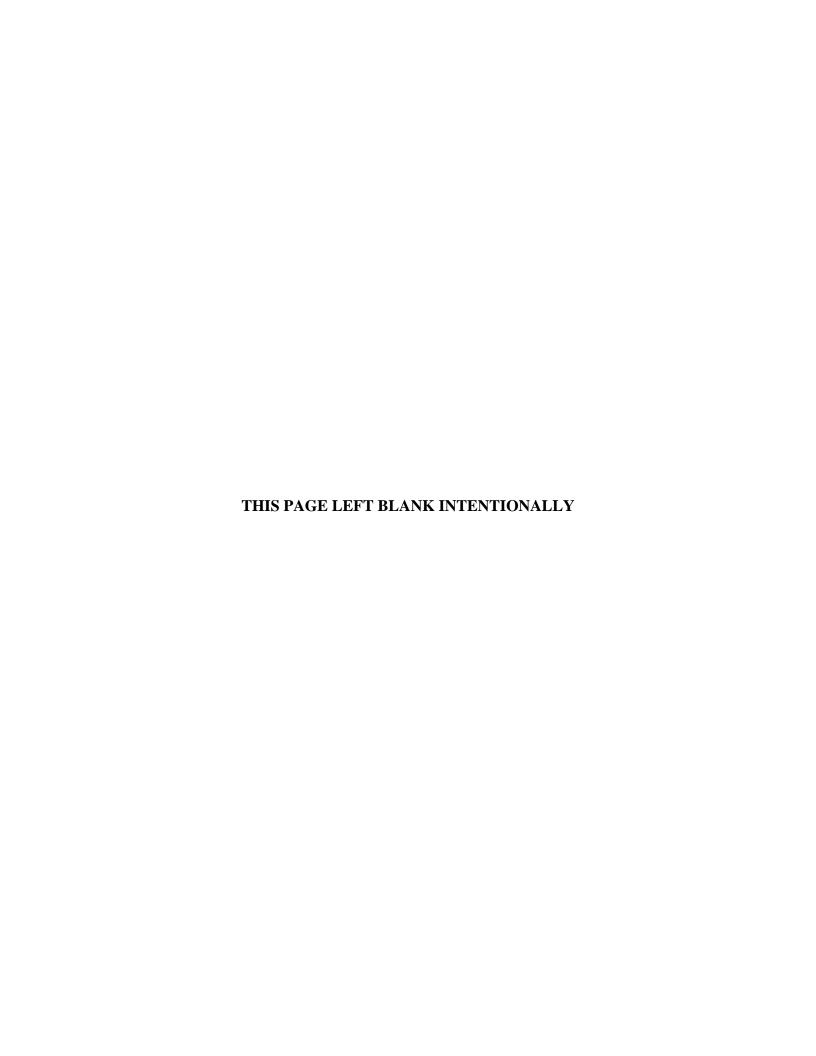
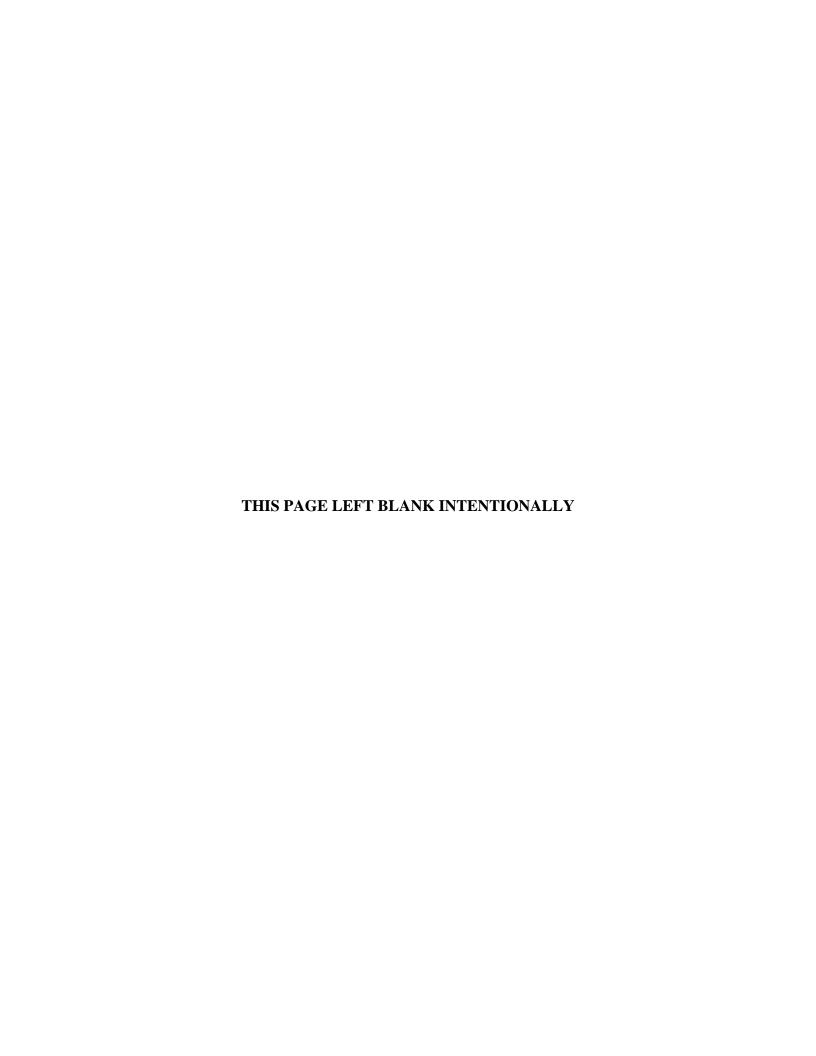
Special Status Species and Habitat Descriptions

- B1 Special Status Plant Species
- B2 Special Status Amphibian and Reptile Species
- B3 Special Status Bird Species
- B4 Special Status Fish Species
- B5 Special Status Invertebrate Species
- B6 Special Status Mammal Species



Special Status Plant Species and Habitat Descriptions



Plants		
Common name		
(Genus species)	Habitat	
Boggs Lake hedge-hyssop (<i>Gratiola heterosepala</i>)	Vernal Pools and lake margins. ¹	Copyright © 2004 Carol W. Witham (Courtesy of CalPhotos)
Bolander's clover (<i>Trifolium bolanderi</i>)	Wet meadows; about 7,000 ft. ⁶	No Photo Available
Brewer's clarkia (Clarkia breweri)	Dry ridges, yellow pine forest; 3,000-6,500 ft. ⁶	Copyright © Roxanne Bittman and CNPS (Courtesy of CalPhotos)
California pinefoot (<i>Pityopus californicus</i>)	Deep shade of mixed evergreen or yellow pine forest; 1,000-5,000 ft. ⁶	Copyright © 1981 Robert E. Preston, Ph.D. (Courtesy of CalPhotos)
Congdon's lewisia (<i>Lewisia congdonii</i>)	Rocky places, red fir forest; 6,000-9,000 ft.6	No Photo Available
Cut-leaved monkey flower (<i>Mimulus laciniatus</i>)	Damp sandy places, yellow pine and red fir forest; 3,300-8,700 ft. ⁶	Copyright © 2001 Steve Schoenig (Courtesy of CalPhotos)

Plants Common name (Genus species)	Habitat	
Fresno mat (ceanothus) (Ceanothus fresnensis)	Dry ridges, yellow pine forest; 3,000-6,500 ft. ⁶	Copyright © 1998 Charles Webber California Academy of Sciences (Courtesy of CalPhotos)
Gray's monkeyflower (<i>Mimulus grayi</i>)	Moist places, montane coniferous forest; 1,800-9,500 ft. ⁶	Copyright © 1994 Dean Wm. Taylor (Courtesy of CalPhotos)
Hall's wyethia (Wyethia elata)	Dry open slopes, foothill woodland, yellow pine forest; 3,000-4,000 ft. ⁶	Copyright © 1995 Brother Alfred Brousseou Saint Mary's College of California (Courtesy of CalPhotos)
Hartweg's golden sunburst (<i>Pseudobahia bahiifolia</i>)	North or northeast-facing slopes of mima mounds, with the highest densities on upper slopes with minimal grass cover, Amador and Rocklin soil series. ¹	Copyright © 2001 John Game (Courtesy of CalPhotos)
Kaweah brodiaea (<i>Brodiaea insignis</i>)	Granitic substrates and deep, clayey soils on south- and southwest-facing slopes. ¹	No Photo Available

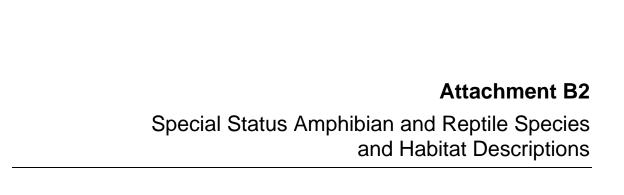
Dianta		
Plants Common name (Genus species)	Habitat	
Kaweah monkeyflower (<i>Mimulus norrisii</i>)	Marble crevices. Elevation 1168 - 4160 feet. ³	http://www.ca.blm.gov/
Madera leptosiphon (<i>Leptosiphon serrulatus</i>)	Dry slopes, yellow pine forest; 1,000-4,000 ft. 6	No Photo Available
Mariposa pussypaws (Calyptridium pulchellum)	Small, barren areas on decomposed granitic sands in annual grasslands and woodlands; 1,500-3,600 ft.4	Copyright © 1994 Dean Wm. Taylor (Courtesy of CalPhotos)
Mono Hot Springs evening-primrose (Camissonia sierrae ssp. Alticola)	Gravel and sandy soil in pans and ledges of granite outcrops. ⁴	No Photo Available
Mouse buckwheat (<i>Eriogonum nudum</i> var. <i>murinum</i>)	Dry, sandy slopes. Chaparral, cismontane woodland, valley and foothill grassland. 3	No Photo Available
Oak-leaved nemophila (Nemophila parviflora var. quercifolia)	Dry shade, foothill woodland, yellow pine forest; 1,000-5,000 ft. ⁶	Copyright © 1995 Brother Alfred Brousseou Saint Mary's College of California (Courtesy of CalPhotos)

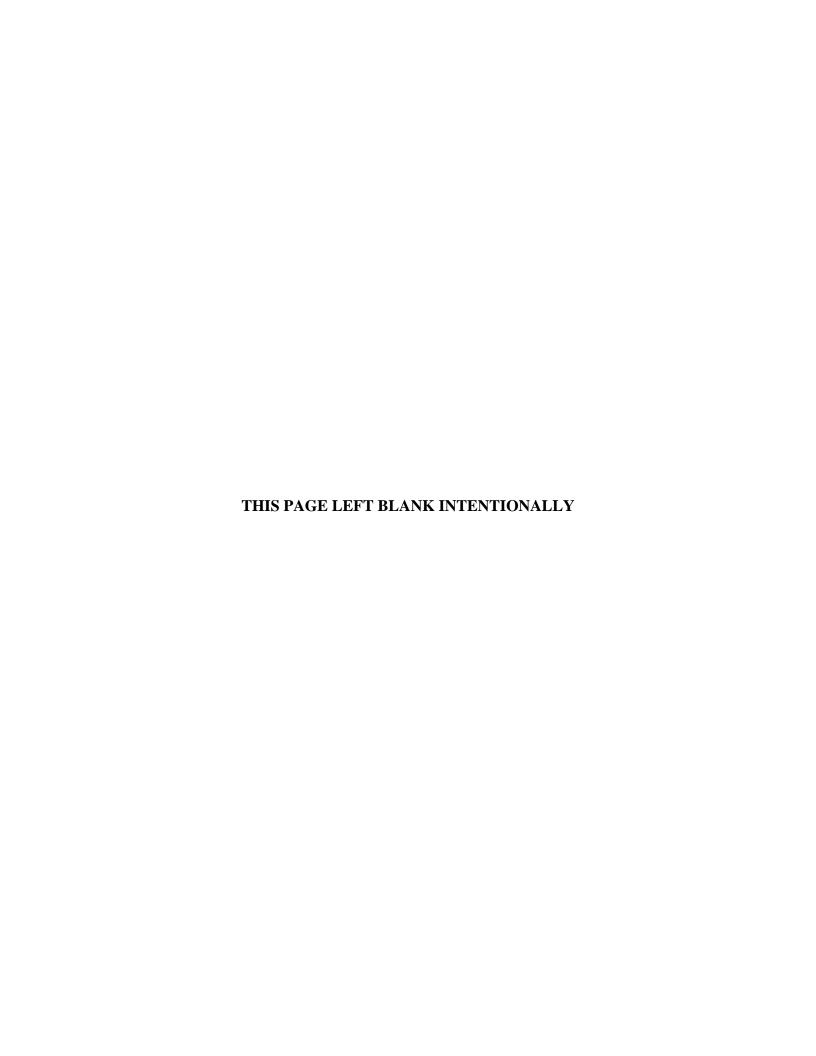
I pu		
Plants Common name (Genus species)	Habitat	
Orange lupine (Lupinus citrinus var. citrinus)	Open granitic areas; 3,000-5,000 ft. ⁶	Copyright © 1985 Dean Wm. Taylor (Courtesy of CalPhotos)
Oval-leaved viburnum (Viburnum ellipticum)	Chapparral, yellow pine, upper montane coniferous forests 3,600-7,000 ft. ¹	No Photo Available
Recurved larkspur (Delphinium recurvatum)	Poorly drained, fine alkaline soils in grassland. Elevation 9.6 - 2400 feet. ³	http://www.ca.blm.gov/
San Joaquin adobe sunburst (<i>Pseudobahia peirsonii</i>)	Heavy adobe clay soils ⁵	Copyright © 1986 Dean Wm. Taylor (Courtesy of CalPhotos)
San Joaquin Valley orcutt grass (Orcuttia inaequalis)	Vernal pools ¹	Copyright © 2002 Joshua D. Boldt (Courtesy of CalPhotos)

Plants Common name (Genus species)	Habitat	
Short-leaved hulsea (<i>Hulsea brevifolia</i>)	Forest openings, red fir forest ⁶	Copyright © 2001 Jeff Abbas (Courtesy of CalPhotos)
Shuteye Peak fawn lily (<i>Erythronium pluriflorum</i>)	Rocky and meadow-type sites in red-fir, lodgepole pine and/or subalpine forest dominated by western white pine and Jeffrey pine ⁴	Copyright © 2004 Aaron Schusteff (Courtesy of CalPhotos)
Spiny-sepaled button-celery (Eryngium spinosepalum)	Vernal pools. ¹	No Photo Available
Springville clarkia (Clarkia springvillensis)	Chaparral; Cismontane Woodland.1	No Photo Available
Succulent owl's-clover (Castilleja campestris ssp. Succulenta)	Drying vernal pools in valley grassland areas. ¹	Copyright © 2000 Robert E. Preston, Ph.D. (Courtesy of CalPhotos)
Tehipite Valley jewel flower (Streptanthus fenestratus)	Sandy decomposed granite slopes; 4,000-6,000 ft. ⁶	Copyright © 1994 Dean Wm. Taylor (Courtesy of CalPhotos)

Plants Common name (Genus species)	Habitat	
Tree-anemone (Carpenteria californica)*	Well-drained granitic soils, most abundant on north-facing ravines and drainages in chaparral and cismontane woodland communities. ¹	Copyright © 1999 Charles Webber California Academy of Sciences (Courtesy of CalPhotos)
Yosemite ivesia (Ivesia unguiculata)	Open slopes, red fir to lodgepole pine forest; 5,000-8,000 ft. ⁶	Copyright © 1995 Brother Alfred Brousseau Saint Mary's College of California (Courtesy of CalPhotos)
Yosemite lewisia (<i>Lewisia disepala</i>)	Pans and shelves of granite gravel found on and next to outcrops surrounded by coniferous forest. ⁴	Copyright © 1995 Brother Alfred Brousseau Saint Mary's College of California (Courtesy of CalPhotos)

¹California Department of Fish and Game
²California Department of Water Resources
³US Bureau of Land Management
⁴US Forest Service, Sierra National Forest Management Plan
⁵US Fish and Wildlife Service, Sacramento Fish & Wildlife Office Species Account
⁶Granite Hydroelectric Project





ATTACHMENT B2. SPECIAL STATUS AMPHIBIAN AND REPTILE SPECIES AND HABITAT DESCRIPTIONS

Amphibians and Reptiles Common name (Genus species)	Habitat	
California Red-legged Frog (<i>Rana aurora draytonii</i>)	Dense, shrubby riparian vegetation associated with deep (2.3 ft.), still or slow-moving water. ¹	Copyright © 2003 Pierre Fidenci
California tiger salamander (Ambystoma californiense)	Lowland species restricted to grasslands and lowest foothill regions with long-lasting rain pools present. ¹	Copyright © 1999 Gerald and Buff Corsi California Academy of Sciences
Foothill yellow-legged frog (<i>Rana boylii</i>)	Shallow, flowing water in small to moderate-sized streams situations with at least some cobble-sized substrate. ¹	Copyright © 1999 Frank E. (Ed) Ely California Academy of Sciences
Mountain yellow-legged frog (<i>Rana muscosa</i>)	Mountain meadow, riparian deciduous, and alpine meadow. Found year-round from 5,000 to 13,000 ft. ⁶	Copyright © 2004 William Flaxington
Relictual slender salamander (<i>Batrachoseps relictus</i>)	Oak woodland-mixed conifer, moist forest with downed wood and deep litter layer; rocks and bark used for cover. ⁴	Copyright © 2003 William Flaxington

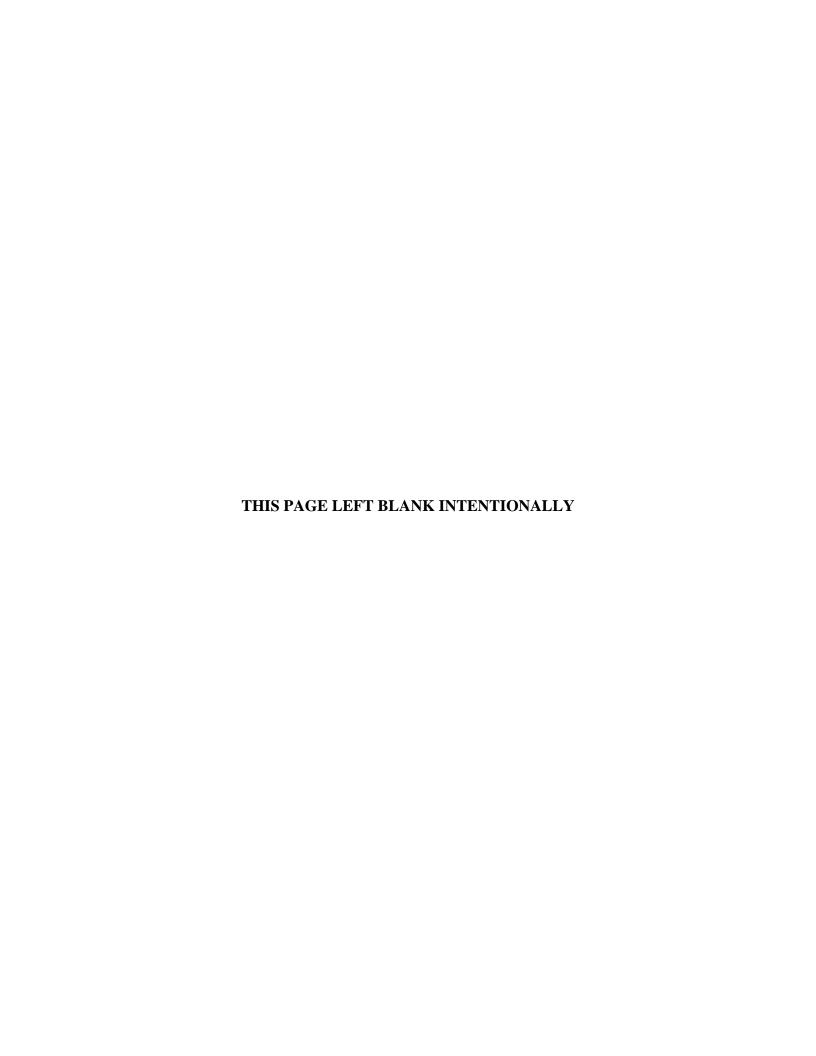
ATTACHMENT B2. SPECIAL STATUS AMPHIBIAN AND REPTILE SPECIES AND **HABITAT DESCRIPTIONS (continued)**

Amphibians and Reptiles Common name (Genus species)	Habitat	
Western pond turtle Emys (=Clemmys) marmorata)	Slack- or slow-water aquatic habitat. Local distributions limited in high gradient streams probably because water temperatures, current velocity, food resources, or any combination thereof. ¹	www.enature.com © Allen Blake Sheldon
Western spadefoot (Spea (=Scaphiopus) hammondii)	Grassland situations, and occasionally in valley-foothill hardwood woodlands; Some orchard-vineyard habitats. ¹	Copyright © 2001 Joyce Gross
Yosemite toad (Bufo canorus)	Restricted to central high Sierra Nevada. Prefers mountain, alpine meadow, lodgepole pine, successional stages of mixed conifer, Jeffrey pine, red fir. Elev. 6,400 to 11,300 ft. 6	Copyright © 1999 John H. Tashjian California Academy of Sciences

¹California Department of Fish and Game
²California Department of Water Resources
³US Bureau of Land Management
⁴US Forest Service, Sierra National Forest Management Plan
⁵US Fish and Wildlife Service, Sacramento Fish & Wildlife Office Species Account

⁶Granite Hydroelectric Project

Special Status Bird Species and Habitat Descriptions



ATTACHMENT B3. SPECIAL STATUS BIRD SPECIES AND HABITAT DESCRIPTIONS

Birds Common name (Genus species)	Habitat	
California condor (Gymnogyps californianus)	Arid foothills and mountain ranges of southern and central California. ¹	http://endangered.fws.gov/
California spotted owl (Strix occidentalis occidentalis)	Wide variety of forest types with moderate to high canopy closure, large accumulations of fallen trees and other debris and sufficient open space below the canopy. ⁵	Copyright © 1999 Gerald and Buff Corsi California Academy of Sciences
Cooper's hawk (Accipiter cooperii)	Ranges from sea level to above 2700 m (0-9000 ft). Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently. ¹	http://www.delta.dfg.ca.gov
Golden eagle (Aquila chrysaetos)	Ranges from sea level up to 11,500 ft. Habitat typically rolling foothills, mountain areas, sage-juniper flats, desert. ¹	http://www.dfg.ca.gov/
Great gray owl (Strix nebulosa)	Old-growth red fir, mixed conifer, or lodgepole pine habitats, always in the vicinity of wet meadows, 4,500-7,500 ft. in the Sierra Nevada. ¹	Copyright © 2004 Don Getty

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Birds Common name (Genus species)	Habitat	
least Bell's vireo (Vireo bellii pusillus)	Low, dense riparian growth along water or along dry parts of intermittent streams. Typically associated with willow, cottonwood, baccharis, wild blackberry, or mesquite in desert localities. ¹	http://www.bird-friends.com/ Copyright © Scott Streit, 2000.
Northern goshawk (<i>Accipiter gentilis</i>)	Dense, mature conifer and deciduous forest, interspersed with meadows, other openings, and riparian areas required. Nesting habitat includes north-facing slopes near water. 1	Copyright © 2004 Don Getty
Norther harrier (Circus cyaneus)	Annual grassland up to lodgepole pine and alpine meadow habitats, as high as 10,000 ft. Mostly found in flat, or hummocky, open areas of tall, dense grasses, moist or dry shrubs, and edges for nesting, cover, and feeding.	Copyright © 2004 Don Getty
Osprey (<i>Pandion haliaetus</i>)	Wide range of habitats near water, primarily lakes, rivers, and coastal waters with adequate supplies of fish. ⁴	Copyright © 2002 Glenn and Martha Vargas California Academy of Sciences

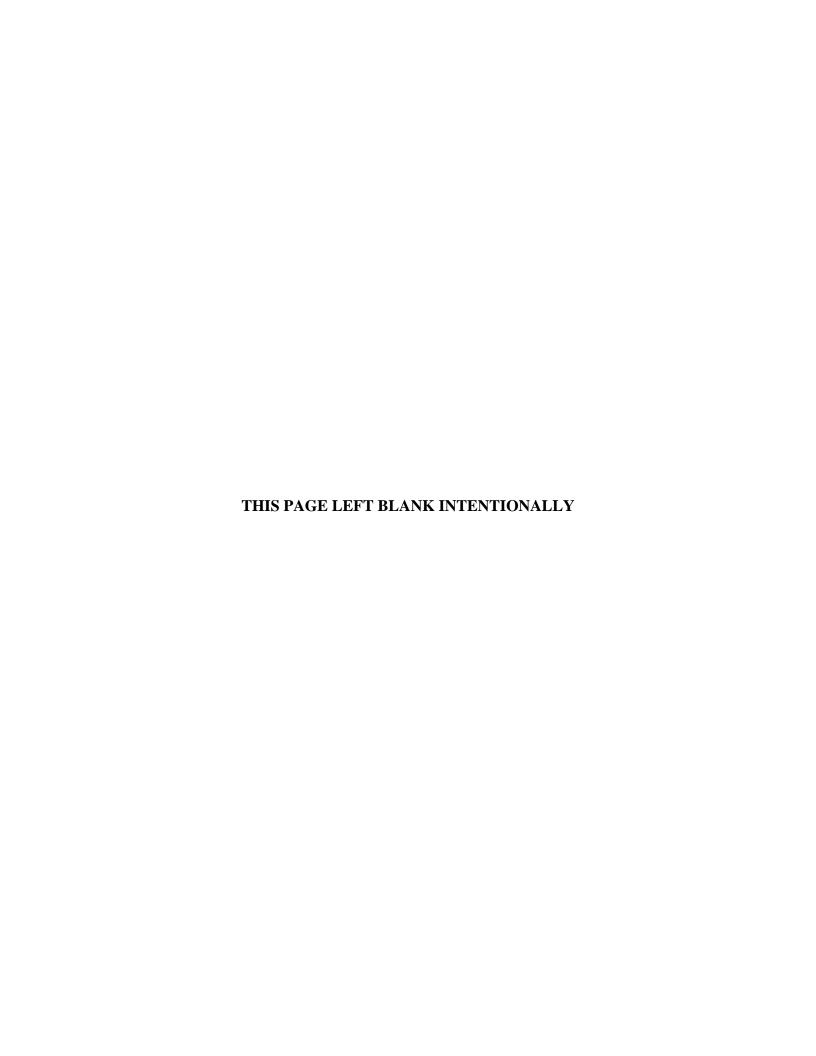
Birds Common name (Genus species)	Habitat	
Prairie falcon (<i>Falco mexicanus</i>)	Annual grasslands to alpine meadows, but associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas. ¹	© 2004 Don Getty
Sharp-shinned hawk (<i>Accipter striatus</i>)	Prefers, but not restricted to, riparian habitats. North facing slopes, with plucking perches are critical requirements. Usually nests in dense, pole and small-tree stands of conifers, which are cool, moist, well shaded, with little ground-cover, near water.	© 2004 Tom Greer
Southern bald eagle (Haliaeetus leucocephalus leucocephalus)	Requires large bodies of water, or free flowing rivers with abundant fish, and adjacent snags or other perches. ¹	© 2004 Don Getty
Swainson's hawk (<i>Buteo swainsoni</i>)	Large, open grasslands with abundant prey in association with suitable nest trees such as oaks, cottonwoods, walnuts, and willows in the Central Valley, and juniper in the Great Basin. ¹	© 2004 Don Getty

Birds		
Common name (Genus species)	Habitat	
Tri-colored blackbird (Agelaius tricolor)	Emergent wetland vegetation, especially cattails and tules; also in trees and shrubs. Roosts in large flocks in emergent wetland or in trees. ¹	http://www.llnl.gov/
Willow flycatcher (<i>Empidonax traillii</i>)	Summer resident in wet meadow and montane riparian habitats at 2000-8000 ft.; broad river valleys or large mountain meadows with lush shrubby willows. ¹	http://www.ronausting.com Copyright © 1997 Ron Austing
Yellow warbler (Dendroica petechia brewsteri)	Riparian habitats in the San Joaquin and Colorado River valleys. ¹	http://www.pnl.gov/

¹California Department of Fish and Game ²California Department of Water Resources ³US Bureau of Land Management

⁴US Forest Service, Sierra National Forest Management Plan ⁵US Fish and Wildlife Service, Sacramento Fish & Wildlife Office Species Account ⁶Granite Hydroelectric Project

Special Status Fish Species and Habitat Descriptions

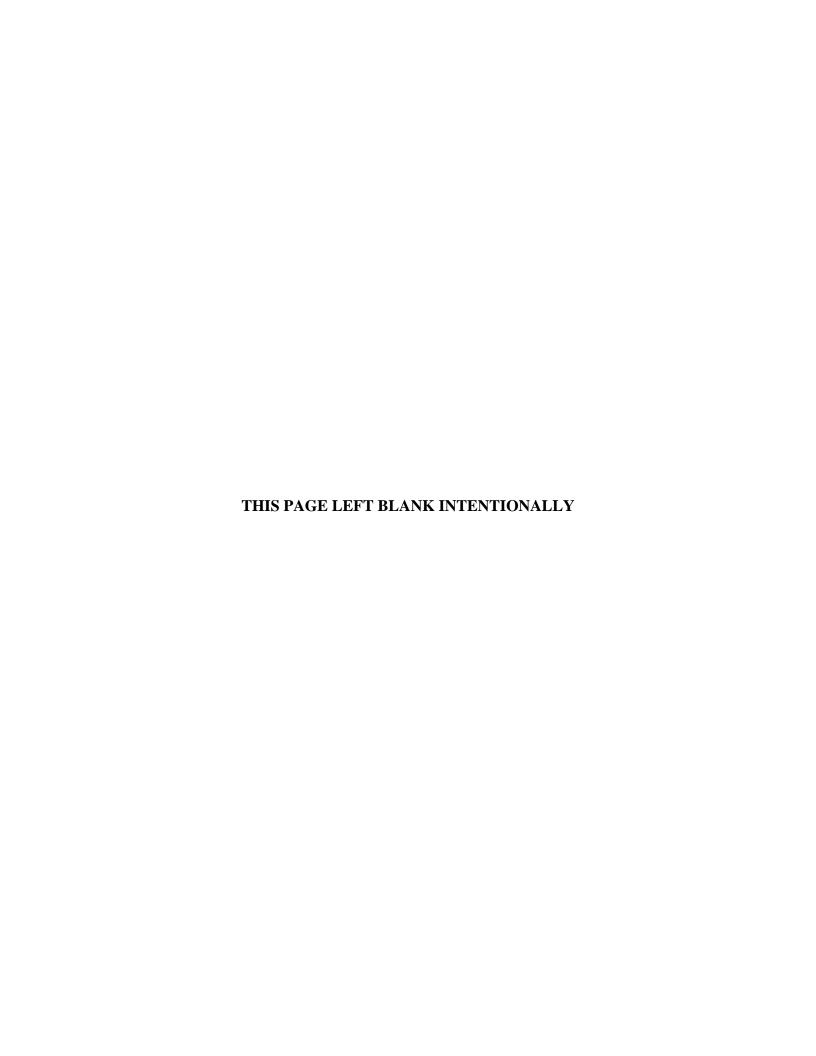


ATTACHMENT B4. SPECIAL STATUS FISH SPECIES AND HABITAT DESCRIPTIONS

Fisheries Common name (Genus species)	Habitat	
Hardhead (<i>Mylopharodon conocephalus</i>)	Undisturbed areas of larger middle- and low- elevation streams, found in association with Sacramento squawfish and usually with Sacramento suckers. ¹	Rene Reyes, US Bureau of Reclamation
Kern Brook lamprey (Lamperta hubbsi)	Thinly scattered throughout the San Joaquin drainage and isolated from one another. ¹	No Photo Available
Lahontan cutthroat trout (Oncorhynchus clarki henshawi)	Lakes and streams and require spawning and nursery habitat characterized by cool water, pools in close proximity to cover and velocity breaks, well vegetated and stable stream banks, and relatively silt free rocky substrate in riffle-run areas. ¹	http://www.dfg.ca.gov/
Paiute cutthroat trout (Oncorhynchus clarki seleniris)	The extant pure populations all occur in headwater stream environments that are isolated from other fish species by barrier falls. ⁵	http://www.dfg.ca.gov/

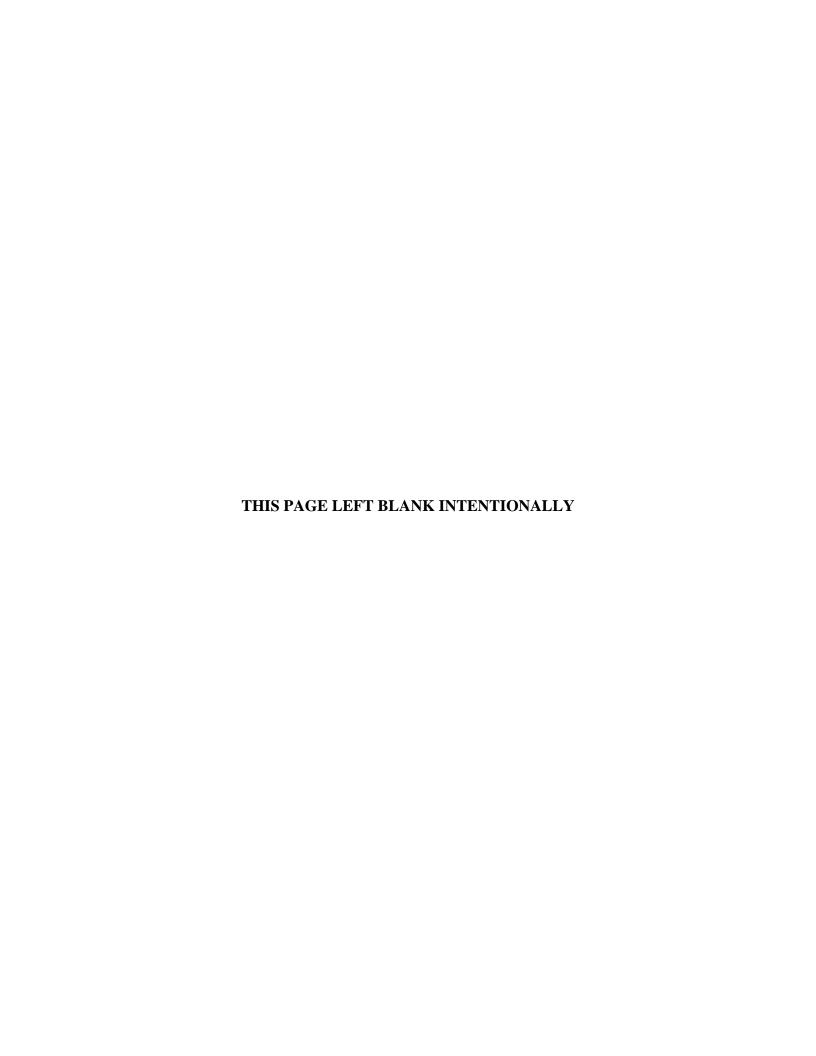
¹California Department of Fish and Game ²California Department of Water Resources ³US Bureau of Land Management

⁴US Forest Service, Sierra National Forest Management Plan ⁵US Fish and Wildlife Service, Sacramento Fish & Wildlife Office Species Account ⁶Granite Hydroelectric Project





Special Status Invertebrate Species and Habitat Descriptions



Invertebrates Common name (Genus species)	Habitat	
California linderiella fairy shrimp (Linderiella occidentalis)	Large, fairly clear vernal pools and lakes ⁵	No Photo Available
Dry Creek cliff strider bug (Oravelia pege)	Information being developed	No Photo Available
Midvalley fairy shrimp (<i>Branchinecta mesovallensis</i>)	Shallow vernal pools, vernal swales and various artificial ephemeral wetland habitats ⁵	http://sacramento.fws.gov
Moesta blister beetle (Lytta moesta)	Information being developed	No Photo Available
Molestan blister beetle (Lytta molesta)	Annual grassland, foothill woodland, and atriplex scrub, dried vernal pools. ²	No Photo Available
Valley elderberry longhorn beetle (Desmocerus californicus dimorphus)	Elderberry plants, present in Great Valley Valley Oak Riparian Forests, are the sole host plant for nesting	Richard A. Arnold, http://sacramento.fws.gov/
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	A variety of different vernal pool habitats, from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools ⁵	http://www.vernalpools.org/
Vernal pool tadpole shrimp (<i>Lepidurus packardi</i>)	Vernal pools containing clear to highly turbid water, ranging in size ⁵	Larry Serpa, http://sacramento.fws.gov/

¹California Department of Fish and Game

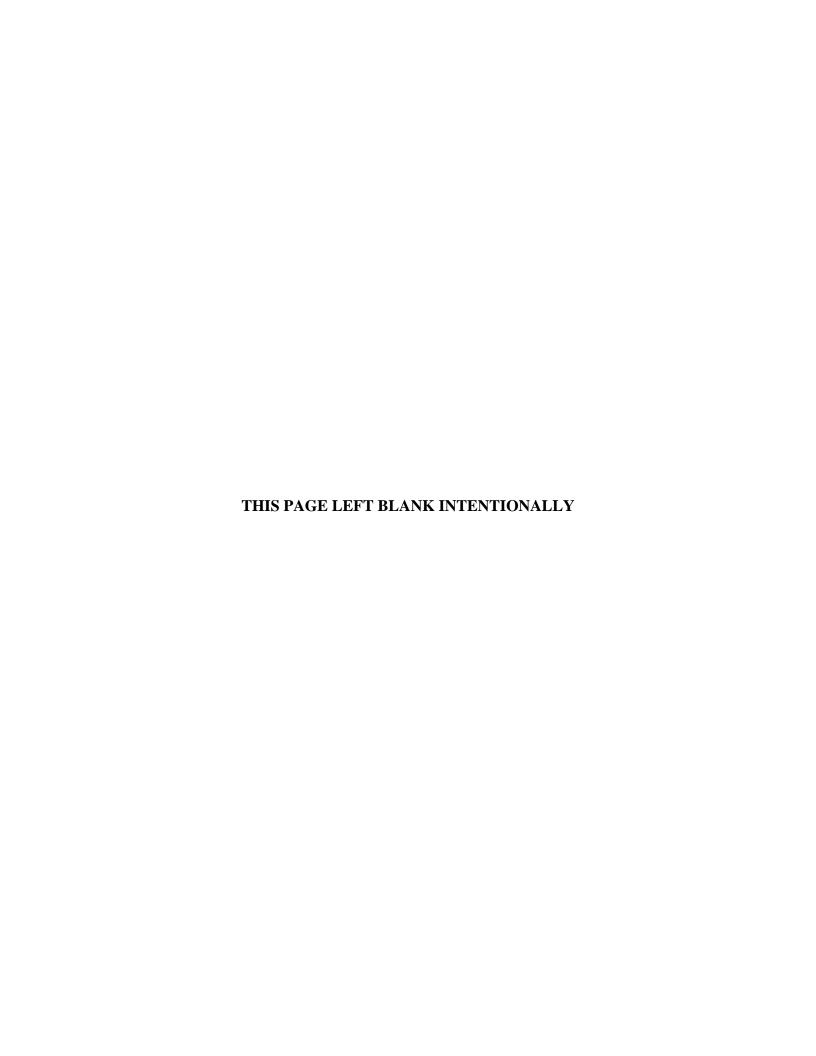
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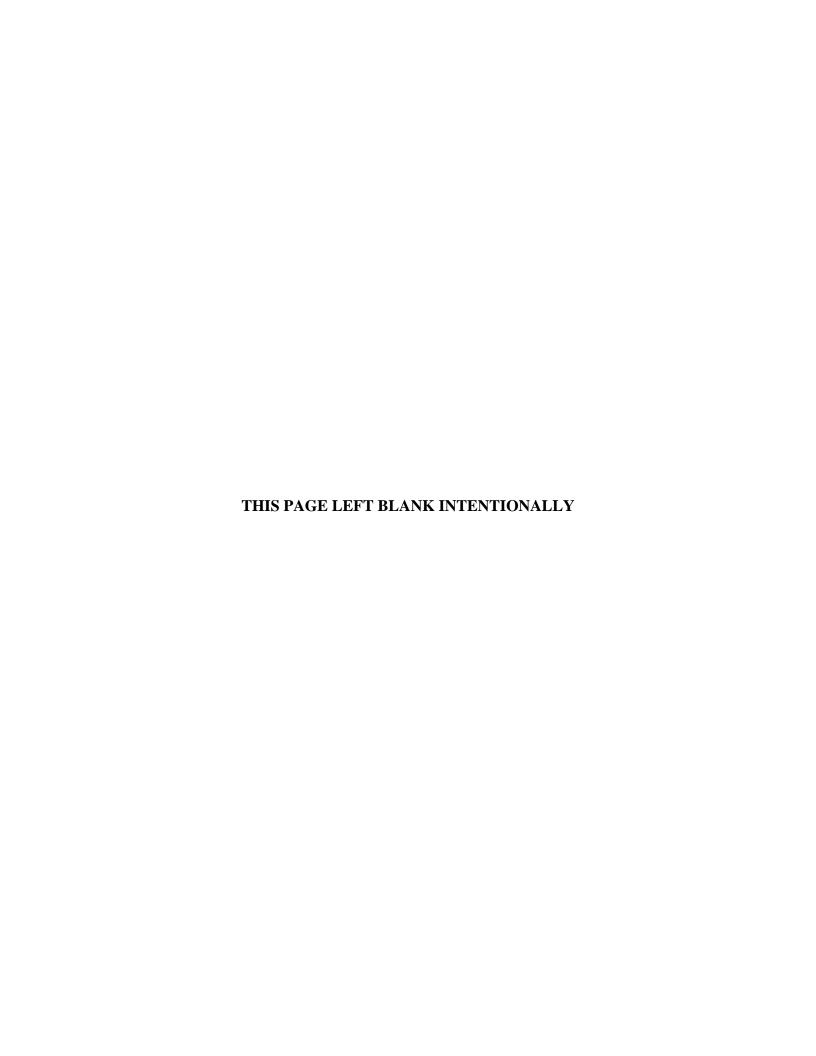
⁴US Forest Service, Sierra National Forest Management Plan

⁵US Fish and Wildlife Service, Sacramento Fish & Wildlife Office Species Account

⁶Granite Hydroelectric Project



Special Status Mammal Species and Habitat Descriptions



Mammals Common name (Genus species)	Habitat	
American (=pine) marten (Martes americana)	Coniferous forest habitat with large diameter trees and snags, large down logs, moderate-to-high canopy closure, and an interspersion of riparian areas and meadows. ⁴	Copyright © 2001 Gerald and Buff Corsi California Academy of Sciences
California wolverine (Gulo gulo)	Southern Sierra Nevada habitats include red fir, mixed conifer, lodgepole, subalpine conifer, alpine dwarfshrub, barren, and probably wet meadows, montane chaparral, and Jeffrey pine; elevations mostly from 6,400-10,800 ft. ¹	Copyright © 1999 Gerald and Buff Corsi California Academy of Sciences
Fringed myotis (Myotis thysanodes)	Pinyon-juniper, valley foothill hardwood and hardwood conifer forest from 4,000 to 7,000 ft. ¹	http://www.werc.usgs.gov
Long-eared myotis (<i>Myotis evotis</i>)	Nearly all brush, woodland, and forest habitats, from sea level to at least 9000 ft., but coniferous woodlands and forests seem to be preferred. It avoids the arid Central Valley and hot deserts. ¹	http://www.werc.usgs.gov

Mammals Common name (Genus species)	Habitat	
Long-legged myotis (<i>Myotis volans</i>)	Woodland, forest, chaparral, shrub and coastal scrub habitats and is uncommon in arid grassland and desert habitats ¹	www.enature.com Copyright © Roger W. Barbour/ Morehead State University
Pacific fisher (Martes pennanti pacifica)	Intermediate to large-tree stages of coniferous forests and deciduous-riparian habitats with a high percent canopy closure. ¹	http://www.sierracampaign.org
Pallid bat (<i>Antrozous pallidus</i>)	Grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting. ¹	Copyright © 1999 Dr. Lloyd Glenn Ingles California Academy of Sciences
San Joaquin kit fox (Vulpes macrotis mutica)	Occur in the remaining native valley and foothill grasslands and chenopod scrub communities of the valley floor and surrounding foothills. ¹	Copyright © 1999 Dr. Lloyd Glenn Ingles California Academy of Sciences

Mammals Common name (Genus species)	Habitat	
Sierra Nevada red fox (Vulpes vulpes necator)	Red fir and lodgepole pine forests in the subalpine zone and alpine fell-fields of the Sierra Nevada. ¹	http://www.pitriveralliance.
Spotted bat (Euderma maculatum)	Mostly in foothills, mountains and desert regions of southern California. Occasionally occurs outside this range. Habitats occupied range from arid deserts and grasslands through mixed conifer forests. ¹	www.enature.com Copyright © Merlin D. Tuttle/ Bat Conservation International
Townsend's western big-eared bat (Corynorhinus townsendii townsendii)	Found in all but subalpine and alpine habitats, and may be found at any season throughout its range. It is most abundant in mesic habitats. ¹	http://www.werc.usgs.gov
Western (California) mastiff bat (Eumops perotis californicus)	Open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. ¹	www.enature.com Copyright © Merlin D. Tuttle/ Bat Conservation International

Mammals Common name (Genus species)	Habitat	
Western red bat (Lasiurus blossevillii)	Forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. ¹	http://www.werc.usgs.gov
Yuma myotis (<i>Myotis yumanensis</i>)	A variety of habitats ranging from sea level to 11,000 ft, but it is uncommon to rare above 2560 m (8000 ft). Optimal habitats are open forests and woodlands with sources of water over which to feed. ¹	http://www.werc.usgs.gov

¹California Department of Fish and Game
²California Department of Water Resources
³US Bureau of Land Management
⁴US Forest Service, Sierra National Forest Management Plan
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