

APPENDICES

APPENDIX 1. Federally-listed plant and animal species not listed under the California Endangered Species Act. For additional information on listed plants, please refer to <http://www.dfg.ca.gov/whdab/pdfs/TEPlants.pdf>. For listed animals: <http://www.dfg.ca.gov/whdab/pdfs/TEAnimals.pdf>.

Gastropods

Common Name	Scientific Name	Status	Date Listed
Morro shoulderband snail	<i>Helminthoglypta walkeriana</i>	FE	1/17/95
White abalone	<i>Haliotis sorenseni</i>	FE	6/28/01

Crustaceans

Common Name	Scientific Name	Status	Date Listed
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	FE	9/19/94
Longhorn fairy shrimp	<i>Branchinecta longiantenna</i>	FE	9/19/94
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	FE	8/3/93
San Diego fairy shrimp	<i>Branchinecta sandiegoensis</i>	FE	2/3/97
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FT	9/19/94
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	FE	9/19/94

Insects

Common Name	Scientific Name	Status	Date Listed
Bay checkerspot butterfly	<i>Euphydryas editha bayensis</i>	FT	10/18/87
Behren's silverspot butterfly	<i>Speyeria zerene behrensii</i>	FE	12/5/97
Callippe silverspot butterfly	<i>Speyeria callippe callippe</i>	FE	12/5/97
Delhi Sands flower-loving fly	<i>Rhaphiomidas terminatus abdominalis</i>	FE	9/23/93
Delta green ground beetle	<i>Elaphrus viridis</i>	FT	8/8/80
El Segundo blue butterfly	<i>Euphilotes battoides allyni</i>	FE	6/1/76
Kern primrose sphinx moth	<i>Euproserpinus euterpe</i>	FT	4/8/80
Laguna Mountains skipper	<i>Pyrgus ruralis lagunae</i>	FE	1/16/97
Lange's metalmark butterfly	<i>Apodemia mormo langei</i>	FE	6/1/76
Lotis blue butterfly	<i>Lycaeides argyrognomon lotis</i>	FE	6/1/76
Mission blue butterfly	<i>Icaricia icarioides missionensis</i>	FE	6/1/76
Mount Hermon June beetle	<i>Polyphylla barbata</i>	FE	2/24/97
Myrtle's silverspot butterfly	<i>Speyeria zerene myrtleae</i>	FE	6/22/92
Ohlone tiger beetle	<i>Cicindela ohlone</i>	FE	10/3/01
Oregon silverspot butterfly	<i>Speyeria zerene hippolyta</i>	FT	7/2/80
Palos Verdes blue butterfly	<i>Glaucopsyche lygdamus palosverdesensis</i>	FE	7/02/80
Quino checkerspot	<i>Euphydryas editha quino</i>	FE	1/16/91
San Bruno elfin butterfly	<i>Incisalia (= Callophrys) mossii bayensis</i>	FE	6/1/76
Smith's blue butterfly	<i>Euphilotes enoptes smithi</i>	FE	6/1/76
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	FT	8/8/80
Zayante band-winged grasshopper	<i>Trimerotropis infantilis</i>	FE	1/24/97

Fish

Common Name	Scientific Name	Status	Date Listed
Chinook salmon - California coastal ESU*	<i>Oncorhynchus tshawytscha</i>	FT	11/15/99
Cowhead Lake tui chub	<i>Gila bicolor vaccaceps</i>	FPE	3/30/98
Lahontan cutthroat trout	<i>Oncorhynchus (= Salmo) clarki</i>	FT	7/16/75
Little Kern golden trout	<i>Oncorhynchus (= Salmo) mykiss whitei</i>	FT	4/13/78
Paiute cutthroat trout	<i>Oncorhynchus (= Salmo) clarki</i>	FT	7/16/95
Sacramento splittail	<i>Pogonichthys macrolepidotus</i>	Deleted	
Santa Ana sucker	<i>Catostomus santaanae</i>	FT	5/12/00
Steelhead - Northern California ESU*	<i>Oncorhynchus mykiss</i>	FT	8/7/00
Steelhead - Central California Coast ESU*	<i>Oncorhynchus mykiss</i>	FT	10/17/97
Steelhead - South/Central California Coast ESU*	<i>Oncorhynchus mykiss</i>	FT	10/17/97
Steelhead - Southern California ESU*	<i>Oncorhynchus mykiss</i>	FE	10/17/97
Steelhead - Central Valley ESU*	<i>Oncorhynchus mykiss</i>	FT	5/18/98
Tidewater goby	<i>Eucyclogobius newberryi</i>	FE	2/4/94

* Evolutionary significant unit

Amphibians

Common Name	Scientific Name	Status	Date Listed
Arroyo toad (= arroyo southwestern)	<i>Bufo californicus (=microscaphus)</i>	FE	1/17/95
California red-legged frog	<i>Rana aurora draytonii</i>	FT	5/20/96
California tiger salamander Central California DPS*	<i>Ambystoma californiense</i>	FPT	5/23/03
California tiger salamander Santa Barbara County DPS*	<i>Ambystoma californiense</i>	FPT FE	5/23/03 9/15/00
California tiger salamander Sonoma County DPS*	<i>Ambystoma californiense</i>	FPT FE	5/23/03 3/19/03
Mountain yellow-legged frog Southern California population	<i>Rana muscosa</i>	FE	8/1/02

* Distinct vertebrate population segment

Reptiles

Common Name	Scientific Name	Status	Date Listed
Green sea turtle	<i>Chelonia mydas</i>	FT	7/28/78
Island night lizard	<i>Xantusia riversiana</i>	FT	8/11/67
Leatherback sea turtle, leatherback	<i>Dermochelys coriacea</i>	FE	6/2/70
Loggerhead sea turtle	<i>Caretta caretta</i>	FT	7/28/78
Olive (=Pacific) Ridley sea turtle	<i>Lepidochelys olivacea</i>	FT	7/28/78

Birds

Common Name	Scientific Name	Status	Date Listed
Aleutian Canada goose (RECOVERED)	<i>Branta canadensis leucopareia</i>		
Arctic peregrine falcon (RECOVERED)	<i>Falco peregrinus tundrius</i>		

Common Name	Scientific Name	Status	Date Listed
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	FT	3/30/93
Northern spotted owl	<i>Strix occidentalis caurina</i>	FT	6/22/90
San Clemente loggerhead shrike	<i>Lanius ludovicianus mearnsi</i>	FE	8/11/77
San Clemente sage sparrow	<i>Amphispiza belli clementeae</i>	FT	8/11/77
Short-tailed albatross	<i>Phoebastria albatrus</i>	FE	8/30/00
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE	3/29/95
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT	4/5/93

Mammals

Common Name	Scientific Name	Status	Date Listed
Blue whale	<i>Balaenoptera musculus</i>	FE	6/2/70
Buena Vista Lake shrew	<i>Sorex ornatus relictus</i>	FE	4/5/02
Fin whale	<i>Balaenoptera physalus</i>	FE	6/2/70
Gray whale (RECOVERED)	<i>Eschrichtius robustus</i>		
Humpback whale	<i>Megaptera novaeangliae</i>	FE	6/2/70
San Miguel I island fox	<i>Urocyon littoralis littoralis</i>	FE	3/5/04
Santa Rosa I island fox	<i>Urocyon littoralis santarosa</i>	FE	3/5/04
Santa Cruz I island fox	<i>Urocyon littoralis santacruzae</i>	FE	3/5/04
Santa Catalina I island fox	<i>Urocyon littoralis catalinae</i>	FE	3/5/04
Pacific pocket mouse	<i>Perognathus longimembris pacificus</i>	FE	3/26/94
Point Arena mountain beaver	<i>Aplodontia rufa nigra</i>	FE	12/12/91
Right whale	<i>Balaena glacialis (includes australis)</i>	FE	6/2/70
Riparian woodrat	<i>Neotoma fuscipes riparia</i>	FE	3/24/00
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	FE	9/24/98
Sei whale	<i>Balaenoptera borealis</i>	FE	6/2/70
Southern sea otter	<i>Enhydra lutris nereis</i>	FT	1/14/77
Southern sea otter South of Pt. Conception, CA	<i>Enhydra lutris nereis</i>	XP*	8/11/87
Sperm whale	<i>Physeter macrocephalus (=catodon)</i>	FE	6/2/70
Steller (=northern) sea lion	<i>Eumetopias jubatus</i>	FT	4/5/90

* Experimental Population, Non- Essential

Plants

Scientific Name	Common Name	Status	Date Listed
<i>Alopecurus aequalis var. sonomensis</i>	Sonoma alopecurus	FE	10/22/97
<i>Ambrosia pumila</i>	San Diego ambrosia	FE	7/22/02
<i>Arabis hoffmannii</i>	Hoffman's rock cress	FE	7/31/97
<i>Arctostaphylos confertiflora</i>	Santa Rosa I island manzanita	FE	7/31/97
<i>Arctostaphylos glandulosa ssp. crassifolia</i>	Del Mar manzanita	FE	10/7/96
<i>Arctostaphylos morroensis</i>	Morro manzanita	FT	12/15/94
<i>Arctostaphylos myrtifolia</i>	I one manzanita	FT	5/26/99
<i>Arenaria ursina</i>	Big Bear Valley sandwort	FT	9/14/98
<i>Astragalus albens</i>	Cushenbury milk-vetch	FE	8/24/94
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	FE	6/29/97

Scientific Name	Common Name	Status	Date Listed
<i>Astragalus jaegerianus</i>	Lane Mountain milk-vetch	FE	10/6/98
<i>Astragalus lentiginosus var. coachellae</i>	Coachella Valley milk-vetch	FE	10/6/98
<i>Astragalus lentiginosus var. piscinensis</i>	Fish Slough milk-vetch	FT	10/6/98
<i>Astragalus tricarinatus</i>	triple-ribbed milk-vetch	FE	10/6/98
<i>Atriplex coronata var. notatior</i>	San Jacinto Valley crownscale	FE	10/6/98
<i>Calyptridium pulchellum</i>	Mariposa pussypaws	FT	9/14/98
<i>Camissonia benitensis</i>	San Benito evening-primrose	FT	2/12/85
<i>Castilleja cinerea</i>	ash-gray Indian paintbrush	FT	9/14/98
<i>Castilleja mollis</i>	soft-leaved Indian paintbrush	FE	7/31/97
<i>Ceanothus ferrisiae</i>	coyote ceanothus	FE	2/3/95
<i>Chamaesyce hooveri</i>	Hoover's spurge	FT	3/26/97
<i>Chlorogalum purpureum var. purpureum</i>	purple amole	FT	3/20/00
<i>Chorizanthe pungens var. hartwegiana</i>	Ben Lomond spineflower	FE	2/4/94
<i>Chorizanthe pungens var. pungens</i>	Monterey spineflower	FT	2/4/94
<i>Chorizanthe robusta var. hartwegii</i>	Scott's Valley spineflower	FE	2/4/94
<i>Chorizanthe robusta var. robusta</i>	robust spineflower	FE	2/4/94
<i>Cirsium hydrophilum var. hydrophilum</i>	Suisun thistle	FE	11/20/97
<i>Cupressus goveniana ssp. goveniana</i>	Gowen cypress	FT	8/12/98
<i>Dudleya abramsii ssp. parva</i>	Conejo dudleya	FT	1/29/97
<i>Dudleya cymosa ssp. agourensis</i>	Santa Monica Mtns. dudleya	FT	1/29/97
<i>Dudleya cymosa ssp. ovatifolia</i>	Santa Monica Mtns. dudleya	FT	1/29/97
<i>Dudleya setchellii</i>	Santa Clara Valley dudleya	FE	2/3/95
<i>Dudleya verityi</i>	Verity's dudleya	FT	1/29/97
<i>Enceliopsis nudicaulis var. corrugata</i>	Ash Meadows daisy	FT	5/20/85
<i>Eremalche kernensis</i>	Kern mallow	FE	7/19/90
<i>Eriastrum hooveri</i>	Hoover's woolly-star	Delisted	10/7/03
<i>Erigeron parishii</i>	Parish's daisy	FT	8/24/94
<i>Eriogonum kennedyi var. austromontanum</i>	southern mountain buckwheat	FT	9/14/78
<i>Eriogonum ovalifolium var. vineum</i>	Cushenbury buckwheat	FE	8/24/94
<i>Gilia tenuiflora ssp. hoffmannii</i>	Hoffmann's slender-flowered gilia	FE	7/31/97
<i>Grindelia fraxino-pratensis</i>	Ash Meadows gumplant	FT	5/20/85
<i>Helianthemum greenei</i>	island rush-rose	FT	7/31/97
<i>Howellia aquatilis</i>	water howellia	FT	7/14/94
<i>Lasthenia conjugens</i>	Contra Costa goldfields	FE	6/18/97
<i>Lembertia congdonii</i>	San Joaquin woollythreads	FE	7/19/90
<i>Lesquerella kingii ssp. bernardina</i>	San Bernardino Mountains bladderpod	FE	8/24/94
<i>Malacothrix indecora</i>	Santa Cruz Island malacothrix	FE	7/31/97
<i>Malacothrix squalida</i>	island malacothrix	FE	7/31/97
<i>Navarretia fossalis</i>	spreading navarretia	FT	10/13/98
<i>Oxytheca parishii var. goodmaniana</i>	Cushenbury oxytheca	FE	8/24/94
<i>Phacelia insularis ssp. insularis</i>	northern Channel Islands phacelia	FE	7/31/97
<i>Piperia yadonii</i>	Yadon's rein orchid	FE	8/12/94
<i>Poa atropurpurea</i>	San Bernardino blue grass	FE	9/14/98
<i>Sibara filifolia</i>	Santa Cruz Island rock cress	FE	8/8/97
<i>Sidalcea keckii</i>	Keck's checker-mallow	FE	2/16/00
<i>Streptanthus albidus ssp. albidus</i>	Metcalf Canyon jewel-flower	FE	2/3/95

Scientific Name	Common Name	Status	Date Listed
<i>Suaeda californica</i>	California seablite	FE	12/15/94
<i>Taraxacum californicum</i>	California dandelion	FE	9/14/98
<i>Thlaspi californicum</i>	Kneeland Prairie penny-cress	FE	2/9/00
<i>Thysanocarpus conchuliferus</i>	Santa Cruz Island fringepod	FE	8/31/97
<i>Trichostema austromontanum ssp.</i>	Hidden Lake bluecurls	FT	9/14/98
<i>Trifolium amoenum</i>	showy Indian clover	FE	10/22/97

APPENDIX 2

STATE AND REGIONAL HEADQUARTERS OFFICES

For additional information, please go to the DFG website <http://www.dfg.ca.gov/>



1. Northern California - North Coast Region

601 Locust Street

Redding, CA 96001

Public Information: (530) 225-2300

Fax: (530) 225-2381

Counties: Del Norte, Humboldt, Lassen, Modoc, Shasta, Siskiyou, Tehama, Trinity

2. Sacramento Valley-Central Sierra Region 2

1701 Nimbus Road

Rancho Cordova, CA 95670

Public Information: (916) 358-2900

Fax: (916) 358-2912

Counties: Alpine, Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Nevada, Placer, Plumas, Sacramento, San Joaquin, Sierra, Solano, Sutter, Yolo, Yuba

3. Central Coast Region

7329 Silverado Trail

Napa, CA 94558

Mail: P.O. Box 47, Yountville, CA 94599

Public Information: (707) 944-5500

Fax: (707) 944-5563

Counties: Alameda, Contra Costa, Lake, Marin, Mendocino, Monterey, Napa, San Benito, San Francisco, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma

4. San Joaquin Valley-Southern Sierra Region

1234 E. Shaw Avenue

Fresno, CA 93710

Public Information: (559) 243-4005 X 151

Fax: (559) 243-4022

Counties: Fresno, Kern, Kings, Madera, Mariposa, Merced, Stanislaus, Tulare, Tuolumne

5. South Coast Region

4949 Viewridge Avenue

San Diego, CA 92123

Public Information: (858) 467-4201

Fax: (858) 467-4299

Counties: Los Angeles, Orange, San Diego, Santa Barbara, Ventura

6. Eastern Sierra and Inland Deserts Region

3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764
Public Information: (909) 484-0167
Fax: (909) 481-2945

Los Alamitos Administrative Office

4665 Lampson Avenue, Suite J
Los Alamitos, CA 90720
Fax: (562) 799-8427
Counties: Imperial, Inyo, Mono, Riverside, San Bernardino

7. Marine Region

20 Lower Ragsdale Drive #100
Monterey, CA 93940
Public Information: (831) 649-2870
FAX: (831) 649-2894
Counties: Entire coastline from Del Norte County south to San Diego County and Channel Islands

APPENDIX 3

Acknowledgments

The current report represents a new direction for DFG. Previous reports were disseminated as bound publications. The 2003 report is being distributed on-line on the DFG website as well as by CD to increase public awareness of the status of sensitive species in California. Many dedicated biologists contributed information and text to this report and helped prepare the document for on-line viewing. Many others kindly lent their images for use throughout the document or provided technical review. We wish to acknowledge their participation and thank them for their support and interest.

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The majority of images are associated with individual species accounts. Some, however, are included in other sections of the report. Information about these images is provided below.

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	San Francisco garter snake	CDPR File Photo
Invertebrates	Trinity bristle snail	DFG File Photo
Fish	Mojave tui chub	DFG File Photo
Amphibians	Santa Cruz long-toed salamander	Brad Alexander
Reptiles	Desert tortoise	Mark Bratton
Birds	California condor	USFWS File Photo
Mammals	San Joaquin antelope ground squirrel	B. Moose Peterson
Plants	Baker's larkspur	Doreen Smith

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	Coast redwood forest	DFG File Photo
6	Succulent owl's-clover	John Game
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8	Sacramento River	Wildlife Conservation Board

1. Introduction

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	California red-legged frog	Gary Nafis
10	Morro Bay kangaroo rat	DFG File Photo
11	Dwarf golden star	Christopher L. Christie

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13	Coast horned lizard Vermillion flycatcher	USGS File Photo Gerald and Buff Corsi, CAS
14	California tiger salamander Contra Costa goldfields Bay checkerspot	Gerald and Buff Corsi, CAS John Game T.W. Davis, CAS
15	Coachella Valley milkvetch Desert pupfish	Kelly Amsberry, Oregon State University John Rinne

2. Planning for Conservation and Recovery

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18	Coachella Valley fringe-toed lizard Oak woodland Lyon's pentachaeta	Sam Stewart, Bon Terra Consulting Tom Annese Michael Charters
19	Cuyamaca Lake downingia Beldings savannah sparrow Stephen's kangaroo rat	Christopher L. Christie DFG File Photo B. Moose Peterson
20	Munz' onion Northern California NCCP map Vicinity Mt. Diablo	Roxanne Bittman, CNPS DFG File Photo USEPA File Photo
21	Road, Mendocino County Placer County roadway Vernal pool flowers California tiger salamander	Mary Ann Showers, DFG File Photo Placer County Planning Department DFG File Photo Gary Nafis
22	Coachella Valley Monitoring	Gary Nafis NASA File Photo

3. Conservation Banking

Page	Image	Photographer
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26	Hairy Orcutt grass Giant garter snake Vernal pool fairy shrimp	George W. Hartwell USGS File Photo Larry Serpa

4. Recovery Land Acquisition Program

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	Kern primrose sphinx moth larva	T. W. Davies, CAS
	Lompoc yerba santa	Roxanne Bittman, CNPS

5. Recovery and Conservation

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	Brookside School students	Tyler Center for Ecoliteracy
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	California least tern	USFWS File Photo
32	Beldings savannah sparrow	USFWS File Photo
	California condor	USFWS File Photo
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	Peninsular bighorn sheep	Glenn and Martha Vargas, CAS
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	Yreka phlox	Pete Figura, DFG
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	Riparian brush rabbit	Heather Bell, USFWS
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37	Yreka phlox	Susan Cochrane Levitsky, DFG
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	Alameda whipsnake	Gary Nafis
	El Dorado mule-ears	Steve Tyron
40	Southwestern willow flycatcher	Steve and David Maslowski, USFWS
	Colorado pikeminnow (squawfish)	USFWS File Photo
	Razorback sucker	DFG File Photo

6. Invasive Species Program

Page	Image	Photographer
41	New Zealand mud snail	DFG File Photo
	Water hyacinth	David R. Worley, Florida Dept. of Environmental Protection
	Caulerpa sp.	NOAA File Photo
42	Broom infestation	R.M. Breckenridge, CDFA
	Yellow star thistle; tocalote	Jo-Ann Ordano, CAS

7. Central Valley Project Conservation Program

Page	Image	Photographer
43	Riparian woodrat Shasta Dam Bakersfield cactus	DFG File Photo USBR File Photo Endangered Species Recovery Program California State University, Stanislaus
44	Sacramento River	BLM File Photo

8. The Wildlife Conservation Board

Page	Image	Photographer
48	Centennial/Dressler Ranch Children at creek California tiger salamander Cosumnes River Preserve	Jacques Etchegoyhen, California Rangeland Trust DPR File Photo Gerald and Buff Corsi, CAS BLM File Photo
49	Riparian habitat Black-necked stilt	DWR File Photo George W. Hartwell
50	Oak woodland, near Mt. Diablo Near Chico, Butte County Susan River Parkway, Lassen County	USEPA File Photo USFS File Photo WCB File Photo
51	Redwood forest Western trillium	NPS File Photo Gerald and Buff Corsi, CAS
52	Satellite imagery - San Francisco Bay San Francisco Bay NWR Hudeman Slough	NOAA File Photo ABAG File Photo ABAG File Photo
53	Soft bird's-beak Saltmarsh harvest mouse Santa Cruz long-toed salamander Oak woodland	Tim Sullivan DWR File Photo G. Nafis Beatrice F. Howitt, CAS
54	Dune scrub vegetation, Morro Bay area Morro shoulderband snail Bridgeport Valley Sage grouse	DFG File Photo Bob Sloan NOAA File Photo Dr. Lloyd Glenn Ingles, CAS
55	Stephen's kangaroo rat Rancho Jamul Hermes copper	Karen Kirtland Riverside County Integrated Program DFG File Photo Dan Marschalek, DFG

Compact Disk Label

Image	Photographer
Greater sandhill crane	B. Moose Peterson
Cuyamaca Lake downingia	Christopher Christie
Alameda whipsnake	G. Nafis

APPENDIX 5. TERMS AND ABBREVIATIONS USED IN TEXT

This report provides information on State-listed species. Species names are followed by both the State designation (see below) and the federal designation, if any, under the Federal Endangered Species Act. State designations are essentially the same as federal designations except that "Rare" is a State designation only. A number of California species have been placed on the Federal list but are not included on the State list. Those species are shown in Appendix 1.

State and Federal Designations

State Designations

- Rare** A native California plant (species, subspecies or variety) is rare when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens (Section 1901, Fish and Game Code). Since 1985, this designation applies to plants only.
- Threatened** A native California bird, mammal, fish, amphibian, reptile or plant (species, subspecies or variety) is threatened when, although not presently threatened with extinction, it is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts. Any animal listed as 'rare' by the Commission on or before January 1, 1985, is now included as a 'threatened' species (Section 2067, Fish and Game Code).
- Endangered** A native California bird, mammal, fish, amphibian, reptile, or plant (species, subspecies or variety) is endangered when it is in serious danger of becoming extinct throughout all, or a significant portion of its range due to one or more causes, including loss of habitat, change of habitat, over-exploitation, predation, competition or disease (Section 2062, Fish and Game Code).
- Candidate** A native California species or subspecies of a bird, mammal fish, amphibian, reptile or plant is a candidate when the Fish and Game Commission has formally noticed it as being under review by the Department to determine whether listing as threatened or endangered is warranted, or when it is the subject of a proposed rulemaking by the Commission to list as threatened or endangered (Section 2068, Fish and Game Code).

Federal Designations

- Endangered** Any species which is in danger of extinction throughout all or a significant portion of its range.
- Threatened** Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- Proposed** A species that has been proposed for listing as threatened or endangered in the Federal Register.
- Candidate** A species for which the U.S. Fish and Wildlife Service has on file sufficient information to support a proposal to list the species as endangered or threatened, but for which proposed rules have not yet been issued.

SPECIES STATUS

This report provides a statement of the current status of a species when that information is available. The statement reflects the current condition as compared to the condition of the species at the time of State listing and takes into consideration the distribution, abundance, and population health of the species.

For many species, this information is not known. Long-term monitoring of demographic trends and reproductive success, for example, has not been implemented or has been ongoing for too short a period of time to document current condition. For other species, the habitats to which they are restricted, such as cliff faces or desert springs, are not readily accessible. Some species, such as a number of annual plants, can have dramatic changes in population size and distribution in response to rainfall levels from one year to the next. Other plants may germinate in response to fire; they remain dormant as seed or vegetative parts until fire triggers germination or growth.

Terms used to describe species status are as follow:

- Increasing:** Since the date of State listing, the range, distribution, and/or number of individuals have measurably increased to levels that may allow for recovery of the species.
- Stable to Increasing:** Since the date of State listing, all populations are stable or increasing in total number of individuals and the range and/or distribution is stable to increasing in an identifiable portion of the total species range.
- Stable:** Since the date of State listing, enough populations of the species, over the appropriate range for the species, have been documented to have stabilized in number and distribution so that the species is no longer in a state of decline.

- Stable to Declining:** Since the date of State listing, some populations have been documented to be biologically stable, while other populations are decreasing in number and/or distribution.
- Declining:** Since the date of State listing, enough populations of the species, over the range for the species, have been documented to have decreased in number or distribution so that the biological stability of the species as a whole may be at risk.
- Extirpated:** Since the date of listing, the species has been documented to be extirpated throughout its historic range in California; all natural populations are gone. The species is thus extinct in California, though it may continue to exist elsewhere.
- Unknown:** DFG does not have sufficient information to determine the current status of the species.

ABBREVIATIONS AND TERMS USED IN THIS REPORT

ACEC	Area of Critical Environmental Concern (BLM)
ACOE	U.S. Army Corps of Engineers
BLM	Bureau of Land Management
BOR	Bureau of Reclamation
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CDF	California Department of Forestry and Fire Protection
CDFG	California Department of Fish & Game
CDPR	California Department of Parks & Recreation
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNPS	California Native Plant Society
CSU	California State University
CVPCP	Central Valley Project Conservation Program
CVPIA	Central Valley Project Improvement Act
DFG	California Department of Fish & Game
DOD	U.S. Department of Defense
DOE	Department of Energy
DPR	California Department of Parks & Recreation
DWR	Department of Water Resources
EBRPD	East Bay Regional Parks District
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESRP	Endangered Species Recovery Program
FESA	Federal Endangered Species Act

FGC	Fish and Game Commission
FHA	Federal Highway Administration
FWS	U.S. Fish and Wildlife Service
GIS	Geographic Information System
GPS	Global Positioning System
HCP	Habitat Conservation Plan
LADWP	Los Angeles Department of Water and Power
MHCP	Multiple Habitat Conservation Program
MOU	Memorandum of Understanding
MSCP	Multiple Species Conservation Plan
MSHCP	Multiple Species Habitat Conservation Plan
NCCP	Natural Community Conservation Plan
NMFS	National Marine Fisheries Service
NPS	National Park Service
NRCS	Natural Resource Conservation Service
OHV	Off-highway vehicle
PG & E	Pacific Gas and Electric
SFWD	San Francisco Water District
SWRCB	State Water Resources Control Board
TNC	The Nature Conservancy
TPL	Trust for Public Land
UC	University of California
USBR	Bureau of Reclamation
USFS	United States Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
WCB	Wildlife Conservation Board
WERC	Western Ecological Research Center (USGS)
WHR	Wildlife Habitat Relationships System (DFG)