

APPENDIX I

Wildlife Species of the San Francisco Estuary

Source: San Francisco Estuary Project. 1992. Status and Trends Report on Wildlife of San Francisco Estuary. Prepared by the U.S. Fish and Wildlife Service.

Wildlife Species of the San Francisco Estuary ¹

Introduction

This appendix includes all species of amphibians, reptiles, birds, and mammals, both native and introduced, which are either currently or were historically considered to occur annually within the San Francisco Estuary study area. The list was derived from the State Wildlife Habitat Relationships database and refined through review of literature and consultation with experts. Species for which an account is presented in Chapter 4 are denoted with an asterisk (*) preceding their common name. The appendix addresses the following information:

Special Status:

The following abbreviations refer to taxa designated as special status by agency and private interests. Complete scientific names for these taxa, except the Audubon Blue List, Federal Management Concern, harvested, and introduced species, are provided in Appendix B.

FE - Federally-listed as an endangered species under the authority of the Endangered Species Act of 1973. The term "endangered" as defined in the Act, refers to "any species which is in danger of extinction throughout all or a significant portion of its range."

FT - Federally-listed as a threatened species. The term "threatened" as defined by the Endangered Species Act, describes "any species which is likely to become endangered in the foreseeable future throughout all or a significant portion of its range."

SE - State-listed as an endangered species under the authority of section 2062 of the Fish and Game Code. The State considers a species to be "endangered" when it "is in serious danger of becoming extinct throughout all, or a significant portion, of its range"

ST - State-listed as a threatened species. The State considers a species to be "threatened" when "although not presently threatened with extinction, [it] is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by [the Fish and Game Codes]" (Section 2067 of the Fish and Game Code).

FC - Federal candidate - taxa under consideration by the U.S. Fish and Wildlife Service for listing as endangered and threatened species (FC1 - Category 1, FC2 - Category 2)

SSC - California Department of Fish and Game Species of Special Concern

SBS - Sensitive bird species - U.S. Fish and Wildlife Service designation of birds, including subspecies or distinct populations, which could become Federally listed as endangered or threatened in the

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foreseeable future, throughout all or in a significant portion of their ranges, without active management and/or removal of threats.

AB - Audubon blue list - birds designated by the National Audubon Society which are believed to be experiencing a population decline in all or a major portion of its range.

MC - Federal management concern - designation of nongame migratory birds because of 1) documented or apparent population declines, 2) small or restricted populations, and 3) dependence on restricted or vulnerable habitats.

HA - Harvested species - species designated for harvest under the California State Fish and Game Code and U.S. Fish and Wildlife Service regulations.

EX - Extirpated - from the Estuary study area.

IN - Introduced - not native or indigenous within the Estuary study area.

Seasonal Occurrence:

R - resident: found in the study area throughout the designated season(s).

M - migrant: species occurring in the study area during seasonal (usually spring and fall) movements between breeding and nonbreeding areas.

Sp - Spring (March - May)

Su - Summer (June - August)

F - Fall (September - November)

W - Winter (December - February)

Relative Abundance:

A - abundant: almost always encountered, usually in great numbers

C - common: usually or often encountered in considerable numbers

U - uncommon: occasionally encountered, usually in small numbers

R - rare: rarely encountered, usually in very small numbers

Wildlife Habitat Types:

Wetland and Deepwater Habitats

OW - Open water

IM - Intertidal mudflat

RS - Rocky shores

SM - Tidal salt marsh

BM - Tidal brackish marsh

FM - Tidal fresh water marsh

DM - Diked seasonal marsh

FH - Other freshwater habitats

FW - Farmed wetlands

RW - Riparian woodland

SP - Salt ponds

LP - Lakes and ponds

Upland Habitats

GR - Grassland
CS - Coastal shrub
MC - Mixed chaparral
WS - Oak woodland

BF - Broad-leaved evergreen forest
AL - Agricultural land
UR - Urban

Sources:

Grinnell and Wythe (1927), Grinnell and Miller (1944), Small (1974), Burt and Grossenheider (1976), Cogswell (1977), Erickson (1982), Stebbins (1985), U.S. Fish and Wildlife Service (1987c), Jameson and Peeters (1988), Zeiner et al. (1988, 1990a+b), Peterson (1990).

Wildlife Species of the
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Common Name	Scientific Name	Status	Seasonal Occurrence	Abundance	OW	IM	RS	SM	BM	FM	DM	FH	FW	RW	SP	LP	GR	CS	MC	WS	BF	AL	UR
AMPHIBIANS																							
tiger salamander	<i>Ambystoma tigrinum</i>	FC2,SSC	R-YR	U					X	X						X			X				
Pacific giant salamander	<i>Dicamptodon ensatus</i>		R-YR	C									X									X	
California newt	<i>Taricha torosa</i>		R-YR	C									X				X	X	X				
rough-skinned newt	<i>Taricha granulosa</i>		R-YR	C							X	X	X						X	X			
Ensatina	<i>Ensatina eschscholtzii</i>		R-YR	U									X				X	X	X	X			
California slender salamander	<i>Batrachoseps attenuatus</i>		R-YR	C									X				X	X	X	X		X	
arboreal salamander	<i>Aneides lugubris</i>		R-YR	C									X						X			X	
black salamander	<i>Aneides flavipunctatus</i>		R-YR	U							X	X			X				X	X			
western toad	<i>Bufo boreas</i>		R-YR	C							X	X	X	X	X	X	X	X	X	X	X	X	
western spadefoot	<i>Scaphiopus hammondi</i>	SSC	R-YR	U							X					X			X				
Pacific treefrog	<i>Pseudacris regilla</i>		R-YR	C				X	X	X	X	X	X		X	X			X	X		X	
red-legged frog	<i>Rana aurora</i>	FC2,SSC	R-YR	U				X	X	X	X	X	X		X	X			X				
foothill yellow-legged frog	<i>Rana boylei</i>	SSC	R-YR	U				X	X	X	X	X	X		X	X	X	X	X	X			
bullfrog	<i>Rana catesbeiana</i>	IN,HA	R-YR	C				X	X	X	X	X	X		X	X			X			X	
REPTILES																							
blunt-nosed leopard lizard	<i>Gambelia sila</i>	EX,FE,SE																X	X				
western fence lizard	<i>Sceloporus occidentalis</i>		R-YR	A									X			X	X	X	X	X	X	X	
sagebrush lizard	<i>Sceloporus graciosus</i>		R-YR	C									X			X	X	X	X				
side-blotched lizard	<i>Uta stansburiana</i>		R-YR	C									X			X	X	X	X				
coast horned lizard	<i>Phrynosoma coronatum</i>	SSC	R-YR	U									X			X	X	X	X				
western skink	<i>Eumeces skiltonianus</i>		R-YR	C									X			X	X	X	X	X	X	X	
Gilbert's skink	<i>Eumeces gilberti</i>		R-YR	C									X			X			X			X	
western whiptail	<i>Cnemidophorus tigris</i>		R-YR	U									X			X	X	X	X				
southern alligator lizard	<i>Gerrhonotus multicarinatus</i>		R-YR	C				X					X				X	X	X	X		X	
northern alligator lizard	<i>Gerrhonotus coeruleus</i>		R-YR	C				X					X				X	X			X	X	
California legless lizard	<i>Anniella pulchra</i>		R-YR	U									X			X	X	X					
rubber boa	<i>Charina bottae</i>		R-YR	U					X	X	X	X	X			X	X	X			X		
ring-necked snake	<i>Diadophis punctatus</i>		R-YR	C					X	X	X	X	X			X	X	X				X	

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sharp-tailed snake	<i>Contia tenuis</i>		R-YR	C								X	X	X			X					X	X
racer	<i>Coluber constrictor</i>		R-YR	C								X	X	X			X				X	X	X
coachwhip	<i>Masticophis flagellum</i>		R-YR	R													X	X	X				X
striped racer	<i>Masticophis lateralis</i>	FC2,ST	R-YR	C										X			X	X	X	X			
glossy snake	<i>Arizona elegans</i>		R-YR	R													X	X	X	X			X
gopher snake	<i>Pituophis melanoleucus</i>		R-YR	A							X	X	X				X	X	X	X			X
common kingsnake	<i>Lampropeltis getulus</i>		R-YR	C													X	X	X	X			X
long-nosed snake	<i>Rhinocheilus lecontei</i>		R-YR	R													X	X	X	X			X
common garter snake	<i>Thamnophis sirtalis</i>	FE,SE	R-YR	C								X	X	X	X		X	X			X	X	X
western terrestrial garter snake	<i>Thamnophis elegans</i>		R-YR	C						X	X	X	X	X		X	X				X	X	X
giant garter snake	<i>Thamnophis gigas</i>	FC2,ST	R-YR	U								X					X	X			X		
California black-headed snake	<i>Tantilla planiceps</i>		R-YR	U													X	X	X	X	X	X	X
night snake	<i>Hypsiglena torquata</i>		R-YR	U													X	X	X	X			X
western rattlesnake	<i>Crotalus viridis</i>		R-YR	C													X	X	X	X			
western pond turtle	<i>Clemmys marmorata</i>	FC	R-YR	U					X	X	X	X	X			X	X						
red-eared slider	<i>Pseudemys scripta</i>	IN	R-YR	C					X		X	X	X			X	X				X		
BIRDS																							
red-throated loon	<i>Gavia stellata</i>		R-W	C	X											X							
Pacific loon	<i>Gavia pacifica</i>		R-W	U	X											X							
common loon	<i>Gavia immer</i>	SSC,MC,SBS	R-W	C	X																		X
pie-billed grebe	<i>Podilymbus podiceps</i>		R-YR	C	X				X	X						X	X						
horned grebe	<i>Podiceps auritus</i>	AB	R-W	C	X			X	X	X						X							
red-necked grebe	<i>Podiceps grisegena</i>		R-W	U	X				X	X													
eared grebe	<i>Podiceps nigricollis</i>		R-W,S	C	X					X						X	X						
western grebe	<i>Aechmophorus occidentalis</i>		R-W	A	X				X	X						X	X						
Clark's grebe	<i>Aechmophorus clarkii</i>		R-W	A	X				X	X						X	X						
American white pelican	<i>Pelecanus erythrorhynchos</i>	SSC,SBS	R-W	U	X					X						X	X						
brown pelican	<i>Pelecanus occidentalis</i>	FE,SE	R-SU,F	C	X		X									X							
double-crested cormorant	<i>Phalacrocorax auritus</i>	SSC	R-YR	C	X		X	X	X	X	X					X	X						

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Brandt's cormorant	Phalacrocorax penicillatus		R-YR	U	X		X																
pelagic cormorant	Phalacrocorax pelagicus		R-YR	U	X		X																
American bittern	Botaurus lentiginosus	AB	R-YR	U						X													
least bittern	Ixobrychus exilis	SSC	R-YR	R																			
great blue heron	Ardea herodias		R-YR	C		X	X	X	X	X	X	X	X	X	X	X	X						X
great egret	Casmerodius albus		R-YR	C		X	X	X	X	X	X	X	X	X	X	X	X						X
snowy egret	Egretta thula		R-YR	C		X	X	X	X	X					X	X	X						
little blue heron	Egretta caerulea		R-SU	R		X		X	X		X				X								
cattle egret	Bubulcus ibis		R-YR	R					X			X	X				X						X
green-backed heron	Butorides striatus		R-YR	U		X		X	X					X									
black-crowned night-heron	Nycticorax nycticorax		R-YR	C		X		X	X	X	X	X	X		X								
white-faced ibis	Plegadis chihi	FC2, SSC, SBS, MC	R-SU	R				X	X	X	X	X					X						
fulvous whistling-duck	Dendrocygna bicolor	SSC, SBS, HA	R-YR	R				X															
tundra swan	Cygnus columbianus		R-W	C	X					X		X				X							X
trumpeter swan	Cygnus buccinator		R-W	R					X			X											
greater white-fronted goose	Anser albifrons	SBS, HA, FC	R-W	U				X	X	X							X						X
snow goose	Chen caerulescens	HA	R-W	U				X	X	X							X						X
Ross' goose	Chen rossii	HA	R-W	R				X															X
brant	Branta bernicla	SSC, HA						X															
Canada goose	Branta canadensis	FE, SE, SBS, HA	R-W	C	X			X	X	X		X		X	X	X							X
wood duck	Aix sponsa	HA	R-YR	U				X	X		X		X		X								
green-winged teal	Anas crecca	HA	R-W	C	X	X		X	X	X	X		X		X	X							
mallard	Anas platyrhynchos	HA	R-SU, W	C				X	X	X	X	X	X	X	X	X						X	X
northern pintail	Anas acuta	HA	R-SU, W	C	X	X		X	X	X	X	X	X		X	X							X
blue-winged teal	Anas discors	HA	R-YR	R				X	X	X	X	X	X		X								
cinnamon teal	Anas cyanoptera	HA	R-SU, W	C				X	X	X	X	X	X		X	X							
northern shoveler	Anas clypeata	HA	R-SU, W	C				X	X	X	X	X	X		X	X							
gadwall	Anas strepera	HA	R-SU, W	C	X	X		X	X	X	X	X	X		X	X	X						X
Eurasian wigeon	Anas penelope		R-W	R	X	X		X	X	X	X	X	X		X	X	X						X
American wigeon	Anas americana	HA	R-W	C	X	X		X	X	X	X	X	X		X	X	X						X

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rough-legged hawk	<i>Buteo lagopus</i>		M-W	U				X	X								X						X	
golden eagle	<i>Aquila chrysaetos</i>	SSC	R-YR	U				X	X				X				X			X			X	
American kestrel	<i>Falco sparverius</i>		R-YR	C						X			X	X			X			X		X	X	
merlin	<i>Falco columbarius</i>	SSC	R-W	R				X	X						X		X			X			X	
peregrine falcon	<i>Falco peregrinus</i>	FE,SE	R-SU,W	R	X		X	X	X				X				X	X	X					
prairie falcon	<i>Falco mexicanus</i>	SSC	R-YR	R						X							X	X	X				X	
ring-necked pheasant	<i>Phasianus colchicus</i>	IN,HA	R-YR	C						X			X				X	X					X	
California quail	<i>Callipepla californica</i>	HA	R-YR	C										X			X	X	X	X	X	X	X	
mountain quail	<i>Oreortyx pictus</i>	HA	R-YR	U										X			X	X				X		
wild turkey	<i>Meleagris gallopavo</i>	HA,IN	R-YR	U																X	X			
yellow rail	<i>Coturnicops noveboracensis</i>	SSC		R				X	X		X													
black rail	<i>Laterallus jamaicensis</i>	FC1,ST,MC	R-YR	R				X	X	X														
clapper rail	<i>Rallus longirostris</i>	FE,SE	R-YR	R				X	X															
Virginia rail	<i>Rallus limicola</i>		R-YR	U				X	X	X	X	X												
sora	<i>Porzana carolina</i>		R-YR	U				X	X	X	X	X												
common moorhen	<i>Gallinula chloropus</i>	HA	R-YR	U				X	X	X	X	X	X											
American coot	<i>Fulica americana</i>	HA	R-YR	A	X			X	X	X	X	X	X				X	X					X	
sandhill crane	<i>Grus canadensis</i>	ST,SBS	R-W	C				X	X	X		X					X	X					X	
black-bellied plover	<i>Pluvialis squatarola</i>		R-W	C		X		X	X	X	X	X	X		X		X						X	
lesser golden-plover	<i>Pluvialis dominica</i>		R-W	R		X		X	X	X		X	X		X		X						X	
snowy plover	<i>Charadrius alexandrinus</i>	FC2,SSC,SBS,MC	R-YR	U		X									X								X	
semipalmated plover	<i>Charadrius semipalmatus</i>		R-W	U		X		X	X	X		X	X				X						X	
killdeer	<i>Charadrius vociferus</i>		R-YR	C		X		X	X	X	X	X	X		X	X	X						X	X
mountain plover	<i>Charadrius montanus</i>	SSC	R-W	R													X						X	
black oystercatcher	<i>Haematopus bachmani</i>		R-YR	R			X																	
black-necked stilt	<i>Himantopus mexicanus</i>		R-SU,W	C		X		X	X	X	X	X	X		X	X								
American avocet	<i>Recurvirostra americana</i>		R-SU,W	C	X	X		X	X	X	X	X	X		X									
greater yellowlegs	<i>Tringa melanoleuca</i>		R-W	U		X		X	X	X	X	X	X		X	X								
lesser yellowlegs	<i>Tringa flavipes</i>		R-W	R		X		X	X	X	X	X	X		X									
solitary sandpiper	<i>Tringa solitaria</i>		M-SP,F	R				X	X								X							

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willet	<i>Catoptrophorus semipalmatus</i>		R-YR	C		X	X	X	X	X	X				X	X	X						X
wandering tattler	<i>Heteroscelus incanus</i>		R-W	R		X	X																
spotted sandpiper	<i>Actitis macularia</i>		R-W,S	U		X	X								X	X							
whimbrel	<i>Numenius phaeopus</i>		R-W,S	U		X	X	X	X				X		X	X	X						X
long-billed curlew	<i>Numenius americanus</i>	FC,SSC	R-W,S	U		X		X	X	X	X	X	X		X	X	X						X
marbled godwit	<i>Limosa fedoa</i>		R-YR	C		X			X						X		X						X
ruddy turnstone	<i>Arenaria interpres</i>		R-W	U		X	X								X								
black turnstone	<i>Arenaria melanocephala</i>		R-W	U		X	X	X							X								
surfbird	<i>Aphriza virgata</i>		R-W	R				X															
red knot	<i>Calidris canutus</i>		R-W	U		X							X		X	X							
sanderling	<i>Calidris alba</i>		R-W	C		X	X	X		X					X	X							
semipalmated sandpiper	<i>Calidris pusilla</i>		M-F	R		X		X	X	X	X	X	X		X	X							
western sandpiper	<i>Calidris mauri</i>		R-W	A		X	X	X	X	X	X	X	X		X	X	X						X
least sandpiper	<i>Calidris minutilla</i>		R-W	A		X		X	X	X	X	X	X		X	X							
Baird's sandpiper	<i>Calidris bairdii</i>		M-F	R		X		X	X	X	X	X	X		X	X							
pectoral sandpiper	<i>Calidris melanotos</i>		M-F	R		X		X	X	X	X	X	X				X	X					
stilt sandpiper	<i>Calidris himantopus</i>		M-F	R		X		X	X				X										
dunlin	<i>Calidris alpina</i>		R-W	A		X		X	X	X		X	X		X	X							
short-billed dowitcher	<i>Limnodromus griseus</i>		R-W	C		X		X	X	X	X	X	X		X								
long-billed dowitcher	<i>Limnodromus scolopaceus</i>		R-W	C		X		X	X	X	X	X	X		X								
common snipe	<i>Gallinago gallinago</i>	HA	R-W	U				X	X	X		X	X				X	X					
Wilson's phalarope	<i>Phalaropus tricolor</i>		M-SP,F	C		X		X	X	X	X	X	X		X	X							
red-necked phalarope	<i>Phalaropus lobatus</i>		M-SP,F	C		X		X	X	X	X	X	X		X	X							
red phalarope	<i>Phalaropus fulicaria</i>		M-SP,F	R		X	X								X	X							
parasitic Jaeges	<i>stercorarius parasiticus</i>		M-F	R		X																	
Bonaparte's gull	<i>Larus philadelphia</i>		R-W	C		X	X		X	X	X				X	X							
Heermann's gull	<i>Larus heermanni</i>		M-SU,F	U		X		X							X								
mew gull	<i>Larus canus</i>		R-W	C		X	X	X		X	X		X		X	X	X						X
ring-billed gull	<i>Larus delawarensis</i>		R-YR	C			X		X	X	X		X		X	X	X						X X
California gull	<i>Larus californicus</i>	SSC	R-YR	C		X	X	X	X	X	X		X	X	X	X	X						X X

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herring gull	<i>Larus argentatus</i>		R-W	C	X	X	X	X	X	X		X		X	X	X						X	X
Thayer's gull	<i>Larus thayeri</i>		R-W	U	X	X	X	X	X	X		X		X	X							X	X
western gull	<i>Larus occidentalis</i>		R-YR	A	X	X	X	X	X					X	X								X
glaucous-winged gull	<i>Larus glaucescens</i>		R-W	C	X	X	X	X	X	X				X	X							X	X
glaucous gull	<i>Larus hyperboreus</i>		R-W	R	X	X																X	X
Caspian tern	<i>Sterna caspia</i>	SBS	R-SU	C	X	X		X	X	X					X	X							
elegant tern	<i>Sterna elegans</i>	SSC	M-SU,F	C	X	X		X							X								
common tern	<i>Sterna hirundo</i>		M-SP,F	U	X	X		X							X	X							
Forster's tern	<i>Sterna forsteri</i>		R-YR	C	X	X		X	X	X					X	X							
least tern	<i>Sterna antillarum</i>	FE,SE	R-SU	U	X	X		X							X	X							
black tern	<i>Chlidonias niger</i>	AB,MC	M-SP,F	R	X			X	X	X		X			X	X							
common murre	<i>Uria aalge</i>		M-F	U	X																		
pigeon guillemot	<i>Cephus columba</i>		R-SU	U	X		X															X	X
rock dove	<i>Columba livia</i>	IM	R-YR	A								X										X	X
band-tailed pigeon	<i>Columba fasciata</i>	HA	R-YR	C										X						X	X		
mourning dove	<i>Zenaidura macroura</i>	HA	R-YR	A										X			X	X		X		X	X
yellow-billed cuckoo	<i>Coccyzus americanus</i>	EX,AB,SBS,SE																					
greater roadrunner	<i>Geococcyx californianus</i>		R-YR	R														X	X				
barn owl	<i>Tyto alba</i>		R-YR	C					X			X	X		X					X		X	X
western screech-owl	<i>Otus kennicottii</i>		R-YR	C								X								X	X		
great horned owl	<i>Bubo virginianus</i>		R-YR	C				X	X	X			X		X	X	X			X	X	X	
northern pygmy-owl	<i>Glaucidium gnoma</i>		R-YR	R																X	X		
burrowing owl	<i>Athene cucularia</i>	SSC	R-YR	U				X	X							X				X		X	
long-eared owl	<i>Asio otus</i>	SSC	R-YR	R				X	X	X			X		X					X	X	X	
short-eared owl	<i>Asio flammeus</i>	SSC,SBS,AB	R-YR	U				X	X	X	X	X	X		X							X	
northern saw-whet owl	<i>Aegolius acadicus</i>		R-YR	U																X	X		
spotted owl	<i>Strix occidentalis</i>	FT,SSC,AB	R-YR	R																		X	
lesser nighthawk	<i>Chordeiles acutipennis</i>		R-SU	R												X						X	
common poorwill	<i>Phalaenoptilus nuttallii</i>		R-SU	U												X	X	X	X				
black swift	<i>Cypseloides niger</i>	SSC	M-SP,F	R			X													X	X	X	
Vaux's swift	<i>Chaetura vauxi</i>		M-SP,F	U									X							X	X	X	

Wildlife Species of the
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Common Name	Scientific Name	Status	Seasonal Occurrence	Abundance	OW	IM	RS	SM	BH	FM	DM	FH	FW	RW	SP	LP	GR	CS	MC	WS	BF	AL	UR
white-throated swift	<i>Aeronautes saxatalis</i>		R-YR	C			X	X										X	X			X	
black-chinned hummingbird	<i>Archilochus alexandri</i>		R-SU	R										X				X	X	X		X	
Anna's hummingbird	<i>Calypte anna</i>		R-YR	C										X				X	X	X	X		X
calliope hummingbird	<i>Stellula calliope</i>		M-SP	U										X				X	X	X	X		
rufous hummingbird	<i>Selasphorus rufus</i>		M-SP,F	U										X				X	X	X		X	
Allen's hummingbird	<i>Selasphorus sasin</i>		R-SU	C										X				X	X	X	X		X
belted kingfisher	<i>Ceryle alcyon</i>		R-YR	U			X							X		X							
Lewis' woodpecker	<i>Melanerpes lewis</i>	SBS	R-YR	R										X						X			
acorn woodpecker	<i>Melanerpes formicivorus</i>		R-YR	C										X						X	X		
red-breasted sapsucker	<i>Sphyrapicus ruber</i>		R-W	U										X						X	X		X
Nuttall's woodpecker	<i>Picoides nuttallii</i>		R-YR	C										X						X	X		
downy woodpecker	<i>Picoides pubescens</i>		R-YR	C										X						X	X		X
hairy woodpecker	<i>Picoides villosus</i>		R-YR	C										X						X	X		
northern flicker	<i>Colaptes auratus</i>		R-YR	C										X			X	X	X	X	X	X	X
pileated woodpecker	<i>Dryocopus pileatus</i>		R-YR	R																X	X		
olive-sided flycatcher	<i>Contopus borealis</i>		R-SU	U																	X		X
western wood-pewee	<i>Contopus sordidulus</i>		R-SU	C										X						X	X		
willow flycatcher	<i>Empidonax traillii</i>	ST,SBS	M-SP,F	U								X	X		X								
Hammond's flycatcher	<i>Empidonax hammondii</i>		M-SP,F	R										X						X	X		
dusky flycatcher	<i>Empidonax oberholseri</i>		M-SP	R										X				X	X	X	X		
gray flycatcher	<i>Empidonax wrightii</i>		M-SP	R										X				X	X	X	X		
Pacific-slope flycatcher	<i>Empidonax difficilis</i>	SBS	R-SU	C										X						X	X		
black phoebe	<i>Sayornis nigricans</i>		R-YR	C					X	X	X	X	X		X	X				X		X	X
Say's phoebe	<i>Sayornis saya</i>		R-YR	U					X				X					X	X	X		X	X
ash-throated flycatcher	<i>Myiarchus cinerascens</i>		R-SU	C									X					X	X	X	X		
western kingbird	<i>Tyrannus verticalis</i>		R-SU	C													X	X	X	X		X	
horned lark	<i>Eremophila alpestris</i>		R-YR	C											X		X	X				X	
purple martin	<i>Progne subis</i>	SSC	M-SP,F	U									X							X	X		
tree swallow	<i>Tachycineta bicolor</i>		R-SU,W	C				X	X	X	X	X	X	X	X	X				X		X	
violet-green swallow	<i>Tachycineta thalassina</i>		R-SU	C				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>		R-SU	C				X	X	X			X	X	X	X				X		X	

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bank swallow	<i>Riparia riparia</i>	ST,SSC	M-SP,F	R						X			X				X	X	X				X
cliff swallow	<i>Hirundo pyrrhonota</i>		R-SU	A				X	X	X			X	X	X	X	X	X	X	X	X	X	X
barn swallow	<i>Hirundo rustica</i>		R-SU	C			X	X	X				X		X	X	X	X	X	X	X	X	X
Steller's jay	<i>Cyanocitta stelleri</i>		R-YR	C									X							X	X		X
scrub jay	<i>Aphelocoma coerulescens</i>		R-YR	C									X							X	X		X
yellow-billed magpie	<i>Pica nuttalli</i>		R-YR	C									X				X	X	X	X	X	X	X
American crow	<i>Corvus brachyrhynchos</i>	HA	R-YR	A									X				X			X	X		X
common raven	<i>Corvus corax</i>		R-YR	U				X	X				X				X			X	X		X
chestnut-backed chickadee	<i>Parus rufescens</i>		R-YR	C									X				X	X	X	X			X
plain titmouse	<i>Parus inornatus</i>		R-YR	C									X							X	X		X
bush-tit	<i>Psaltriparus minimus</i>		R-YR	C									X							X	X		X
white-breasted nuthatch	<i>Sitta carolinensis</i>		R-YR	U									X				X	X	X	X			X
red-breasted nuthatch	<i>Sitta canadensis</i>		R-YR	U									X							X	X		
pygmy nuthatch	<i>Sitta pygmaea</i>		R-YR	R									X							X	X		X
brown creeper	<i>Certhia americana</i>		R-YR	U									X								X		X
rock wren	<i>Salpinctes obsoletus</i>		R-YR	U									X							X	X		
canyon wren	<i>Catherpes mexicanus</i>		R-YR	R									X				X	X	X				
Bewick's wren	<i>Thryomanes bewickii</i>	AB	R-YR	C									X				X	X	X				
house wren	<i>Troglodytes aedon</i>		R-SU	C				X					X				X	X	X	X			X
winter wren	<i>Troglodytes troglodytes</i>		R-YR	U				X					X				X	X	X	X	X		X
marsh wren	<i>Cistothorus palustris</i>		R-YR	C									X								X		
American dipper	<i>Cinclus mexicanus</i>		FFYR	R				X	X	X	X	X											
golden-crowned kinglet	<i>Regulus satrapa</i>		R-W	C									X							X	X		X
ruby-crowned kinglet	<i>Regulus calendula</i>		R-W	C									X							X	X		X
blue-gray gnatcatcher	<i>Polyptila caerulea</i>		R-YR	U				X	X				X				X	X	X	X	X		X
western bluebird	<i>Sialia mexicana</i>	SBS	R-YR	C									X				X	X	X	X			X
mountain bluebird	<i>Sialia currucoides</i>		R-W	R									X				X	X	X	X	X		X
Townsend's solitaire	<i>Myadestes townsendi</i>		R-W	R									X				X						X
Swainson's thrush	<i>Catharus ustulatus</i>		R-SU	C									X				X	X	X				X
hermit thrush	<i>Catharus guttatus</i>		R-W	C									X				X	X	X	X	X		X
American robin	<i>Turdus migratorius</i>		R-YR	A									X				X			X	X		X

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varied thrush	<i>Ixoreus naevius</i>		R-W	U										X						X	X		
wrenit	<i>Chamaea fasciata</i>		R-YR	C										X			X	X		X			
northern mockingbird	<i>Mimus polyglottos</i>		R-YR	C										X			X	X	X	X		X	X
California thrasher	<i>Toxostoma redivivum</i>		R-YR	C										X			X	X	X	X			
American pipit	<i>Anthus rubescens</i>		R-W	C	X	X	X		X	X	X	X	X		X	X	X					X	X
cedar waxwing	<i>Bobycilla cedrorum</i>		R-W	C				X						X			X	X	X	X	X	X	X
phainopepla	<i>Phainopepla nitens</i>		R-YR	R										X			X	X	X				
European starling	<i>Sturnus vulgaris</i>	IN	R-YR	A				X	X					X			X			X		X	X
Bell's vireo	<i>Vireo bellii</i>	EX,SSC																					
solitary vireo	<i>Vireo solitarius</i>		R-SU	U										X						X	X		
Hutton's vireo	<i>Vireo huttoni</i>		R-YR	C										X						X	X		
warbling vireo	<i>Vireo gilvus</i>		R-SU	C										X						X	X	X	X
orange-crowned warbler	<i>Vermivora celata</i>		R-SU	C										X			X	X	X	X	X	X	X
Nashville warbler	<i>Vermivora ruficapilla</i>		M-SP,F	R										X					X	X	X		
yellow warbler	<i>Dendroica petechia</i>	SSC	R-SU	C										X			X	X	X	X	X	X	X
yellow-rumped warbler	<i>Dendroica coronata</i>		R-W	C										X			X	X	X	X	X	X	X
black-throated gray warbler	<i>Dendroica nigrescens</i>		R-SU	U										X			X	X	X	X			
Townsend's warbler	<i>Dendroica townsendi</i>		R-W	U										X			X	X	X	X		X	
hermit warbler	<i>Dendroica occidentalis</i>		M-SP,F	R										X						X	X		X
MacGillivray's warbler	<i>Oporornis tolmiei</i>		R-SU	U										X							X		
common yellowthroat	<i>Geothlypis trichas</i>	FC2,SBS,SSC	R-YR	U				X	X	X				X									
Wilson's warbler	<i>Wilsonia pusilla</i>		R-SU	C										X			X	X	X	X			
yellow-breasted chat	<i>Icteria virens</i>	SSC	R-SU	R										X									
western tanager	<i>Piranga ludoviciana</i>		M-SP,F	C										X						X	X		
black-headed grosbeak	<i>Pheucticus melanocephalus</i>		R-SU	C										X						X	X		
blue grosbeak	<i>Guiraca caerulea</i>		R-SU	U										X			X						
Lazuli bunting	<i>Passerina amoena</i>		R-SU	C								X	X	X			X	X	X	X	X		
rufous-sided towhee	<i>Pipilo erythrophthalmus</i>		R-YR	C										X			X	X	X	X		X	
California towhee	<i>Pipilo crissalis</i>		R-YR	C										X			X	X	X	X	X	X	X
rufous-crowned sparrow	<i>Aimophila ruficeps</i>		R-YR	U													X	X	X				
chipping sparrow	<i>Spizella passerina</i>		R-SU	U										X			X	X	X	X	X	X	X

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black-chinned sparrow	<i>Spizella atrogularis</i>		R-SU	U													X	X					
vesper sparrow	<i>Poocetes gramineus</i>		R-W	R													X	X	X			X	
lark sparrow	<i>Chondestes grammacus</i>		R-YR	C													X	X	X	X		X	
sage sparrow	<i>Amphispiza belli</i>		R-YR	U													X	X					
Savannah sparrow	<i>Passerculus sandwichensis</i>		R-YR	C				X	X	X	X	X	X				X						
grasshopper sparrow	<i>Ammodramus savannarum</i>	AB	R-SU	R													X						
fox sparrow	<i>Passerella iliaca</i>		R-W	C										X			X	X			X		X
song sparrow	<i>Melospiza melodia</i>	FC2,SSC	R-YR	C			X	X	X	X	X	X	X				X	X	X		X	X	X
Lincoln's sparrow	<i>Melospiza lincolni</i>		R-W	U			X	X	X					X			X	X	X	X			
white-throated sparrow	<i>Zonotrichia albicollis</i>		R-W	R										X			X	X	X	X	X	X	X
golden-crowned sparrow	<i>Zonotrichia atricapilla</i>		R-W	C										X			X	X	X	X	X	X	X
white-crowned sparrow	<i>Zonotrichia leucophrys</i>		R-YR	C				X	X		X	X	X				X	X	X	X	X	X	X
dark-eyed junco	<i>Junco hyemalis</i>		R-YR	C										X			X	X	X	X	X	X	X
red-winged blackbird	<i>Agelaius phoeniceus</i>		R-YR	A			X	X	X	X	X	X	X				X					X	X
tricolored blackbird	<i>Agelaius tricolor</i>	FC2,SSC	R-YR	C			X	X	X	X	X	X	X			X	X					X	
western meadowlark	<i>Sturnella neglecta</i>		R-YR	C			X	X				X					X	X		X		X	X
yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>		R-W	U			X	X				X	X			X	X					X	
Brewer's blackbird	<i>Euphagus cyanocephalus</i>		R-YR	A					X		X	X	X			X	X					X	X
brown-headed cowbird	<i>Molothrus ater</i>		R-YR	C				X					X				X	X	X	X	X	X	X
hooded oriole	<i>Icterus cucullatus</i>		R-SU	U										X								X	X
northern oriole	<i>Icterus galbula</i>		R-SU	C										X						X		X	X
purple finch	<i>Carpodacus purpureus</i>		R-YR	C										X						X	X	X	X
house finch	<i>Carpodacus mexicanus</i>		R-YR	A				X	X				X	X			X	X		X	X	X	X
red crossbill	<i>Loxia curvirostra</i>		R-W,SU	U										X								X	X
pine siskin	<i>Carduelis pinus</i>		R-YR	C										X						X	X		X
lesser goldfinch	<i>Carduelis psaltria</i>		R-YR	C										X			X	X	X	X	X	X	X
Lawrence's goldfinch	<i>Carduelis lawrencei</i>		R-YR	U										X			X	X	X		X	X	X
American goldfinch	<i>Carduelis tristis</i>		R-YR	C										X			X			X	X	X	X
evening grosbeak	<i>Coccothraustes vespertina</i>		R-W	R										X							X	X	X

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house sparrow	<i>Passer domesticus</i>	IN	R-YR	A																			X X
MAMMALS																							
Virginia opossum	<i>Didelphis virginiana</i>	HA, IN	R-YR	C																			
vagrant shrew	<i>Sorex vagrans</i>	FC1, SSC	R-YR	A						X	X	X	X	X		X	X	X	X		X	X	X
Pacific shrew	<i>Sorex pacificus</i>		R-YR	C	X	X				X						X	X	X			X	X	
ornate shrew	<i>Sorex ornatus</i>	FC1, SSC	R-YR	U						X		X	X				X	X			X		
Trowbridge's shrew	<i>Sorex trowbridgii</i>		R-YR	C	X	X				X	X	X	X				X	X	X	X	X	X	
shrew-mole	<i>Neurotrichus gibbsii</i>		R-YR	C									X				X	X	X	X			
broad-footed mole	<i>Scapanus latimanus</i>		R-YR	C					X		X												X
little brown bat	<i>Myotis lucifugus</i>		R-YR	C									X				X		X	X	X		
Yuma myotis	<i>Myotis yumanensis</i>		R-YR	U							X		X				X	X	X		X		
long-eared myotis	<i>Myotis evotis</i>		R-YR	U									X									X	
fringed myotis	<i>Myotis thysanodes</i>		R-YR	U									X				X	X	X	X			
long-legged myotis	<i>Myotis volans</i>		R-YR	C															X	X	X		
California bat	<i>Myotis californicus</i>		R-YR	C									X				X	X	X	X			
small-footed myotis	<i>Myotis leibii</i>		R-YR	C									X				X	X	X	X			
silver-haired bat	<i>Lasionycteris noctivagans</i>		R-YR	C									X				X	X	X	X	X		
western pipistrelle	<i>Pipistrellus hesperus</i>		R-YR	C									X						X	X			
big brown bat	<i>Eptesicus fuscus</i>		R-YR	A													X	X	X	X	X		
red bat	<i>Lasiurus borealis</i>		R-YR	C													X		X				
hoary bat	<i>Lasiurus cinereus</i>		M-W	U									X				X	X	X	X		X	
Townsend's big-eared bat	<i>Plecotus townsendii</i>	FC2, SSC	R-YR	R									X						X	X			
pallid bat	<i>Antrozous pallidus</i>	SSC	R-YR	U									X						X				
Brazilian free-tailed bat	<i>Tadarida brasiliensis</i>		R-YR	U									X				X	X	X	X	X	X	
western mastiff bat	<i>Eumops perotis</i>	FC2, SSC	R-YR	U									X				X	X	X	X		X	
brush rabbit	<i>Sylvilagus bachmani</i>	FC1, SSC, HA	R-YR	A									X				X	X	X	X		X	
desert cottontail	<i>Sylvilagus audubonii</i>	HA	R-YR	A									X				X	X	X	X			
black-tailed hare	<i>Lepus californicus</i>	HA	R-YR	C									X				X	X	X	X		X	
Sonoma chipmunk	<i>Tamias sonomae</i>		R-YR	C						X		X	X	X			X	X	X	X	X		X
Merriam's chipmunk	<i>Tamias merriami</i>		R-YR	C									X				X	X	X	X			

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California ground squirrel	<i>Spermophilus beecheyi</i>		R-YR	A									X	X			X	X	X	X	X	X	X
eastern gray squirrel	<i>Sciurus carolinenses</i>	IN	R-YR	C																			X
western gray squirrel	<i>Sciurus griseus</i>	HA	R-YR	C										X						X		X	X
fox squirrel	<i>Sciurus niger</i>	HA, IN	R-YR	C										X						X		X	X
Douglas' squirrel	<i>Tamiasciurus douglasii</i>	HA	R-YR	C										X						X	X	X	X
Botta's pocket gopher	<i>Thomomys bottae</i>		R-YR	C																X	X		
little pocket mouse	<i>Perognathus longimembris</i>		R-YR	C						X	X	X					X	X		X		X	X
San Joaquin pocket mouse	<i>Perognathus inornatus</i>	FC2, SSC	R-YR	U														X	X				
California pocket mouse	<i>Perognathus californicus</i>		R-YR	U													X	X	X				
narrow-faced kangaroo rat	<i>Dipodomys venustus</i>		R-YR	C									X				X	X	X	X	X		
Heerman's kangaroo rat	<i>Dipodomys heermanni</i>		R-YR	U									X				X	X	X	X			
California kangaroo rat	<i>Dipodomys californicus</i>		R-YR	C										X			X	X	X				
beaver	<i>Castor canadensis</i>	HA	R-YR	C				X	X		X	X	X				X	X		X	X		
western harvest mouse	<i>Reithrodontomys megalotis</i>		R-YR	C					X		X	X					X	X		X	X		
salt-marsh harvest mouse	<i>Reithrodontomys raviventris</i>	FE, SE	R-YR	R				X	X		X						X	X	X	X	X	X	
California mouse	<i>Peromyscus californicus</i>		R-YR	A									X				X	X	X	X			
deer mouse	<i>Peromyscus maniculatus</i>		R-YR	A				X		X	X	X	X	X		X	X	X	X	X	X	X	X
brush mouse	<i>Peromyscus boylii</i>		R-YR	U									X				X	X	X	X			
pinyon mouse	<i>Peromyscus truei</i>		R-YR	U													X	X		X			
desert woodrat	<i>Neotoma lepida</i>		R-YR	U													X	X					
dusky-footed woodrat	<i>Neotoma fuscipes</i>	FC2, SSC	R-YR	C									X				X	X	X	X			
western red-backed vole	<i>Clethrionomys californicus</i>		R-YR	U									X									X	
California vole	<i>Microtus californicus</i>	SSC	R-YR	U				X		X	X	X					X				X		X
muskrat	<i>Ondatra zibethicus</i>	HA, IN	R-YR	A				X	X		X	X			X					X	X	X	
black rat	<i>Rattus rattus</i>	IN	R-YR	A									X				X	X	X				
Norway rat	<i>Rattus norvegicus</i>	IN	R-YR	A				X	X	X	X	X					X	X	X				X
house mouse	<i>Mus musculus</i>	IN	R-YR	A				X	X	X	X	X										X	X
Pacific jumping mouse	<i>Zapus trinotatus</i>	FC2, SSC	R-YR	C					X	X	X	X					X				X	X	
porcupine	<i>Erethizon dorsetum</i>		R-YR	C					X		X	X	X		X		X	X	X	X			

