

Appendix F

U. S. Fish and Wildlife Service Species List and No Effect Determination for Special-Status Species



United States Department of the Interior
FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825



June 24, 2008

Document Number: 080624020134

Jeffrey Lee, PE - Project Manager
Golden Gate Bridge, Highway & Transportation District
PO Box 9000
San Francisco, CA 94129

Subject: Species List for Physical Suicide Deterrent Project

Dear: Mr. Lee

We are sending this official species list in response to your June 24, 2008 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be September 22, 2008.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at www.fws.gov/sacramento/es/branches.htm.

Endangered Species Division



**Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the Counties and/or
U.S.G.S. 7 1/2 Minute Quads you requested**

Document Number: 080624020134

Database Last Updated: January 31, 2008

No quad species lists requested.

County Lists

Marin County

Listed Species

Invertebrates

Haliotes sorenseni

white abalone (E) (NMFS)

Icaricia icarioides missionensis

mission blue butterfly (E)

Incisalia mossii bayensis

San Bruno elfin butterfly (E)

Speyeria zerene myrtleae

Myrtle's silverspot butterfly (E)

Syncaris pacifica

California freshwater shrimp (E)

Fish

Acipenser medirostris

green sturgeon (T) (NMFS)

Eucyclogobius newberryi

critical habitat, tidewater goby (X)

tidewater goby (E)

Oncorhynchus kisutch

coho salmon - central CA coast (E) (NMFS)

Critical habitat, coho salmon - central CA coast (X) (NMFS)

Oncorhynchus mykiss

Central California Coastal steelhead (T) (NMFS)

Critical habitat, Central California coastal steelhead (X) (NMFS)

Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha

California coastal chinook salmon (T) (NMFS)

Central Valley spring-run chinook salmon (T) (NMFS)

Critical habitat, winter-run chinook salmon (X) (NMFS)

winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)

Rana aurora draytonii
California red-legged frog (T)
Critical habitat, California red-legged frog (X)

Reptiles

Caretta caretta
loggerhead turtle (T) (NMFS)

Chelonia mydas (incl. agassizi)
green turtle (T) (NMFS)

Dermochelys coriacea
leatherback turtle (E) (NMFS)

Lepidochelys olivacea
olive (=Pacific) ridley sea turtle (T) (NMFS)

Birds

Brachyramphus marmoratus
Critical habitat, marbled murrelet (X)
marbled murrelet (T)

Charadrius alexandrinus nivosus
Critical habitat, western snowy plover (X)
western snowy plover (T)

Diomedea albatrus
short-tailed albatross (E)

Pelecanus occidentalis californicus
California brown pelican (E)

Rallus longirostris obsoletus
California clapper rail (E)

Sternula antillarum (=Sterna, =albifrons) browni
California least tern (E)

Strix occidentalis caurina
northern spotted owl (T)

Mammals

Arctocephalus townsendi
Guadalupe fur seal (T) (NMFS)

Balaenoptera borealis
sei whale (E) (NMFS)

Balaenoptera musculus
blue whale (E) (NMFS)

Balaenoptera physalus
finback (=fin) whale (E) (NMFS)

Eubalaena (=Balaena) glacialis
right whale (E) (NMFS)

Eumetopias jubatus
Critical Habitat, Steller (=northern) sea-lion (X) (NMFS)
Steller (=northern) sea-lion (T) (NMFS)

Megaptera novaeangliae
humpback whale (E) (NMFS)

Physeter catodon (=macrocephalus)
sperm whale (E) (NMFS)

Reithrodontomys raviventris
salt marsh harvest mouse (E)

Plants

Alopecurus aequalis var. sonomensis
Sonoma alopecurus (E)

Calochortus tiburonensis
Tiburon mariposa lily (T)

Castilleja affinis ssp. neglecta
Tiburon paintbrush (E)

Chorizanthe robusta var. robusta
robust spineflower (E)

Chorizanthe valida
Sonoma spineflower (E)

Delphinium bakeri
Baker's larkspur (E)
Critical habitat, Baker's larkspur (X)

Delphinium luteum
Critical habitat, yellow larkspur (X)
yellow larkspur (E)

Hesperolinon congestum
Marin dwarf-flax (=western flax) (T)

Layia carnosa
beach layia (E)

Lupinus tidestromii

clover lupine [Tidestrom's lupine] (E)

Streptanthus niger
Tiburon jewelflower (E)

Trifolium amoenum
showy Indian clover (E)

Candidate Species

Invertebrates

Haliotes cracherodii
black abalone (C) (NMFS)

San Francisco County

Listed Species

Invertebrates

Haliotes sorenseni
white abalone (E) (NMFS)

Icaricia icarioides missionensis
mission blue butterfly (E)

Incisalia mossii bayensis
San Bruno elfin butterfly (E)

Fish

Acipenser medirostris
green sturgeon (T) (NMFS)

Eucyclogobius newberryi
tidewater goby (E)

Oncorhynchus kisutch
coho salmon - central CA coast (E) (NMFS)

Oncorhynchus mykiss
Central California Coastal steelhead (T) (NMFS)
Critical habitat, Central California coastal steelhead (X) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha
Critical habitat, winter-run chinook salmon (X) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Rana aurora draytonii
California red-legged frog (T)

Reptiles

Caretta caretta
loggerhead turtle (T) (NMFS)

Chelonia mydas (incl. agassizi)
green turtle (T) (NMFS)

Dermochelys coriacea
leatherback turtle (E) (NMFS)

Lepidochelys olivacea
olive (=Pacific) ridley sea turtle (T) (NMFS)

Birds

Charadrius alexandrinus nivosus
western snowy plover (T)

Diomedea albatrus
short-tailed albatross (E)

Pelecanus occidentalis californicus
California brown pelican (E)

Rallus longirostris obsoletus
California clapper rail (E)

Mammals

Arctocephalus townsendi
Guadalupe fur seal (T) (NMFS)

Balaenoptera borealis
sei whale (E) (NMFS)

Balaenoptera musculus
blue whale (E) (NMFS)

Balaenoptera physalus
finback (=fin) whale (E) (NMFS)

Eubalaena (=Balaena) glacialis
right whale (E) (NMFS)

Eumetopias jubatus
Critical Habitat, Steller (=northern) sea-lion (X) (NMFS)
Steller (=northern) sea-lion (T) (NMFS)

Megaptera novaeangliae
humpback whale (E) (NMFS)

Physeter catodon (=macrocephalus)
sperm whale (E) (NMFS)

Reithrodontomys raviventris
salt marsh harvest mouse (E)

Plants

Arctostaphylos hookeri ssp. ravenii
Presidio (=Raven's) manzanita (E)

Clarkia franciscana
Presidio clarkia (E)

Hesperolinon congestum
Marin dwarf-flax (=western flax) (T)

Lessingia germanorum
San Francisco lessingia (E)

Candidate Species

Invertebrates

Haliotes cracherodii
black abalone (C) (NMFS)

Key:

- (E) *Endangered* - Listed 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.
- (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
- Critical Habitat* - Area essential to the conservation of a species.
- (PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
- (C) *Candidate* - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the 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.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list.

For plant surveys, we recommend using the [Guidelines for Conducting and Reporting Botanical Inventories](#). The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal [consultation](#) with the Service.

During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

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, there will be a separate line for this on the species list. 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). See our [critical habitat page](#) for maps.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. [More info](#)

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be September 22, 2008.

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**Special-Status Species Documented in the Project
Area for Which the Suicide Deterrent System Would
Have No Effect**

Special-Status Species Documented in the Project Area - No Effect Determination

| Common Name | Scientific Name | Status | General Habitat Description | Rationale | Potentially Impacted¹ |
|------------------------|---|---------------|--|---|---|
| <i>Invertebrates</i> | | | | | |
| Monarch butterfly | <i>Danaus plexippus</i> | SSA | Wintering sites in California are associated with wind-protected groves of large trees (primarily eucalyptus or pines) with nectar and water sources nearby, generally near the coast. | <i>Could occur near staging areas.</i> Winter roost sites are known from the project area, but documented or potential winter roost sites are not located in potentially affected areas. | No |
| Mission blue butterfly | <i>Plebejus icarioides missionensis</i> | FE | Coastal scrub and grassland habitats; three larval host plants are used, including <i>Lupinus albifrons</i> , <i>L. variicolor</i> , and <i>L. formosus</i> . | <i>Known to occur near staging areas.</i> The larval host plants of the species are present in areas bordering and near the staging areas within GGNRA lands north of the Bridge; adults observed in the area during earlier studies (ESA, 1995). | No |
| <i>Mammals</i> | | | | | |
| Southern sea otter | <i>Enhydra lutris nereis</i> | FT/FP | Nearshore marine environments; needs canopies of giant kelp and bull kelp for rafting and feeding. | <i>Not expected.</i> Known from the project area, but suitable habitat is not present in areas potentially affected by the proposed project. | No |
| American badger | <i>Taxidea taxus</i> | SSC | Drier open stages of shrub, forest, and herbaceous habitats with friable soils. | <i>Not expected.</i> Known from the project area, but suitable habitat is not present within or bordering the staging areas. | No |

¹

The determination of if a species could be impacted by the proposed project assumes that ongoing avoidance measures would continue to be implemented or that active bird nests protected by the Migratory Bird Treaty Act and/or California Fish and Game Code would be avoided.

| Common Name | Scientific Name | Status | General Habitat Description | Rationale | Potentially Impacted ¹ |
|----------------------------|---|-----------------|---|--|-----------------------------------|
| Point Reyes jumping mouse | <i>Zapus trinotatus orarius</i> | SSC | Bunch grass marshes on the uplands of Point Reyes. | <i>Not expected.</i> Suitable habitat is not present in areas potentially affected by the proposed project; outside of expected distribution of the species. | No |
| <i>Amphibians</i> | | | | | |
| California red-legged frog | <i>Rana draytonii</i> | FT/SSC | Water sources such as ponds, lakes, reservoirs, streams and adjacent riparian woodlands. | <i>Not expected.</i> Known from the project area, but suitable habitat is not present in areas potentially affected by the proposed project. | No |
| <i>Birds</i> | | | | | |
| Peregrine falcon | <i>Falco peregrinus anatum</i> | BCC/SE-SCD | Nests on steep cliffs and tall structures. | <i>Known to use the Bridge:</i> Has attempted nesting under the Bridge roadway and uses the Bridge year-round. | No |
| Double-crested cormorant | <i>Phalacrocorax auritus</i> | SSC | Colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state. Also known to nest on the San Francisco-Oakland Bay Bridge. | <i>Not expected.</i> No cormorants have been reported to nest on the Golden Gate Bridge (CNDDDB, 2008); no nest sites documented within two miles of the Bridge or staging areas (CNDDDB, 2008). | No |
| <i>Plants</i> | | | | | |
| Presidio manzanita | <i>Arctostaphylos hookeri</i> ssp. <i>ravenii</i> | FE/SE CNPS 1B.1 | Chaparral, coastal prairie, coastal scrub. | <i>Not expected:</i> Known only from south side of the Bridge and suitable habitat not present within or near the southern staging area. | No |

| Common Name | Scientific Name | Status | General Habitat Description | Rationale | Potentially Impacted ¹ |
|-------------------------------|--|-----------------------|---|---|-----------------------------------|
| Marsh sandwort | <i>Arenaria paludicola</i> | FE/SE CNPS 1B.1 | Marshes and swamps/sandy openings. | <i>Not expected:</i> extirpated from the project area (CNPS, 2008); suitable habitat not present within or near the staging areas. | No |
| Franciscan thistle | <i>Cirsium andrewsii</i> | CNPS 1B.2 | Broadleafed upland forest, coastal bluff scrub, coastal scrub, coastal prairie. | <i>Could occur near staging areas.</i> Suitable habitat is not present within the staging areas, but the species could occur in nearby locations. | No |
| San Francisco Bay spineflower | <i>Chorizanthe cuspidata</i> var. <i>cuspidata</i> | CNPS 1B.2 | Coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub. | <i>Could occur near staging areas.</i> Suitable habitat is not present within the staging areas, but the species could occur in nearby locations. | No |
| Presidio clarkia | <i>Clarkia franciscana</i> | FE/SE CNPS 1B.1 | Coastal scrub, valley and foothill grassland/serpentinite | <i>Not expected:</i> Known only from south side of the Bridge and suitable habitat not present within or near the southern staging area. | No |
| Round-headed Chinese houses | <i>Collinsia corymbosa</i> | CNPS 1B.2 | Coastal dunes. | <i>Not expected.</i> Historically known from San Francisco County (not Marin County), but now believed to be extirpated (CNPS, 2008); suitable habitat is not present within or near the southern staging area. | No |
| Blue coast gilia | <i>Gilia capitata</i> ssp. <i>chamissonis</i> | CNPS 1B.1 | Coastal dunes, coastal scrub. | <i>Could occur near staging areas.</i> Suitable habitat is not present within | No |

| Common Name | Scientific Name | Status | General Habitat Description | Rationale | Potentially Impacted ¹ |
|-------------------------|---|-----------------|---|--|-----------------------------------|
| | | | | the staging areas, but the species could occur in nearby locations. | |
| Dark-eyed gilia | <i>Gilia millefoliata</i> | CNPS 1B.2 | Coastal dunes. | <i>Not expected:</i> Suitable habitat is not present within or near staging areas; extirpated from San Francisco County (CNPS, 2008). | No |
| San Francisco gumplant | <i>Grindelia hirsutula</i> var. <i>maritima</i> | CNPS 1B.2 | Coastal bluff scrub, coastal scrub, valley and foothill grassland/sandy and serpentinite. | <i>Could occur near staging areas.</i> Suitable habitat is not present within the staging areas, but the species could occur in nearby locations. | No |
| Marin western flax | <i>Hesperolinon congestum</i> | FT/ST CNPS 1B.1 | Chaparral, valley and foothill grassland/ Serpentinite. | <i>Not expected:</i> Suitable habitat not present within or near staging areas. | No |
| Kellogg's horkelia | <i>Horkelia cuneata</i> ssp. <i>sericea</i> | CNPS 1B.1 | Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub. | <i>Not expected:</i> Extirpated from the project area (CNPS, 2008). | No |
| San Francisco lessingia | <i>Lessingia germanorum</i> | FE/SE CNPS 1B.1 | Coastal scrub (remnant dunes) | <i>Not expected.</i> Known from San Francisco County (not Marin County), but suitable habitat is not present within or near the southern staging area. | No |
| Marsh microseris | <i>Microseris paludosa</i> | CNPS 1B.2 | Closed cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. | <i>Could occur near staging areas.</i> Suitable habitat is not present within the staging areas, but the species could occur in nearby locations. | No |

| Common Name | Scientific Name | Status | General Habitat Description | Rationale | Potentially Impacted¹ |
|------------------------------|---|--------------------|--|--|---|
| San Francisco popcorn flower | <i>Plagiobothrys diffusus</i> | SE CNPS 1B.1 | Coastal prairie, valley and foothill grassland. | <i>Not expected:</i> Suitable habitat not present within or near staging areas. | No |
| San Francisco campion | <i>Silene verecunda</i> ssp. <i>verecunda</i> | CNPS 1B.2 | Coastal bluff scrub, chaparral, coastal prairie, coastal scrub, valley and foothill grassland/sandy. | <i>Not expected:</i> Known only from south side of the Bridge and suitable habitat not present within or near the southern staging area. | No |
| San Francisco owl's clover | <i>Triphysaria floribunda</i> | CNPS 1B.2 | Coastal prairie, coastal scrub, valley and foothill grassland. | <i>Could occur near staging areas.</i> Suitable habitat is not present within the staging areas, but the species could occur in nearby locations. | No |

FE: Federal Endangered; FT: Federal Threatened; FP: Federally Proposed; SE: State Endangered; SSC: State Species of Special Concern; ST: State Threatened; SCD: State Candidate for Delisting; SSA: State Special Animal List; CNPS 1B.1: Rare, threatened, or endangered in California and elsewhere-seriously endangered in California; CNPS 1B.2: Rare, threatened, or endangered in California and elsewhere-fairly endangered in California

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