consultation, under 50 CFR § 402.14, should be initiated if you determine that a listed species may be affected by the proposed project. If you determine that a proposed species may be adversely affected, you should consider requesting a conference with our office under 50 CFR § 402.10. Informal consultation may be utilized prior to a written request for formal consultation to exchange information and resolve conflicts with respect to a listed species. If a biological assessment is required, and it is not initiated within 90 days of your receipt of this letter, you should informally verify the accuracy of this list with our office.

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as *critical habitat*. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal. Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, this will be noted on the species list. Maps and boundary descriptions of the critical habitat may be found in the *Federal Register*. The information is also reprinted in the *Code of Federal Regulations* (50 CFR 17.95).

Candidate species are being reviewed for possible listing. Contact our office if your biological assessment reveals any candidate species that might be adversely affected. Although they currently have no protection under the Endangered Species Act, one or more of them could be proposed and listed before your project is completed. By considering them from the beginning, you could avoid problems later.

Your list may contain a section called Species of Concern. This is an informal term that refers to those species that the Sacramento Fish and Wildlife Office believes might be in need of concentrated conservation actions. Such conservation actions vary depending on the health of the populations and degree and types of threats. At one extreme, there may only need to be periodic monitoring of populations and threats to the species and its habitat. At the other extreme, a species may need to be listed as a Federal threatened or endangered species. Species of concern receive no legal protection and the use of the term does not necessarily mean that the species will eventually be proposed for listing as a threatened or endangered species.

Please contact Richard DeHaven at (916) 414-6738, if you have any questions about the attached list or your responsibilities under the Endangered Species Act. For the fastest response to species list requests, address them to the attention of Species Lists at this address. You may fax requests to 414-6712 or 414-6713.

Sincerely,

*Original Signed by
Harry Mossman*

Jan C. Knight
Chief, Endangered Species Division

Enclosures

ENCLOSURE A

Endangered and Threatened Species that May Occur in
or be Affected by Projects in the Selected Quads Listed Below

Reference File No. 1-1-03-SP-0063

October 16, 2002

QUAD: 406B MORGAN HILL

Listed Species

Mammals

- riparian brush rabbit, *Sylvilagus bachmani riparius* (E) *
- San Joaquin kit fox, *Vulpes macrotis mutica* (E)

Birds

- bald eagle, *Haliaeetus leucocephalus* (T)
- California least tern, *Sterna antillarum (=albigrons) browni* (E)

Amphibians

- California tiger salamander, *Ambystoma californiense* (C/E)
- California red-legged frog, *Rana aurora draytonii* (T)

Fish

- delta smelt, *Hypomesus transpacificus* (T)
- Central California Coastal steelhead, *Oncorhynchus mykiss* (T) NMFS
- Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS
- winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS
- Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (T) NMFS
- Sacramento splittail, *Pogonichthys macrolepidotus* (T)

Invertebrates

- Critical habitat, bay checkerspot butterfly, *Euphydryas editha bayensis* (T)
- bay checkerspot butterfly, *Euphydryas editha bayensis* (T)

Plants

- Tiburon paintbrush, *Castilleja affinis* ssp. *neglecta* (E)
- Coyote ceanothus, *Ceanothus ferrisiae* (E)
- Santa Clara Valley dudleya, *Dudleya setchellii* (E)
- Metcalf Canyon jewelflower, *Streptanthus albidus* ssp. *albidus* (E)

Candidate Species

Fish

- Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS

Species of Concern

Mammals

- Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)
small-footed myotis bat, *Myotis ciliolabrum* (SC)
long-eared myotis bat, *Myotis evotis* (SC)
fringed myotis bat, *Myotis thysanodes* (SC)
long-legged myotis bat, *Myotis volans* (SC)
Yuma myotis bat, *Myotis yumanensis* (SC)
San Francisco dusky-footed woodrat, *Neotoma fuscipes annectens* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)
grasshopper sparrow, *Ammodramus savannarum* (SC)
Bell's sage sparrow, *Amphispiza belli belli* (SC)
short-eared owl, *Asio flammeus* (SC)
western burrowing owl, *Athene cunicularia hypugaea* (SC)
ferruginous hawk, *Buteo regalis* (SC)
Costa's hummingbird, *Calypte costae* (SC)
Lawrence's goldfinch, *Carduelis lawrencei* (SC)
Vaux's swift, *Chaetura vauxi* (SC)
black tern, *Chlidonias niger* (SC)
black swift, *Cypseloides niger* (SC)
hermit warbler, *Dendroica occidentalis* (SC)
white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)
little willow flycatcher, *Empidonax traillii brewsteri* (CA)
American peregrine falcon, *Falco peregrinus anatum* (D)
loggerhead shrike, *Lanius ludovicianus* (SC)
Lewis' woodpecker, *Melanerpes lewis* (SC)
long-billed curlew, *Numenius americanus* (SC)
rufous hummingbird, *Selasphorus rufus* (SC)
Allen's hummingbird, *Selasphorus sasin* (SC)

Reptiles

silvery legless lizard, *Anniella pulchra pulchra* (SC)
northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
southwestern pond turtle, *Clemmys marmorata pallida* (SC)
San Joaquin coachwhip (=whipsnake), *Masticophis flagellum ruddocki* (SC)
California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

foothill yellow-legged frog, *Rana boylei* (SC)
western spadefoot toad, *Spea hammondi* (SC)

Fish

longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

Opler's longhorn moth, *Adeia oplerella* (SC)
Edgewood blind harvestman, *Calicina minor* (SC)
Ricksecker's water scavenger beetle, *Hydrochara rickseckeri* (SC)
Horn's microblind harvestman, *Microcina horni* (SC)
Jung's microblind harvestman, *Microcina juni* (SC)
unsilvered fritillary butterfly, *Speyeria adiastra adiastra* (SC)

Plants

Mt. Hamilton thistle, *Cirsium fontinale* var. *campylon* (SC)
fragrant fritillary (= prairie bells), *Fritillaria liliacea* (SC)
smooth lessingia, *Lessingia micradenia* var. *glabrata* (SC)
Hall's bush mallow, *Malacothamnus hallii* (= *M. fasciculatus*) (SLC)
most beautiful (uncommon) jewelflower, *Streptanthus albidus* ssp. *peramoenus* (SC)

QUAD: 406C MT. MADONNA

Listed Species

Mammals

San Joaquin kit fox, *Vulpes macrotis mutica* (E)

Birds

bald eagle, *Haliaeetus leucocephalus* (T)
California least tern, *Sterna antillarum* (= *albifrons*) *browni* (E)
Least Bell's vireo, *Vireo bellii pusillus* (E)

Amphibians

California tiger salamander, *Ambystoma californiense* (C/E)
California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)
South Central California steelhead, *Oncorhynchus mykiss* (T) NMFS
winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS
Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (T) NMFS
Sacramento splittail, *Pogonichthys macrolepidotus* (T)

Invertebrates

Critical habitat, bay checkerspot butterfly, *Euphydryas editha bayensis* (T)
bay checkerspot butterfly, *Euphydryas editha bayensis* (T)

Plants

Santa Clara Valley dudleya, *Dudleya setchellii* (E)
Critical habitat, Santa Cruz tarplant, *Holocarpha macradenia* (T)
Santa Cruz tarplant, *Holocarpha macradenia* (T)

Candidate Species

Fish

Central Valley fall/mate fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS

Species of Concern

Mammals

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)
greater western mastiff-bat, *Eumops perotis californicus* (SC)
small-footed myotis bat, *Myotis ciliolabrum* (SC)
long-eared myotis bat, *Myotis evotis* (SC)
fringed myotis bat, *Myotis thysanodes* (SC)
long-legged myotis bat, *Myotis volans* (SC)
Yuma myotis bat, *Myotis yumanensis* (SC)
San Francisco dusky-footed woodrat, *Neotoma fuscipes annectens* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)
grasshopper sparrow, *Ammodramus savannarum* (SC)
Bell's sage sparrow, *Amphispiza belli belli* (SC)
short-eared owl, *Asio flammeus* (SC)
western burrowing owl, *Athene cunicularia hypugaea* (SC)
ferruginous hawk, *Buteo regalis* (SC)
Costa's hummingbird, *Calypte costae* (SC)
Lawrence's goldfinch, *Carduelis lawrencei* (SC)
Vaux's swift, *Chaetura vauxi* (SC)
black tern, *Chlidonias niger* (SC)
black swift, *Cypseloides niger* (SC)
hermit warbler, *Dendroica occidentalis* (SC)
white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)
little willow flycatcher, *Empidonax traillii brewsteri* (CA)
American peregrine falcon, *Falco peregrinus anatum* (D)
loggerhead shrike, *Lanius ludovicianus* (SC)
Lewis' woodpecker, *Melanerpes lewis* (SC)
long-billed curlew, *Numenius americanus* (SC)
rufous hummingbird, *Selasphorus rufus* (SC)

Reptiles

silvery legless lizard, *Anniella pulchra pulchra* (SC)
northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
southwestern pond turtle, *Clemmys marmorata pallida* (SC)
California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

foothill yellow-legged frog, *Rana boylei* (SC)
western spadefoot toad, *Spea hammondi* (SC)

Fish

longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

Opler's longhorn moth, *Adela oplerella* (SC)
Edgewood blind harvestman, *Calicina minor* (SC)
Hom's microblind harvestman, *Microcina homi* (SC)
Jung's microblind harvestman, *Microcina juni* (SC)
unsilvered fritillary butterfly, *Speyeria adiastra adiastra* (SC)

Plants

Santa Cruz manzanita, *Arctostaphylos andersonii* (SLC)
smooth lessingia, *Lessingia micradenia* var. *glabrata* (SC)
arcuate bush mallow, *Malacothamnus arcutatus* (= *M. fasciculat*) (SLC)
Hall's bush mallow, *Malacothamnus hallii* (= *M. fasciculatus*) (SLC)
Santa Cruz Mts. beardtongue, *Penstemon rattanii* var. *kleei* (SLC)

QUAD: 406D GILROY

Listed Species

Mammals

San Joaquin kit fox, *Vulpes macrotis mutica* (E)

Birds

bald eagle, *Haliaeetus leucocephalus* (T)
California least tern, *Sterna antillarum* (= *albifrons*) *browni* (E)
Least Bell's vireo, *Vireo bellii pusillus* (E)

Amphibians

California tiger salamander, *Ambystoma californiense* (C/E)
California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)
Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS
South Central California steelhead, *Oncorhynchus mykiss* (T) NMFS
winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS
Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (T) NMFS
Sacramento splittail, *Pogonichthys macrolepidotus* (T)

Invertebrates

bay checkerspot butterfly, *Euphydryas editha bayensis* (T)

Plants

Santa Clara Valley dudleya, *Dudleya setchellii* (E)
Metcalf Canyon jewelflower, *Streptanthus albidus* ssp. *albidus* (E)
showy Indian clover, *Trifolium amoenum* (E) *

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Candidate Species

Fish

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS

Species of Concern

Mammals

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)
greater western mastiff-bat, *Eumops perotis californicus* (SC)
small-footed myotis bat, *Myotis ciliolabrum* (SC)
long-eared myotis bat, *Myotis evotis* (SC)
fringed myotis bat, *Myotis thysanodes* (SC)
long-legged myotis bat, *Myotis volans* (SC)
Yuma myotis bat, *Myotis yumanensis* (SC)
San Francisco dusky-footed woodrat, *Neotoma fuscipes annectens* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)
grasshopper sparrow, *Ammodramus savannarum* (SC)
Bell's sage sparrow, *Amphispiza belli belli* (SC)
short-eared owl, *Asio flammeus* (SC)
western burrowing owl, *Athene cunicularia hypugaea* (SC)
ferruginous hawk, *Buteo regalis* (SC)
Costa's hummingbird, *Calypte costae* (SC)

Lawrence's goldfinch, *Carduelis lawrencei* (SC)
Vaux's swift, *Chaetura vauxi* (SC)
black tern, *Chlidonias niger* (SC)
black swift, *Cypseloides niger* (SC)
hermit warbler, *Dendroica occidentalis* (SC)
white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)
little willow flycatcher, *Empidonax traillii brewsteri* (CA)
American peregrine falcon, *Falco peregrinus anatum* (D)
loggerhead shrike, *Lanius ludovicianus* (SC)
Lewis' woodpecker, *Melanerpes lewis* (SC)
long-billed curlew, *Numenius americanus* (SC)
rufous hummingbird, *Selasphorus rufus* (SC)

Reptiles

silvery legless lizard, *Anniella pulchra pulchra* (SC)
northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
southwestern pond turtle, *Clemmys marmorata pallida* (SC)
San Joaquin coachwhip (=whipsnake), *Masticophis flagellum ruddocki* (SC)
California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

foothill yellow-legged frog, *Rana boylei* (SC)

Endangered and Threatened Species that May Occur in or be Affected by
Projects in the Area of the Following California Counties
Reference File No. 1-1-03-SP-0063
Llagas Creek Flood Control Project
October 16, 2002

SANTA CLARA COUNTY

Listed Species

Mammals

- San Joaquin kit fox, *Vulpes macrotis mutica* (E)
- riparian brush rabbit, *Sylvilagus bachmani riparius* (E) *
- salt marsh harvest mouse, *Reithrodontomys raviventris* (E)

Birds

- California brown pelican, *Pelecanus occidentalis californicus* (E)
- California clapper rail, *Rallus longirostris obsoletus* (E)
- California least tern, *Sterna antillarum (=albifrons) browni* (E)
- Least Bell's vireo, *Vireo bellii pusillus* (E)
- bald eagle, *Haliaeetus leucocephalus* (T)
- marbled murrelet, *Brachyramphus marmoratus* (T)
- western snowy plover, *Charadrius alexandrinus nivosus* (T)

Reptiles

- Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)
- Critical habitat, Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)
- San Francisco garter snake, *Thamnophis sirtalis tetrataenia* (E)

Amphibians

- California red-legged frog, *Rana aurora draytonii* (T)
- California tiger salamander, *Ambystoma californiense* (C/E)
- Critical habitat, California red-legged frog, *Rana aurora draytonii* (T)

Fish

- Central California Coastal steelhead, *Oncorhynchus mykiss* (T) NMFS
- Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (T) NMFS
- Sacramento splittail, *Pogonichthys macrolepidotus* (T)
- South Central California steelhead, *Oncorhynchus mykiss* (T) NMFS
- coho salmon - central CA coast, *Oncorhynchus kisutch* (T) NMFS

*delta smelt, Hypomesus transpacificus (T) **

tidewater goby, Eucyclogobius newberryi (E)

winter-run chinook salmon, Oncorhynchus tshawytscha (E) NMFS

Invertebrates

Critical habitat, bay checkerspot butterfly, Euphydryas editha bayensis (T)

bay checkerspot butterfly, Euphydryas editha bayensis (T)

vernal pool fairy shrimp, Branchinecta lynchi (T)

Plants

*California sea blite, Suaeda californica (E) **

*Contra Costa goldfields, Lasthenia conjugens (E) **

Coyote ceanothus, Ceanothus ferrisiae (E)

Metcalf Canyon jewelflower, Streptanthus albidus ssp. albidus (E)

Santa Clara Valley dudleya, Dudleya setchellii (E)

Tiburon paintbrush, Castilleja affinis ssp. neglecta (E)

*robust spineflower, Chorizanthe robusta var. robusta (E) **

*showy Indian clover, Trifolium amoenum (E) **

Proposed Species

Birds

mountain plover, Charadrius montanus (PT)

Candidate Species

Fish

Central Valley fall/late fall-run chinook salmon, Oncorhynchus tshawytscha (C) NMFS

Critical habitat, Central Valley fall/late fall-run chinook, Oncorhynchus tshawytscha (C) NMFS

Species of Concern

Mammals

Pacific western big-eared bat, Corynorhinus (=Plecotus) townsendii townsendii (SC)

San Francisco dusky-footed woodrat, Neotoma fuscipes annectens (SC)

Yuma myotis bat, Myotis yumanensis (SC)

fringed myotis bat, Myotis thysanodes (SC)

greater western mastiff-bat, Eumops perotis californicus (SC)

long-eared myotis bat, Myotis evotis (SC)

long-legged myotis bat, Myotis volans (SC)

salt marsh vagrant shrew, Sorex vagrans halicoetes (SC)

small-footed myotis bat, Myotis ciliolabrum (SC)

Birds

Alameda (South Bay) song sparrow, Melospiza melodia pusillula (SC)
Allen's hummingbird, Selasphorus sasin (SC)
American bittern, Botaurus lentiginosus (SC)
American peregrine falcon, Falco peregrinus anatum (D)
Bell's sage sparrow, Amphispiza belli belli (SC)
California thrasher, Toxostoma redivivum (SC)
Costa's hummingbird, Calypte costae (SC)
Lawrence's goldfinch, Carduelis lawrencei (SC)
Lewis' woodpecker, Melanerpes lewis (SC)
Vaux's swift, Chaetura vauxi (SC)
black rail, Laterallus jamaicensis coturniculus (CA)
black swift, Cypseloides niger (SC)
common loon, Gavia immer (SC)
ferruginous hawk, Buteo regalis (SC)
grasshopper sparrow, Ammodramus savannarum (SC)
hermit warbler, Dendroica occidentalis (SC)
least bittern, western, Ixobrychus exilis hesperis (SC)
little willow flycatcher, Empidonax traillii brewsteri (CA)
loggerhead shrike, Lanius ludovicianus (SC)
long-billed curlew, Numenius americanus (SC)
olive-sided flycatcher, Contopus cooperi (SC)
rufous hummingbird, Selasphorus rufus (SC)
saltmarsh common yellowthroat, Geothlypis trichas sinuosa (SC)
short-eared owl, Asio flammeus (SC)
tricolored blackbird, Agelaius tricolor (SC)
western burrowing owl, Athene cunicularia hypugaea (SC)
white-tailed (=black shouldered) kite, Elanus leucurus (SC)

Reptiles

California horned lizard, Phrynosoma coronatum frontale (SC)
San Joaquin coachwhip (=whipsnake), Masticophis flagellum ruddocki (SC)
northwestern pond turtle, Clemmys marmorata marmorata (SC)
silvery legless lizard, Anniella pulchra pulchra (SC)
southwestern pond turtle, Clemmys marmorata pallida (SC)

Amphibians

foothill yellow-legged frog, *Rana boylei* (SC)

western spadefoot toad, *Spea hammondi* (SC)

Fish

green sturgeon, *Acipenser medirostris* (SC)

longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

California linderiella fairy shrimp, *Linderiella occidentalis* (SC)

Edgewood blind harvestman, *Calicina minor* (SC)

Hom's microblind harvestman, *Microcina homi* (SC)

Jung's microblind harvestman, *Microcina juni* (SC)

Opler's longhorn moth, *Adela oplerella* (SC)

Ricksecker's water scavenger beetle, *Hydrochara rickseckeri* (SC)

unsilvered fritillary butterfly, *Speyeria adiastra adiastra* (SC)

Plants

Ben Lomond buckwheat (= naked buckwheat), *Eriogonum nudum* var. *decurrens* (SC)

Brandegee's woolly-star (=eriastrum), *Eriastrum brandegeae* (SC)

Congdon's tarplant, *Hemizonia parryi* ssp. *congdonii* (SC)

Franciscan onion, *Allium peninsulare* var. *franciscanum* (SLC)

Gardner's yampah, *Perideridia gairdneri* ssp. *gairdneri* (SC)

Greene's popcorn flower, *Plagiobothrys reticulatus* var. *rossianorum* (SC) *

Hall's bush mallow, *Malacothamnus hallii* (=M. *fasciculatus*) (SLC)

Hoover's button-celery, *Eryngium aristulatum* var. *hooveri* (SC) *

Kings Mountain manzanita, *Arctostaphylos regismontana* (SLC)

Loma Prieta hoita, *Hoita strobilina* (SC)

Mt. Diablo phacelia, *Phacelia phacelioides* (SC)

Mt. Hamilton (=Sharesmith's) harebell, *Campanula sharsmithiae* (SC)

Mt. Hamilton coreopsis, *Coreopsis hamiltonii* (SC)

Mt. Hamilton jewelflower, *Streptanthus callistus* (SLC)

Mt. Hamilton lomatium, *Lomatium observatorium* (SLC)

Mt. Hamilton thistle, *Cirsium fontinale* var. *campylon* (SC)

Oregon meconella (=white fairypoppy), *Meconella oregana* (SC)

Pacific cordgrass (=California cordgrass), *Sparina foliosa* (SLC)

Salinas Valley (=hooked) popcornflower, *Plagiobothrys uncinatus* (SC)

San Francisco Bay spineflower, Chorizanthe cuspidata var. cuspidata (SC)
San Francisco wallflower, Erysimum franciscanum (SC)
*San Joaquin spearscale (=saltbush), Atriplex joaquiniana (SC) **
Santa Cruz Mts. beardtongue, Penstemon rattanii var. kleei (SLC)
Santa Cruz manzanita, Arctostaphylos andersonii (SLC)
Sharsmith's onion, Allium sharsmithae (SC)
South Bay clarkia (=Santa Clara red ribbons), Clarkia concinna ssp. automixa (SC)
Tiburon buckwheat, Eriogonum caninum (SLC)
*alkali milk-vetch, Astragalus tener var. tener (SC) **
arcuate bush mallow, Malacothamnus arcuatus (=M. fasciculat) (SLC)
big-scale (=California) balsamroot, Balsamorhiza macrolepis var. macrolepis (SLC)
*caper-fruited tropidocarpum, Tropidocarpum capparideum (SC) **
chaparral harebell (=bellflower), Campanula exigua (SLC)
clustered lady's-slipper, Cypripedium fasciculatum (SC)
*curly-leaved (=curlyleaf) monardella, Monardella undulata (SC) **
*delta tule-pea, Lathyrus jepsonii var. jepsonii (SC) **
fragrant fritillary (= prairie bells), Fritillaria liliacea (SC)
*hairless allocarya (=popcornflower), Plagiobothrys glaber (SC) ***
interior California (Hospital Canyon) larkspur, Delphinium californicum ssp. interius (SC)
large-flowered (=flower) linanthus, Linanthus grandiflorus (SC)
maple-leaved checkerbloom, Sidalcea malachroides (SLC)
most beautiful (uncommon) jewelflower, Streptanthus albidus ssp. peramoenus (SC)
*northcoast (=Point Reyes) bird's-beak, Cordylanthus maritimus ssp. palustris (SC) **
rock sanicle, Sanicula saxatilis (SC)
serpentine bedstraw, Galium andrewsii ssp. gatense (SLC)
smooth lessingia, Lessingia micradenia var. glabrata (SC)
talus fritillary, Fritillaria falcata (SC)
water sack (=saline) clover, Trifolium depauperatum var. hydrophilum (SC)
western leatherwood, Dirca occidentalis (SLC)

KEY:

- (E) *Endangered* Listed (in the Federal Register) as being in danger of extinction.
 (T) *Threatened* Listed as likely to become endangered within the foreseeable future.

- (P) *Proposed* Officially proposed (in the Federal Register) for listing as endangered or threatened.
- {PX} *Proposed* Proposed as an area essential to the conservation of the species.
Critical Habitat
- (C) *Candidate* Candidate to become a proposed species.
- {SC} *Species of Concern* Other species of concern to the Service.
- (SLC) *Species of Local Concern* Species of local or regional concern or conservation significance.
- (D) *Delisted* Delisted. Status to be monitored for 5 years.
- (CA) *State-Listed* Listed as threatened or endangered by the State of California.
- NMFS *NMFS species* Under jurisdiction of the National Marine Fisheries Service. Contact them directly.
- * *Extirpated* Possibly extirpated from the area.
- ** *Extinct* Possibly extinct
- Critical Habitat* Area essential to the conservation of a species.

