

APPENDIX 8.2-A

Special-status Species List



**United States Department of the Interior
FISH AND WILDLIFE SERVICE**

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



February 26, 2007

Document Number: 070226101626

John Cleckler
CH2M Hill
2485 Natomas Park Dr.
Suite 600
Sacramento, CA 95833

Subject: Species List for Chevron Richmond Refinery Power Plant Replacement Project

Dear: Mr. Cleckler

We are sending this official species list in response to your February 26, 2007 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 May 27, 2007.

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: 070226102135

Database Last Updated: February 23, 2007

No quad species lists requested.

County Lists

Contra Costa County

Listed Species

Invertebrates

Apodemia mormo langei

Lange's metalmark butterfly (E)

Branchinecta conservatio

Conservancy fairy shrimp (E)

Branchinecta longiantenna

Critical habitat, longhorn fairy shrimp (X)

longhorn fairy shrimp (E)

Branchinecta lynchi

Critical habitat, vernal pool fairy shrimp (X)

vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus

valley elderberry longhorn beetle (T)

Lepidurus packardi

vernal pool tadpole shrimp (E)

Speyeria callippe callippe

callippe silverspot butterfly (E)

Fish

Acipenser medirostris

green sturgeon (T) (NMFS)

Eucyclogobius newberryi

tidewater goby (E)

Hypomesus transpacificus

Critical habitat, delta smelt (X)

delta smelt (T)

*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**Central Valley spring-run chinook salmon (T) (NMFS)**Critical Habitat, Central Valley spring-run chinook (X) (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***Masticophis lateralis euryxanthus**Alameda whipsnake [=striped racer] (T)**Critical habitat, Alameda whipsnake (X)**Thamnophis gigas**giant garter snake (T)***Birds***Charadrius alexandrinus nivosus**western snowy plover (T)**Haliaeetus leucocephalus**bald eagle (T)**Pelecanus occidentalis californicus**California brown pelican (E)**Rallus longirostris obsoletus**California clapper rail (E)**Sternula antillarum (=Sterna, =albifrons) browni**California least tern (E)*

Mammals

Reithrodontomys raviventris
salt marsh harvest mouse (E)

Vulpes macrotis mutica
San Joaquin kit fox (E)

Plants

Amsinckia grandiflora
large-flowered fiddleneck (E)

Arctostaphylos pallida
pallid manzanita (=Alameda or Oakland Hills manzanita) (T)

Cordylanthus mollis ssp. *mollis*
soft bird's-beak (E)

Erysimum capitatum ssp. *angustatum*
Contra Costa wallflower (E)
Critical Habitat, Contra Costa wallflower (X)

Holocarpha macradenia
Critical habitat, Santa Cruz tarplant (X)
Santa Cruz tarplant (T)

Lasthenia conjugens
Contra Costa goldfields (E)
Critical habitat, Contra Costa goldfields (X)

Oenothera deltoides ssp. *howellii*
Antioch Dunes evening-primrose (E)
Critical habitat, Antioch Dunes evening-primrose (X)

Proposed Species

Plants

Cordylanthus mollis ssp. *mollis*
Critical habitat, soft bird's-beak (PX)

Candidate Species

Fish

Oncorhynchus tshawytscha
Central Valley fall/late fall-run chinook salmon (C) (NMFS)
Critical habitat, Central Valley fall/late fall-run chinook (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 May 27, 2007.

California Department of Fish and Game
 Natural Diversity Database
 Selected Elements by Element Code - Portrait
 Oakland West, Oakland East, San Quentin, Richmond, and Mare Island Quads

Element Code	Scientific Name/Common Name	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 AAAAA01180	<i>Ambystoma californiense</i> California tiger salamander	Threatened		G2G3	S2S3	SC
2 AAABH01022	<i>Rana aurora draytonii</i> California red-legged frog	Threatened		G4T2T3	S2S3	SC
3 AAABH01050	<i>Rana boylei</i> foothill yellow-legged frog			G3	S2S3	SC
4 ABNFD01020	<i>Phalacrocorax auritus</i> double-crested cormorant			G5	S3	SC
5 ABNGA04010	<i>Ardea herodias</i> great blue heron			G5	S4	
6 ABNGA05010	<i>Ardea alba</i> great egret			G5	S4	
7 ABNGA06030	<i>Egretta thula</i> snowy egret			G5	S4	
8 ABNGA11010	<i>Nycticorax nycticorax</i> black-crowned night heron			G5	S3	
9 ABNKC01010	<i>Pandion haliaetus</i> osprey			G5	S3	SC
10 ABNKC06010	<i>Elanus leucurus</i> white-tailed kite			G5	S3	
11 ABNKC11010	<i>Circus cyaneus</i> northern harrier			G5	S3	SC
12 ABNKC12040	<i>Accipiter cooperii</i> Cooper's hawk			G5	S3	SC
13 ABNKC22010	<i>Aquila chrysaetos</i> golden eagle			G5	S3	SC
14 ABNME03041	<i>Laterallus jamaicensis coturniculus</i> California black rail		Threatened	G4T1	S1	
15 ABNME05016	<i>Rallus longirostris obsoletus</i> California clapper rail	Endangered	Endangered	G5T1	S1	
16 ABNNM08020	<i>Sterna caspia</i> Caspian tern			G5	S4	
17 ABNNM08103	<i>Sterna antillarum browni</i> California least tern	Endangered	Endangered	G4T2T3Q	S2S3	
18 ABNSB13040	<i>Asio flammeus</i> short-eared owl			G5	S3	SC
19 ABPBX1201A	<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat			G5T2	S2	SC
20 ABPBXA301S	<i>Melospiza melodia pusillula</i> Alameda song sparrow			G5T2?	S2?	SC
21 ABPBXA301W	<i>Melospiza melodia samuelis</i> San Pablo song sparrow			G5T2?	S2?	SC
22 ABPBXB3010	<i>Xanthocephalus xanthocephalus</i> yellow-headed blackbird			G5	S3S4	
23 AFCHB01040	<i>Hypomesus transpacificus</i> Delta smelt	Threatened	Threatened	G1	S1	

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24 AFCJB34020	<i>Pogonichthys macrolepidotus</i> Sacramento splittail			G2	S2	SC
25 AFCQB07010	<i>Archoplites interruptus</i> Sacramento perch			G3	S1	SC
26 AFCQN04010	<i>Eucyclogobius newberryi</i> tidewater goby	Endangered		G3	S2S3	SC
27 AMABA01071	<i>Sorex vagrans halicoetes</i> salt-marsh wandering shrew			G5T1	S1	SC
28 AMABA01103	<i>Sorex ornatus sinuosus</i> Suisun shrew			G5T1	S1	SC
29 AMABB02031	<i>Scapanus latimanus parvus</i> Alameda Island mole			G5T1Q	S1	SC
30 AMACC02010	<i>Lasionycteris noctivagans</i> silver-haired bat			G5	S3S4	SC
31 AMACD04020	<i>Nyctinomops macrotis</i> big free -tailed bat			G5	S2	SC
32 AMAFD03061	<i>Dipodomys heermanni berkeleyensis</i> Berkeley kangaroo rat			G3G4T1	S1	
33 AMAFF02040	<i>Reithrodontomys raviventris</i> salt-marsh harvest mouse	Endangered	Endangered	G1G2	S1S2	
34 AMAFF11034	<i>Microtus californicus sanpabloensis</i> San Pablo vole			G5T1T2	S1S2	SC
35 AMAJF04010	<i>Taxidea taxus</i> American badger			G5	S4	SC
36 ARAAD02030	<i>Emys (=Clemmys) marmorata</i> western pond turtle			G3G4	S3	SC
37 ARADB21031	<i>Masticophis lateralis euryxanthus</i> Alameda whipsnake	Threatened	Threatened	G4T2	S2	
38 CTT37C10CA	<i>Northern Maritime Chaparral</i>			G1	S1.2	
39 CTT41100CA	<i>Coastal Terrace Prairie</i>			G2	S2.1	
40 CTT42110CA	<i>Valley Needlegrass Grassland</i>			G1	S3.1	
41 CTT42130CA	<i>Serpentine Bunchgrass</i>			G2	S2.2	
42 CTT52110CA	<i>Northern Coastal Salt Marsh</i>			G3	S3.2	
43 IICOL02101	<i>Cicindela hirticollis gravida</i> sandy beach tiger beetle			G5T2	S1	
44 IIHYM80010	<i>Trachusa gummifera</i>			G1	S1	
45 IILEPK4055	<i>Euphydryas editha bayensis</i> Bay checkerspot butterfly	Threatened		G5T1	S1	
46 IILEPP2010	<i>Danaus plexippus</i> monarch butterfly			G5	S3	
47 ILARA13010	<i>Microcina tiburona</i> Tiburon micro-blind harvestman			G1	S1	
48 ILARA47040	<i>Microcina leei</i> Lee's micro-blind harvestman			G1	S1	

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49 IMGASC2362	<i>Helminthoglypta nickliniana bridgesi</i> Bridges' coast range shoulderband (snail)			G2T1	S1	
50 IMGASJ7040	<i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)			G2G3	S2S3	
51 PDAPI19030	<i>Lilaeopsis masonii</i> Mason's lilaeopsis		Rare	G3	S3.1	1B.1
52 PDAPI1Z0D0	<i>Sanicula mantima</i> adobe sanicle		Rare	G2	S2.2	1B.1
53 PDAST0T540	<i>Aster lentus</i> Suisun Marsh aster			G2	S2.2	1B.2
54 PDAST4M020	<i>Helianthella castanea</i> Diablo helianthella			G3	S3.2	1B.2
55 PDAST4X020	<i>Holocarpha macradenia</i> Santa Cruz tarplant	Threatened	Endangered	G1	S1.1	1B.1
56 PDAST5N010	<i>Layia carnosa</i> beach layia	Endangered	Endangered	G1	S1.1	1B.1
57 PDAST6X030	<i>Pentachaeta bellidiflora</i> white-rayed pentachaeta	Endangered	Endangered	G1	S1.1	1B.1
58 PDAST8H060	<i>Senecio aphanactis</i> rayless ragwort			G3?	S1.2	2.2
59 PDBOR01070	<i>Amsinckia lunaris</i> bent-flowered fiddleneck			G2	S2.2	1B.2
60 PDBOR0V061	<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i> Choris's popcorn-flower			G3T2Q	S2.2	1B.2
61 PDBOR0V080	<i>Plagiobothrys diffusus</i> San Francisco popcorn-flower		Endangered	G1Q	S1.1	1B.1
62 PDBOR0V0B0	<i>Plagiobothrys glaber</i> hairless popcorn-flower			GH	SH	1A
63 PDBRA2G012	<i>Streptanthus albidus</i> ssp. <i>peramoenus</i> most beautiful jewel-flower			G2T2	S2.2	1B.2
64 PDBRA2G0T0	<i>Streptanthus niger</i> Tiburon jewel-flower	Endangered	Endangered	G1	S1.1	1B.1
65 PDCHE041F3	<i>Atriplex joaquiniana</i> San Joaquin spearscale			G2	S2.1	1B.2
66 PDCHE0P020	<i>Suaeda californica</i> California seablite	Endangered		G1	S1.1	1B.1
67 PDCON040D2	<i>Calystegia purpurata</i> ssp. <i>saxicola</i> coastal bluff morning-glory			G4T2	S2.2	1B.2
68 PDERI04110	<i>Arctostaphylos pallida</i> pallid manzanita	Threatened	Endangered	G1	S1.2	1B.1
69 PDFAB0F8R1	<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch			G1T1	S1.1	1B.2
70 PDFAB40040	<i>Trifolium amoenum</i> showy indian clover	Endangered		G1	S1.1	1B.1
71 PDFAB400R5	<i>Trifolium depauperatum</i> var. <i>hydrophilum</i> saline clover			G5T2?	S2.2?	1B.2

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72 PDFAB5Z030	<i>Hoita strobilina</i> Loma Prieta hoita			G2	S2.1	1B.1
73 PDGER01070	<i>Erodium macrophyllum</i> round-leaved filaree			G4	S2.1	2.1
74 PDLAM180P7	<i>Monardella villosa ssp. globosa</i> robust monardella			G5T2	S2.2	1B.2
75 PDLIN01060	<i>Hesperolinon congestum</i> Marin western flax	Threatened	Threatened	G2	S2.1	1B.1
76 PDONA050H0	<i>Clarkia franciscana</i> Presidio clarkia	Endangered	Endangered	G1	S1.1	1B.1
77 PDPAP0G030	<i>Meconella oregana</i> Oregon meconella			G2G3	S1.1	1B.1
78 PDPGN04081	<i>Chorizanthe cuspidata var. cuspidata</i> San Francisco Bay spineflower			G2T2	S2.2	1B.2
79 PDPGN040Q2	<i>Chorizanthe robusta var. robusta</i> robust spineflower	Endangered		G2T1	S1.1	1B.1
80 PDPLM040B3	<i>Gilia capitata ssp. chamissonis</i> dune gilia			G5T2	S2.1	1B.1
81 PDPLM09180	<i>Leptosiphon rosaceus</i> rose leptosiphon			G1	S1.1	1B.1
82 PDR0S0W043	<i>Horkelia cuneata ssp. sericea</i> Kellogg's horkelia			G4T1	S1.1	1B.1
83 PDSCR0D260	<i>Castilleja affinis ssp. neglecta</i> Tiburon Indian paintbrush	Endangered	Threatened	G4G5T1	S1.2	1B.2
84 PDSCR0J0C3	<i>Cordylanthus maritimus ssp. palustris</i> Point Reyes bird's-beak			G4?T2	S2.2	1B.2
85 PDSCR0J0D2	<i>Cordylanthus mollis ssp. mollis</i> soft bird's-beak	Endangered	Rare	G2T1	S1.1	1B.2
86 PDTHY03010	<i>Dirca occidentalis</i> western leatherwood			G2G3	S2S3	1B.2
87 PMLIL0D1C0	<i>Calochortus tiburonensis</i> Tiburon mariposa lily	Threatened	Threatened	G1	S1.2	1B.1
88 PMLIL0V0C0	<i>Fritillaria liliacea</i> fragrant fritillary			G2	S2.2	1B.2
89 PMPOT03090	<i>Potamogeton filiformis</i> slender-leaved pondweed			G5	S1S2	2.2