



## Appendix A-I

### Methodology for Creation of SCLTC Maps

March 18, 2011

This document sets out ways that the original data was modified or categorized in the SCLTC Foothills map series.

**Parcel Fragmentation:** County Parcel data were collected for each county in the Foothills region. We then calculated parcel acre size (acres) for every parcel. Water bodies and roads were removed manually. Parcels were then grouped and symbolized by acreage size: <10, 10-40, 40-80, 80-160, 160-320, >320. Protected areas were placed over the parcel fragmentation data, so only the parcel fragmentation of the non-protected areas in the foothills region were displayed in the map series.

**Housing Density:** We used the standard Theobald classifications for defining urban/suburban, exurban, rural, and undeveloped private lands. CPAD was placed over the housing density data, so only the housing density of the non-protected areas in the foothills region were displayed in the map series.

**Housing Growth from 2000 – 2030:** The 2000 housing density data was subtracted from the 2030 housing density data. Since the raster cell size was the same, a simple raster calculator subtraction created a yes/no (1 or 0) code to indicate if an increase in housing density between 2000 and 2030 was predicted. We did not measure how much growth was predicted. We chose to use 2000 as a base year because Theobald's housing density data is based on the 2000 census.

**Rare Plant and Animal and Landscapes:** Areas of Greater Occurrences of Sensitive Animal or Plant Distribution is based upon CNDDDB species occurrence. CNDDDB data for both animals and plants were selected based upon an interaction with the foothills region. Then we created a centroid point for each record and displayed on both the ecological landscapes maps.

**Large Land Owners:** This file was created from querying the ownership attribute within each county's parcel data. The first step was to clip the parcel data to the foothills region. Then we eliminated all publicly owned parcels. We did this by erasing all parcels within the foothills region that overlap CPAD, and then manually searched through the parcel data to find other publicly owned parcels and removed them. Parcel ownership is often entered slightly differently for the same owner. For example "Johnson, JS " may also be entered as "Johnson, J.S.". To help relieve this issue, we took the first fourteen characters of the ownership attribute and created a new field called "Own14". We then merged parcel data sets on this field. Parcels with identical "Own14" names and within 30 yards from each other were dissolved to create one record. The 30 yards accounted for roads that may separate parcels that were for all intents and purposes adjacent land owned by a single owner. After we completed this for every county, we then manually sorted the "Own 14 field" by alphabetical order to manually correct any large single owners that our automated method did not find. Finally we calculated acreage based upon the merged "Own 14" file. Any record that was 320 acres or greater was displayed on the Large Land Owner map series. All county parcel data had ownership attributes with the exception of Amador County.

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**Watersheds:** The foothill watersheds were named by Virginia Mahacek.

**Vegetation:** The vegetation layer was provided by Steve Beckwitt. The categorization of the vegetation layer was created by John Hunter and Ted Beedy.



## Appendix A-II

### Data Used in Foothills Conservation Strategy: Overview

March 18, 2011

Below is a list of the data used for the Sierra Cascade Land Trust Council's Foothills Conservation Strategy. Each of the files was unioned together, and acres were calculated, for the analysis. GIS data and spreadsheets were delivered to John Hunter and Ted Beedy for further analysis.

#### Counties

ESRI Data & Maps DVD - 2010

#### Elevation data

90-meter DEM

USGS National Map Server

<http://seamless.usgs.gov/>

#### Water Bodies

ESRI Data & Maps DVD - 2010

#### Riparian Areas

Derived from NHDH

<ftp://nhdftp.usgs.gov/DataSets/Staged/States/FileGDB/HighResolution/>

- From NHDH, create 2 files, one of named waterways, one of perennial waterways
- Merge these two files, dissolve
- Create a 30-meter buffer of this dissolved named & perennial waterways file
- Select all buffers that intersect named waterways, export buffers to new file
- Select all rivers from merged named & perennial waterways file that intersect above buffer file, export
- Select NHDH water bodies that intersect latest rivers file, export to new file
- Erase rivers that overlap water bodies
- Convert water bodies to polylines, merge with rivers
- Buffer by 100 meters to create riparian buffers
- Clip out water bodies to only show shoreline of water bodies

#### Foothill outline

Lowest elevation is the Sierra Nevada Conservancy boundary.

Upper elevation is composed of a combination of the Cal Jepson Foothills boundary and the 3000-foot contour. Created by Jason Jones and John Hunter.

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### **Ecological Landscape of Plants**

CNDDDB 2008 plant data provided by John Hunter. Files clipped to Foothills boundary.  
Created centroids followed by a one mile radius buffer around these points.  
<http://www.dfg.ca.gov/biogeodata/cnddb/>

### **Vegetation**

composite vegetation from Steve Beckwitt  
GAP Protection Scores  
CPAD/GAP February 2010  
<http://www.calands.org/>

### **Soils**

Vernal Pool Complexes, Gabbro, Serpentine, lone,  
From John Hunter

### **Parcel Fragmentation**

County Parcel data. GIS calculation of parcel acres size. Most parcel data is from 2007-2008.  
Parcels were then set into acre sizes of:

<10  
10-40  
40-80  
80-160  
160-320  
>320

### **2010 Housing Density**

- David Theobald, Colorado State University
- Grouping in accordance with Theobald's standards.
- 0 - Undeveloped Private > 80 acres
- 1, 2, 3 - Rural
- 4, 5, 6 - Exurban
- 7, 8, 9 - Urban/Suburban
- 10 - Commercial/Industrial
- <http://www.nrel.colostate.edu/ftp/theobald/>

### **Housing Growth from 2000 - 2030**

Housing Growth was a raster created by GreenInfo Network using Theobald's Housing Density Data. The 2000 housing density was subtracted from the 2030 housing density model. Since cell size was the same, a simple raster calculator subtraction created a yes/no (1 or 0) raster indicating if there were likely to be an increase in housing density between 2000 to 2030. We chose to use 2000 data because Theobald's data is based on the 2000 census.  
<http://www.nrel.colostate.edu/ftp/theobald/>



## Appendix A-III

### Data Used in Foothills Conservation Strategy: Water April 11, 2011

Below is a list of the data used for the Sierra Cascade Land Trust Council's Foothills Conservation Strategy water analyses. GIS data and spreadsheets were delivered to Virginia Mahacek for further analysis.

#### **Watersheds**

- 1 - Select all CalWater 2.2.1 (<http://www.atlas.ca.gov/catalog/CentralCoastWetlandsGISProject/WatershedsCalWater221.html>) hydrologic unit watersheds (names edited by Virginia, Lower Calaveras and Upper Calaveras combined per Virginia's request) that intersect the foothills region, export to new shapefile
- 2 - Union foothills watersheds with foothills region, create a field in the new shapefile to show whether the watershed or section of watershed is within the foothills region
- 3 - Buffer 300 feet inside watersheds
- 4 - Extract 30-meter USGS digital elevation model (<http://seamless.usgs.gov/website/seamless/viewer.htm>) with watershed buffers
- 5 - Convert extracted DEM to point shapefile
- 6 - Intersect point shapefile with foothills watersheds (with inside/outside field)
- 7 - For each watershed, calculate highest and lowest point, both inside and outside foothills region
- 8 - Calculate acres and square miles for watersheds, both inside and outside foothills region

#### **Rivers/Streams**

- 1 - Select all perennial, intermittent, and ephemeral water types from California NHD data (<http://nhd.usgs.gov/data.html>), export to new shapefile
- 2 - Intersect new shapefile with watersheds (inside and outside foothills)
- 3 - Calculate kilometers and miles of rivers/streams by watershed (inside and outside foothills)

#### **Reservoirs**

- 1 - Query dams from the Geographic Names Information System (GNIS)([http://geonames.usgs.gov/domestic/download\\_data.htm](http://geonames.usgs.gov/domestic/download_data.htm)), export to new shapefile
- 2 - select all named waterbodies from the CA DFG lakes (<http://gis.ca.gov/catalog/BrowseRecord.epl?id=31272>) shapefile that are within 500 feet of a dam, export "reservoirs" shapefile from resulting water bodies
- 3 - Intersect with foothills to determine if the reservoir is inside, outside, or partially inside the foothills region
- 4 - Calculate acres of each reservoir
- 5 - Create centroids of reservoirs, and calculate coordinates (lat/long) for each centroid
- 6 - Intersect with watersheds to determine which watershed each reservoir is in
- 7 - Apply Virginia's naming convention for watersheds to final spreadsheet
- 8 - Extract elevation value from 30-meter DEM using the reservoir centroids

## Appendix B-I

### Vertebrate Species with Known or Potential Occurrence in the Sierra Cascade Foothills Area

Family/Common Name	Scientific Name	
<b>FISHES</b>		
Lampreys ( <i>Petromyzontidae</i> )		
	Pacific Lamprey	<i>Lampetra tridentata</i>
	River Lamprey	<i>Lampetra ayresi</i>
	Kern brook Lamprey	<i>Lampera hubbsi</i>
	Western brook Lamprey	<i>Lampera transmontanus</i>
Trouts, Salmon and Chars ( <i>Salmonidae</i> )		
	Central Valley Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
	Central Valley Steelhead	<i>Oncorhynchus mykiss irideus</i>
	Coho Salmon (I)*	<i>Oncorhynchus kisutch</i>
	Resident Rainbow Trout	<i>Oncorhynchus mykiss irideus</i>
	Kokanee (Introduced Species-I)	<i>Oncorhynchus nerka</i>
	Brown Trout (I)	<i>Salmo trutta</i>
	Brook Trout (I)	<i>Salvelinus fontinalis</i>
	Lake Trout (I)	<i>Salvelinus namaycush</i>
Sturgeons ( <i>Acipenseridae</i> )		
	White Sturgeon	<i>Acipenser transmontanus</i>
Herrings ( <i>Clupeidae</i> )		
	Threadfin Shad (I)	<i>Dorosoma petenense</i>
	American Shad (I)	<i>Alosa sapidissima</i>
Smelts ( <i>Osmeridae</i> )		
	Wakasagi (I)	<i>Hypomesus nipponensis</i>
Minnows ( <i>Cyprinidae</i> )		
	Sacramento Roach	<i>Hesperoleucus symmetricus</i>
	Hardhead	<i>Mylopharodon conocephalus</i>
	Sacramento Pike-minnow	<i>Ptychocheilus grandis</i>
	Sacramento Hitch	<i>Lavinia exilicauda exilicauda</i>
	Sacramento Speckled Dace	<i>Rhinichthys osculus ssp.</i>
	Sacramento Blackfish	<i>Orthodon microlepidotus</i>
	Golden Shiner (I)	<i>Notemigonus crysoleucas</i>
	Lahontan Redside	<i>Richardsonius egregius</i>
	Fathead Minnow (I)	<i>Pimephales promelas</i>

\*(I) = Introduced

Family/Common Name	Scientific Name	
Minnnows ( <i>Cyprinidae</i> ) continued		
	Redshiner (I)	<i>Notropis lutrensis</i>
	Goldfish (I)	<i>Carassius auratus</i>
	Common Carp (I)	<i>Cyprinus carpio</i>
Suckers ( <i>Catostomidae</i> )		
	Sacramento Sucker	<i>Catostomus occidentalis</i>
	Mountain Sucker	<i>Catostomus platyrhynchus</i>
Catfishes ( <i>Ictaluridae</i> )		
	Black Bullhead (I)	<i>Ictalurus melas</i>
	Brown Bullhead (I)	<i>Ictalurus nebulosus</i>
	White Catfish (I)	<i>Ictalurus catus</i>
	Channel Catfish (I)	<i>Ictalurus punctatus</i>
Sticklebacks ( <i>Gasterosteidae</i> )		
	Threespine Stickleback	<i>Gasterosteus aculeatus</i>
Livebearers ( <i>Poeciliidae</i> )		
	Western Mosquitofish (I)	<i>Gambusia affinis</i>
Sunfishes ( <i>Centrarchidae</i> )		
	Bluegill (I)	<i>Lepomis macrochirus</i>
	Redear Sunfish (I)	<i>Lepomis microlophus</i>
	Green Sunfish (I)	<i>Lepomis cyanellus</i>
	Pumpkinseed (I)	<i>Lepomis gibbosus</i>
	Warmouth (I)	<i>Lepomis gulosus</i>
	Black Crappie (I)	<i>Pomoxis nigromaculatus</i>
	White Crappie (I)	<i>Pomoxis annularis</i>
	Largemouth Bass (I)	<i>Micropterus salmoides</i>
	Smallmouth Bass (I)	<i>Micropterus dolomieu</i>
	Spotted Bass (I)	<i>Micropterus punctulatus</i>
	Redeye Bass (I)	<i>Micropterus coosae</i>
Temperate Basses ( <i>Percichthyidae</i> )		
	Striped Bass (I)	<i>Morone saxatilis</i>
	White Bass (I)	<i>Morone chrysops</i>
Surfperches ( <i>Embiotocidae</i> )		
	Sacramento Tule Perch	<i>Hysterocarpus traski</i> ssp.
	Yellow Perch (I)	<i>Perca flavescens</i>
Sculpins ( <i>Cottidae</i> )		
	Riffle Sculpin	<i>Cottus gulosus</i>
	Prickly Sculpin	<i>Cottus asper</i>

Family/Common Name		Scientific Name
<b>AMPHIBIANS</b>		
Mole Salamanders ( <i>Ambystomatidae</i> )		
	California Tiger Salamander	<i>Ambystoma tigrinum californiense</i>
	Long-toed Salamander	<i>Ambystoma macrodactylum</i>
Newts ( <i>Salamandridae</i> )		
	California Newt	<i>Taricha torosa</i>
Lungless Salamanders ( <i>Plethodontidae</i> )		
	California Slender Salamander	<i>Batrachoseps attenuatus</i>
Spadefoot Toads ( <i>Pelobatidae</i> )		
	Western Spadefoot	<i>Scaphiopus hammondi</i>
True Toads ( <i>Bufo</i> )		
	Western Toad	<i>Bufo boreas</i>
Treefrogs ( <i>Hylidae</i> )		
	Pacific Chorus Frog	<i>Pseudacris regilla</i>
True Frogs ( <i>Ranidae</i> )		
	California Red-legged Frog	<i>Rana aurora draytoni</i>
	Foothill Yellow-legged Frog	<i>Rana boylei</i>
	Bullfrog (I)	<i>Rana catesbeiana</i>
<b>REPTILES</b>		
Pond Turtles ( <i>Emydidae</i> )		
	Western Pond Turtle	<i>Clemmys marmorata</i>
Iguanids ( <i>Phrynosomatidae</i> )		
	Western Fence Lizard	<i>Sceloporus occidentalis</i>
	Sagebrush Lizard	<i>Sceloporus graciosus</i>
	California Horned Lizard	<i>Phrynosoma coronatum</i>
Skinks ( <i>Scincidae</i> )		
	Western Skink	<i>Eumeces skiltonianus</i>
	Gilbert's Skink	<i>Eumeces gilberti</i>
Whiptails ( <i>Teiidae</i> )		
	Western Whiptail	<i>Cnemidophorus tigris</i>
Alligator Lizards ( <i>Anguillidae</i> )		
	Southern Alligator Lizard	<i>Gerrhonotus multicarinatus</i>
	Northern Alligator Lizard	<i>Gerrhonotus coeruleus</i>
Boas ( <i>Boidae</i> )		
	Rubber Boa	<i>Charina bottae</i>

Family/Common Name		Scientific Name
Colubrids ( <i>Colubridae</i> )		
	Ringneck Snake	<i>Diadophis punctatus</i>
	Sharp-tailed Snake	<i>Contia tenuis</i>
	Yellow-bellied Racer	<i>Coluber constrictor</i>
	Coachwhip	<i>Masticophis flagellum</i>
	California Whipsnake	<i>Masticophis lateralis</i>
	Gopher Snake	<i>Pituophis melanoleucus</i>
	Common Kingsnake	<i>Lampropeltis getulus</i>
	California Mountain Kingsnake	<i>Lampropeltis zonata</i>
	Long-nosed Snake	<i>Rhinocheilus lecontei</i>
	Common Garter Snake	<i>Thamnophis sirtalis</i>
	Western Terrestrial Garter Snake	<i>Thamnophis elegans</i>
	Western Aquatic Garter Snake	<i>Thamnophis couchi</i>
	Night Snake	<i>Hypsiglena torquata</i>
Vipers ( <i>Viperidae</i> )		
	Western Rattlesnake	<i>Crotalus viridis</i>
<b>BIRDS</b>		
Loons ( <i>Gaviidae</i> )		
	Pacific Loon	<i>Gavia pacifica</i>
	Common Loon	<i>Gavia immer</i>
Grebes ( <i>Podicipedidae</i> )		
	Pied-billed Grebe	<i>Podilymbus podiceps</i>
	Horned Grebe	<i>Podiceps auritus</i>
	Eared Grebe	<i>Podiceps nigricollis</i>
	Western Grebe	<i>Aechmophorus occidentalis</i>
	Clark's Grebe	<i>Aechmophorus clarkii</i>
Pelicans ( <i>Pelecanidae</i> )		
	American White Pelican	<i>Pelecanus erythrorhynchos</i>
Cormorants ( <i>Phalacrocoracidae</i> )		
	Double-crested Cormorant	<i>Phalacrocorax auritus</i>
Hérons and Egrets ( <i>Ardeidae</i> )		
	American Bittern	<i>Botaurus lentiginosus</i>
	Great Blue Heron	<i>Ardea herodias</i>
	Great Egret	<i>Ardea alba</i>
	Snowy Egret	<i>Egretta thula</i>
	Cattle Egret	<i>Bubulcus ibis</i>
	Green Heron	<i>Butorides virescens</i>
	Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>

Family/Common Name	Scientific Name	
<b>Ibis (<i>Threskiornithidae</i>)</b>		
	White-faced Ibis	<i>Plegadis chihi</i>
<b>New World Vultures (<i>Cathartidae</i>)</b>		
	Turkey Vulture	<i>Cathartes aura</i>
<b>Swans, Geese and Ducks (<i>Anatidae</i>)</b>		
	Greater White-fronted Goose	<i>Anser albifrons</i>
	Snow Goose	<i>Chen caerulescens</i>
	Ross's Goose	<i>Chen rossii</i>
	Canada Goose	<i>Branta canadensis</i>
	Tundra Swan	<i>Cygnus columbianus</i>
	Wood Duck	<i>Aix sponsa</i>
	Gadwall	<i>Anas strepera</i>
	American Wigeon	<i>Anas americana</i>
	Mallard	<i>Anas platyrhynchos</i>
	Cinnamon Teal	<i>Anas cyanoptera</i>
	Northern Shoveler	<i>Anas clypeata</i>
	Northern Pintail	<i>Anas acuta</i>
	Green-winged Teal	<i>Anas crecca carolinensis</i>
	Canvasback	<i>Aythya valisineria</i>
	Redhead	<i>Aythya americana</i>
	Ring-necked Duck	<i>Aythya collaris</i>
	Greater Scaup	<i>Aythya marila</i>
	Lesser Scaup	<i>Aythya affinis</i>
	Harlequin Duck	<i>Histrionicus histrionicus</i>
	Bufflehead	<i>Bucephala albeola</i>
	Common Goldeneye	<i>Bucephala clangula</i>
	Barrow's Goldeneye	<i>Bucephala islandica</i>
	Hooded Merganser	<i>Lophodytes cucullatus</i>
	Common Merganser	<i>Mergus merganser</i>
	Ruddy Duck	<i>Oxyura jamaicensis</i>
<b>Osprey, Hawk and Eagles (<i>Accipitridae</i>)</b>		
	Osprey	<i>Pandion haliaetus</i>
	White-tailed Kite	<i>Elanus leucurus</i>
	Bald Eagle	<i>Haliaeetus leucocephalus</i>
	Northern Harrier	<i>Circus cyaneus</i>
	Sharp-shinned Hawk	<i>Accipiter striatus</i>
	Cooper's Hawk	<i>Accipiter cooperii</i>
	Northern Goshawk	<i>Accipiter gentilis</i>
	Red-shouldered Hawk	<i>Buteo lineatus</i>
	Swainson's Hawk	<i>Buteo swainsoni</i>

Family/Common Name	Scientific Name	
Osprey, Hawk and Eagles ( <i>Accipitridae</i> ) continued		
	Red-tailed Hawk	<i>Buteo jamaicensis</i>
	Ferruginous Hawk	<i>Buteo regalis</i>
	Rough-legged Hawk	<i>Buteo lagopus</i>
	Golden Eagle	<i>Aquila chrysaetos</i>
Falcons ( <i>Falconidae</i> )		
	American Kestrel	<i>Falco sparverius</i>
	Merlin	<i>Falco columbarius</i>
	Peregrine Falcon	<i>Falco peregrinus</i>
	Prairie Falcon	<i>Falco mexicanus</i>
Pheasants, Grouse and Turkeys ( <i>Phasianidae</i> )		
	Ring-necked Pheasant (I)	<i>Phasianus colchicus</i>
	Sooty Grouse	<i>Dendragapus fuliginosus</i>
	Wild Turkey (I)	<i>Meleagris gallopavo</i>
Quail ( <i>Odontophoridae</i> )		
	California Quail	<i>Callipepla californica</i>
	Mountain Quail	<i>Oreortyx pictus</i>
Rails, Moorhens and Coots ( <i>Rallidae</i> )		
	Black Rail	<i>Laterallus jamaicensis</i>
	Virginia Rail	<i>Rallus limicola</i>
	Sora	<i>Porzana carolina</i>
	Common Moorhen	<i>Gallinula chloropus</i>
	American Coot	<i>Fulica americana</i>
Cranes ( <i>Gruidae</i> )		
	Sandhill Crane	<i>Grus canadensis</i>
Plovers ( <i>Charadriidae</i> )		
	Black-bellied Plover	<i>Pluvialis squatarola</i>
	Snowy Plover	<i>Charadrius alexandrinus nivosus</i>
	Semipalmated Plover	<i>Charadrius semipalmatus</i>
	Killdeer	<i>Charadrius vociferus</i>
Avocets and Stilts ( <i>Recurvirostridae</i> )		
	Black-necked Stilt	<i>Himantopus mexicanus</i>
	American Avocet	<i>Recurvirostra americana</i>
Sandpipers ( <i>Scolopacidae</i> )		
	Greater Yellowlegs	<i>Tringa melanoleuca</i>
	Lesser Yellowlegs	<i>Tringa flavipes</i>
	Willet	<i>Catoptrophorus semipalmatus</i>
	Spotted Sandpiper	<i>Actitis macularia</i>
	Whimbrel	<i>Numenius phaeopus</i>
	Long-billed Curlew	<i>Numenius americanus</i>

Family/Common Name	Scientific Name	
Sandpipers ( <i>Scolopacidae</i> ) continued		
	Western Sandpiper	<i>Calidris mauri</i>
	Least Sandpiper	<i>Calidris minutilla</i>
	Pectoral Sandpiper	<i>Calidris melanotos</i>
	Dunlin	<i>Calidris alpina</i>
	Long-billed Dowitcher	<i>Limnodromus scolopaceus</i>
	Wilson's Snipe	<i>Gallinago delicata</i>
	Wilson's Phalarope	<i>Phalaropus tricolor</i>
	Red-necked Phalarope	<i>Phalaropus lobatus</i>
Gulls and Terns ( <i>Laridae</i> )		
	Bonaparte's Gull	<i>Larus philadelphia</i>
	Ring-billed Gull	<i>Larus delawarensis</i>
	California Gull	<i>Larus californicus</i>
	Herring Gull	<i>Larus argentatus</i>
	Thayer's Gull	<i>Larus thayeri</i>
	Western Gull	<i>Larus occidentalis</i>
	Glaucous-winged Gull	<i>Larus glaucescens</i>
	Caspian Tern	<i>Sterna caspia</i>
	Common Tern	<i>Sterna hirundo</i>
	Forster's Tern	<i>Sterna forsteri</i>
	Black Tern	<i>Chlidonias niger</i>
Pigeons and Doves ( <i>Columbidae</i> )		
	Rock Dove (I)	<i>Columba livia</i>
	Band-tailed Pigeon	<i>Columba fasciata</i>
	Mourning Dove	<i>Zenaida macroura</i>
Cuckoos and Roadrunners ( <i>Cuculidae</i> )		
	Yellow-billed Cuckoo	<i>Coccyzus americanus</i>
	Greater Roadrunner	<i>Geococcyx californianus</i>
Barn Owls ( <i>Tytonidae</i> )		
	Barn Owl	<i>Tyto alba</i>
	Flammulated Owl	<i>Otus flammeolus</i>
	Western Screech-Owl	<i>Otus kennicottii</i>
	Great Horned Owl	<i>Bubo virginianus</i>
	Northern Pygmy-Owl	<i>Glaucidium gnoma</i>
	Burrowing Owl	<i>Athene cunicularia</i>
	Spotted Owl	<i>Strix occidentalis</i>
	Long-eared Owl	<i>Asio otus</i>
	Short-eared Owl	<i>Asio flammeus</i>
	Northern Saw-Whet Owl	<i>Aegolius acadicus</i>

Family/Common Name		Scientific Name
Nighthawks ( <i>Caprimulgidae</i> )		
	Lesser Nighthawk	<i>Chordeiles acutipennis</i>
	Common Nighthawk	<i>Chordeiles minor</i>
	Common Poorwill	<i>Phalaenoptilus nuttallii</i>
Swifts ( <i>Apodidae</i> )		
	Black Swift	<i>Cypseloides niger</i>
	Vaux's Swift	<i>Chaetura vauxi</i>
	White-throated Swift	<i>Aeronautes saxatalis</i>
Hummingbirds ( <i>Trochilidae</i> )		
	Black-chinned Hummingbird	<i>Archilochus alexandri</i>
	Anna's Hummingbird	<i>Calypte anna</i>
	Calliope Hummingbird	<i>Stellula calliope</i>
	Rufous Hummingbird	<i>Selasphorus rufus</i>
Kingfishers ( <i>Alcedinidae</i> )		
	Belted Kingfisher	<i>Megaceryle alcyon</i>
Woodpeckers ( <i>Picidae</i> )		
	Lewis's Woodpecker	<i>Melanerpes lewis</i>
	Acorn Woodpecker	<i>Melanerpes formicivorus</i>
	Red-breasted Sapsucker	<i>Sphyrapicus ruber</i>
	Nuttall's Woodpecker	<i>Picoides nuttallii</i>
	Downy Woodpecker	<i>Picoides pubescens</i>
	Hairy Woodpecker	<i>Picoides villosus</i>
	White-headed Woodpecker	<i>Picoides albolarvatus</i>
	Northern Flicker	<i>Colaptes auratus</i>
	Pileated Woodpecker	<i>Dryocopus pileatus</i>
Tyrant Flycatchers ( <i>Tyrannidae</i> )		
	Olive-sided Flycatcher	<i>Contopus cooperi</i>
	Western Wood-Pewee	<i>Contopus sordidulus</i>
	Willow Flycatcher	<i>Empidonax traillii</i>
	Hammond's Flycatcher	<i>Empidonax hammondii</i>
	Dusky Flycatcher	<i>Empidonax oberholseri</i>
	Pacific-slope Flycatcher	<i>Empidonax difficilis</i>
	Black Phoebe	<i>Sayornis nigricans</i>
	Say's Phoebe	<i>Sayornis saya</i>
	Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>
	Western Kingbird	<i>Tyrannus verticalis</i>
Shrikes ( <i>Laniidae</i> )		
	Loggerhead Shrike	<i>Lanius ludovicianus</i>

Family/Common Name		Scientific Name
Vireos ( <i>Vireonidae</i> )		
	Cassin's Vireo	<i>Vireo cassinii</i>
	Hutton's Vireo	<i>Vireo huttoni</i>
	Warbling Vireo	<i>Vireo gilvus</i>
Jays, Magpies and Crows ( <i>Corvidae</i> )		
	Steller's Jay	<i>Cyanocitta stelleri</i>
	Western Scrub-Jay	<i>Aphelocoma californica</i>
	Yellow-billed Magpie	<i>Pica nuttalli</i>
	American Crow	<i>Corvus brachyrhynchos</i>
	Common Raven	<i>Corvus corax</i>
Larks ( <i>Alaudidae</i> )		
	Horned Lark	<i>Eremophila alpestris</i>
Swallows ( <i>Hirundinidae</i> )		
	Purple Martin	<i>Progne subis</i>
	Tree Swallow	<i>Tachycineta bicolor</i>
	Violet-green Swallow	<i>Tachycineta thalassina</i>
	Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>
	Bank Swallow	<i>Riparia riparia</i>
	Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
	Barn Swallow	<i>Hirundo rustica</i>
Chickadees and Titmice ( <i>Paridae</i> )		
	Mountain Chickadee	<i>Poecile gambeli</i>
	Chestnut-backed Chickadee	<i>Poecile rufescens</i>
	Oak Titmouse	<i>Baeolophus inornatus</i>
Bushtits ( <i>Aegithalidae</i> )		
	Bushtit	<i>Psaltriparus minimus</i>
Nuthatches ( <i>Sittidae</i> )		
	Red-breasted Nuthatch	<i>Sitta canadensis</i>
	White-breasted Nuthatch	<i>Sitta carolinensis</i>
Creepers ( <i>Certhiidae</i> )		
	Brown Creeper	<i>Certhia americana</i>
Wren ( <i>Troglodytidae</i> )		
	Rock Wren	<i>Salpinctes obsoletus</i>
	Canyon Wren	<i>Catherpes mexicanus</i>
	Bewick's Wren	<i>Thryomanes bewickii</i>
	House Wren	<i>Troglodytes aedon</i>
	Pacific Wren	<i>Troglodytes pacificus</i>
	Marsh Wren	<i>Cistothorus palustris</i>

Family/Common Name		Scientific Name
Dippers ( <i>Cinclidae</i> )		
	American Dipper	<i>Cinclus mexicanus</i>
Kinglets ( <i>Regulidae</i> )		
	Golden-crowned Kinglet	<i>Regulus satrapa</i>
	Ruby-crowned Kinglet	<i>Regulus calendula</i>
Gnatcatchers ( <i>Poliophtidae</i> )		
	Blue-gray Gnatcatcher	<i>Poliophtila caerulea</i>
Thrushes ( <i>Turdidae</i> )		
	Western Bluebird	<i>Sialia mexicana</i>
	Mountain Bluebird	<i>Sialia currucoides</i>
	Townsend's Solitaire	<i>Myadestes townsendi</i>
	Swainson's Thrush	<i>Catharus ustulatus</i>
	Hermit Thrush	<i>Catharus guttatus</i>
	American Robin	<i>Turdus migratorius</i>
	Varied Thrush	<i>Ixoreus naevia</i>
Wrentits ( <i>Sylviidae</i> )		
	Wrentit	<i>Chamaea fasciata</i>
Mockingbirds and Thrashers ( <i>Mimidae</i> )		
	Northern Mockingbird	<i>Mimus polyglottos</i>
	California Thrasher	<i>Toxostoma redivivum</i>
Starlings and Mynas ( <i>Sturnidae</i> )		
	European Starling (I)	<i>Sturnus vulgaris</i>
Pipits and Wagtails ( <i>Motacillidae</i> )		
	American Pipit	<i>Anthus rubescens</i>
Waxwings ( <i>Bombycillidae</i> )		
	Cedar Waxwing	<i>Bombycilla cedrorum</i>
Silky Flycatchers ( <i>Ptilonotidae</i> )		
	Phainopepla	<i>Phainopepla nitens</i>
Wood Warblers ( <i>Parulidae</i> )		
	Nashville Warbler	<i>Vermivora ruficapilla</i>
	Yellow Warbler	<i>Dendroica petechia</i>
	Yellow-rumped Warbler	<i>Dendroica coronata</i>
	Black-throated Gray Warbler	<i>Dendroica nigrescens</i>
	Townsend's Warbler	<i>Dendroica townsendi</i>
	Hermit Warbler	<i>Dendroica occidentalis</i>
	MacGillivray's Warbler	<i>Oporornis tolmiei</i>
	Common Yellowthroat	<i>Geothlypis trichas</i>
	Wilson's Warbler	<i>Wilsonia pusilla</i>
	Yellow-breasted Chat	<i>Icteria virens</i>

Family/Common Name		Scientific Name
Tanagers ( <i>Thraupidae</i> )		
	Western Tanager	<i>Piranga ludoviciana</i>
Towhees and Sparrows ( <i>Emberizidae</i> )		
	Green-tailed Towhee	<i>Pipilo chlorurus</i>
	Spotted Towhee	<i>Pipilo maculatus</i>
	California Towhee	<i>Pipilo crissalis</i>
	Rufous-crowned Sparrow	<i>Aimophila ruficeps</i>
	Chipping Sparrow	<i>Spizella passerina</i>
	Brewer's Sparrow	<i>Spizella breweri</i>
	Black-chinned Sparrow	<i>Spizella atrogularis</i>
	Vesper Sparrow	<i>Pooecetes gramineus</i>
	Lark Sparrow	<i>Chondestes grammacus</i>
	Black-throated Sparrow	<i>Amphispiza bilineata</i>
	Sage Sparrow	<i>Amphispiza belli</i>
	Savannah Sparrow	<i>Passerculus sandwichensis</i>
	Grasshopper Sparrow	<i>Ammodramus savannarum</i>
	Fox Sparrow	<i>Passerella iliaca</i>
	Song Sparrow	<i>Melospiza melodia</i>
	Lincoln's Sparrow	<i>Melospiza lincolnii</i>
	Golden-crowned Sparrow	<i>Zonotrichia atricapilla</i>
	White-crowned Sparrow	<i>Zonotrichia leucophrys</i>
	Dark-eyed Junco	<i>Junco hyemalis</i>
Grosbeaks and Buntings ( <i>Cardinalidae</i> )		
	Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
	Blue Grosbeak	<i>Guiraca caerulea</i>
	Lazuli Bunting	<i>Passerina amoena</i>
Blackbirds and Orioles ( <i>Icteridae</i> )		
	Red-winged Blackbird	<i>Agelaius phoeniceus</i>
	Tricolored Blackbird	<i>Agelaius tricolor</i>
	Western Meadowlark	<i>Sturnella neglecta</i>
	Yellow-headed Blackbird	<i>Xanthocephalus xanthocephalus</i>
	Brewer's Blackbird	<i>Euphagus cyanocephalus</i>
	Great-tailed Grackle	<i>Quiscalus mexicanus</i>
	Brown-headed Cowbird	<i>Molothrus ater</i>
	Hooded Oriole	<i>Icterus cucullatus</i>
	Bullock's Oriole	<i>Icterus bullockii</i>
Finches ( <i>Fringillidae</i> )		
	Purple Finch	<i>Carpodacus purpureus</i>
	Cassin's Finch	<i>Carpodacus cassinii</i>
	House Finch	<i>Carpodacus mexicanus</i>

Family/Common Name		Scientific Name
Finches ( <i>Fringillidae</i> ) continued		
	Pine Siskin	<i>Spinus pinus</i>
	Lesser Goldfinch	<i>Spinus psaltria</i>
	Lawrence's Goldfinch	<i>Spinus lawrencei</i>
	American Goldfinch	<i>Spinus tristis</i>
	Evening Grosbeak	<i>Coccothraustes vespertinus</i>
Weaver Finches ( <i>Passeridae</i> )		
	House Sparrow (I)	<i>Passer domesticus</i>
<b>MAMMALS</b>		
Opossums ( <i>Didelphidae</i> )		
	Virginia Opossum (I)	<i>Didelphis virginiana</i>
Shrews ( <i>Soricidae</i> )		
	Vagrant Shrew	<i>Sorex vagrans</i>
	Ornate Shrew	<i>Sorex ornatus</i>
	Water Shrew	<i>Sorex palustris</i>
	Dusky Shrew	<i>Sorex monticolus</i>
	Trowbridge's Shrew	<i>Sorex trowbridgii</i>
Moles ( <i>Talpidae</i> )		
	Shrew-mole	<i>Neurotrichus gibbsii</i>
	Broad-footed Mole	<i>Scapanus latimanus</i>
Vespertilionid Bats ( <i>Vespertilionidae</i> )		
	Little Brown Myotis	<i>Myotis lucifugus</i>
	Yuma Myotis	<i>Myotis yumanensis</i>
	Long-eared Myotis	<i>Myotis evotis</i>
	Fringed Myotis	<i>Myotis thysanodes</i>
	Long-legged Myotis	<i>Myotis volans</i>
	California Myotis	<i>Myotis californicus</i>
	Small-footed Myotis	<i>Myotis ciliolabrum</i>
	Silver-haired Bat	<i>Lasionycteris noctivagans</i>
	Western Pipistrelle	<i>Pipistrellus hesperus</i>
	Big Brown Bat	<i>Eptesicus fuscus</i>
	Red Bat	<i>Lasiurus borealis</i>
	Hoary Bat	<i>Lasiurus cinereus</i>
	Spotted Bat	<i>Euderma maculatum</i>
	Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>
	Pallid Bat	<i>Antrozous pallidu</i>
Free-tailed Bats ( <i>Molossidae</i> )		
	Brazilian Free-tailed Bat	<i>Tadarida brasiliensis</i>
	Greater Western Mastiff Bat	<i>Eumops perotis californicus</i>

Family/Common Name		Scientific Name
Rabbits ( <i>Leporidae</i> )		
	Brush Rabbit	<i>Sylvilagus bachmani</i>
	Nuttall's Cottontail	<i>Sylvilagus nuttallii</i>
	Desert Cottontail	<i>Sylvilagus audubonii</i>
	Sierra Nevada Snowshoe Hare	<i>Lepus americanus</i>
	Black-tailed Jackrabbit	<i>Lepus californicus</i>
Squirrels and Chipmunks ( <i>Sciuridae</i> )		
	Yellow-pine Chipmunk	<i>Tamias amoenus</i>
	Allen's Chipmunk	<i>Tamias senex</i>
	Mirriam's Chipmunk	<i>Tamias merriami</i>
	Long-eared Chipmunk	<i>Tamias quadrimaculatus</i>
	California Ground Squirrel	<i>Spermophilus beecheyi</i>
	Mojave Ground Squirrel	<i>Spermophilus mohavensis</i>
	Western Gray Squirrel	<i>Sciurus griseus</i>
	Douglas' Squirrel	<i>Tamiasciurus douglasii</i>
	Northern Flying Squirrel	<i>Glaucomys sabrinus</i>
Pocket Gophers ( <i>Geomyidae</i> )		
	Botta's Pocket Gopher	<i>Thomomys bottae</i>
Kangaroo Rats and Pocket Mice ( <i>Heteromyidae</i> )		
	California Kangaroo Rat	<i>Dipodomys californicus</i>
	Merced Kangaroo Rat	<i>Dipodomys heermanii</i>
	San Joaquin Pocket Mouse	<i>Perognathus inornatus</i>
	Tehachapi Pocket Mouse	<i>Perognathus alticolus</i>
	Yellow-eared Pocket Mouse	<i>Perognathus zanthotus</i>
	California Pocket Mouse	<i>Perognathus californicus</i>
	Tulare Pocket Mouse	<i>Onychomys torridus</i>
Beavers ( <i>Castoridae</i> )		
	Beaver	<i>Castor canadensis</i>
Deer Mice, Voles and relatives ( <i>Cricetidae</i> )		
	Western Harvest Mouse	<i>Reithrodontomys megalotis</i>
	Brush Mouse	<i>Peromyscus boylii</i>
	Deer Mouse	<i>Peromyscus maniculatus</i>
	Pinyon Mouse	<i>Peromyscus truei</i>
	Dusky-footed Woodrat	<i>Neotoma fuscipes</i>
	Bushy-tailed Woodrat	<i>Neotoma cinerea</i>
	California Vole	<i>Microtus californicus</i>
	Long-tailed Vole	<i>Microtus longicaudus</i>
	Muskrat (I)	<i>Ondatra zibethicus</i>

Family/Common Name	Scientific Name	
Old World Rats and Mice ( <i>Muridae</i> )		
	Black Rat (I)	<i>Rattus rattus</i>
	Norway Rat (I)	<i>Rattus norvegicus</i>
	House Mouse (I)	<i>Mus musculus</i>
Jumping Mice ( <i>Zapodidae</i> )		
	Western Jumping Mouse	<i>Zapus princeps</i>
New World Porcupines ( <i>Erethizontidae</i> )		
	Porcupine	<i>Erethizon dorsatum</i>
Coyotes and Foxes ( <i>Canidae</i> )		
	Coyote	<i>Canis latrans</i>
	San Joaquin Kit Fox	<i>Vulpes macrotis mutica</i>
	Gray Fox	<i>Urocyon cinereoargenteus</i>
Bears ( <i>Ursidae</i> )		
	Black Bear	<i>Ursus americanus</i>
Raccoons and relatives ( <i>Procyonidae</i> )		
	Ringtail	<i>Bassaricus astutus</i>
	Raccoon	<i>Procyon lotor</i>
Weasels, Badgers, and relatives ( <i>Mustelidae</i> )		
	Sierra Marten	<i>Martes americana</i>
	Pacific Fisher	<i>Martes pennanti</i>
	Ermine	<i>Mustela erminea</i>
	Long-tailed Weasel	<i>Mustela frenata</i>
	Mink	<i>Mustela vison</i>
	American Badger	<i>Taxidea taxus</i>
	Western Spotted Skunk	<i>Spilogale putorius</i>
	Striped Skunk	<i>Mephitis mephitis</i>
	River Otter	<i>Lutra canadensis</i>
Cats ( <i>Felidae</i> )		
	Mountain Lion	<i>Felis concolor</i>
	Bobcat	<i>Lynx rufus</i>
Pigs ( <i>Suidae</i> )		
	Wild Pig (I)	<i>Sus scrofa</i>
Deer ( <i>Cervidae</i> )		
	Mule Deer	<i>Odocoileus hemionus</i>

## B-I

### Information Sources for Appendix B-I

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#### Museums and Databases:

- California Department of Fish and Game's Natural Diversity Database (2011 records search).
- University of California, Museum of Vertebrate Zoology, Berkeley, CA (2009 records search)
- Christmas Bird Counts, National Audubon Society.

#### Personal Communication:

- Leidy, Roy. Fisheries Biologist, AECOM, Sacramento, CA. Letter and meeting April 7, 2011.

## Appendix B-II

### Occurrence of Special-Status Animals in the Sierra Cascade Foothills Region (California Natural Diversity Data Base 2010)

Common Name	Scientific Name	Legal or Special Status <sup>1</sup>			Species with Special Status, by Subregion				
		Federal	State	Other	North	North Central	Central	South Central	Southern
<b>INVERTEBRATES</b>									
<b>Molluscs</b>									
tight coin (=Yates' snail)	<i>Ammonitella yatesii</i>	None	None	IUCN-V			•	•	
California floater	<i>Anodonta californiensis</i>	USFS-S	None					•	
nugget pebblesnail	<i>Fluminicola seminalis</i>	USFS-S	None			•			
Merced Canyon shoulderband	<i>Helminthoglypta allynsmithi</i>	None	None	IUCN-V				•	
Kern shoulderband	<i>Helminthoglypta callistoderma</i>	None	None	IUCN-E					•
Klamath sideband	<i>Monadenia churchi</i>	None	None	SC		•			
keeled sideband	<i>Monadenia circumcarinata</i>	BLM-S	None					•	
Button's Sierra sideband	<i>Monadenia mormonum buttoni</i>	None	None	IUCN-DD				•	
hirsute Sierra sideband	<i>Monadenia mormonum hirsuta</i>	BLM-S	None					•	
Tuolumne sideband	<i>Monadenia tuolumneana</i>	BLM-S	None					•	
Yosemite Mariposa sideband	<i>Monadenia yosemitensis</i>	None	None	SC				•	
Trinity Spot	<i>Punctum hannai</i>	None	None	SC				•	
<b>Crustacean</b>									
<b>vernal pool fairy shrimp<sup>2</sup></b>	<i>Branchinecta lynchi</i>	<b>T</b>	<b>None</b>	<b>IUCN-V</b>	•	•	•	•	•
<b>vernal pool tadpole shrimp</b>	<i>Lepidurus packardii</i>	<b>E</b>	<b>None</b>	<b>IUCN-V</b>	•	•			•
California linderiella	<i>Linderiella occidentalis</i>	None	None	IUCN-NT		•	•		•
an isopod	<i>Calasellus longus</i>	None	None	SC					•
Hara's Cave amphipod	<i>Stygobromus harai</i>	None	None	IUCN-V				•	
Wengerors' Cave amphipod	<i>Stygobromus wengerorum</i>	None	None	IUCN-V				•	
<b>Arachnids</b>									
Grubbs' Cave pseudoscorpion	<i>Aphrastochthonius grubbsi</i>	None	None	SC				•	
Lacey's Cave pseudoscorpion	<i>Larca laceyi</i>	None	None	SC				•	
Music Hall Cave pseudoscorpion	<i>Pseudogarypus orpheus</i>	None	None	SC				•	
a cave-obligate harvestman	<i>Banksula californica</i>	None	None	SC			•		
Galile's cave harvestman	<i>Banksula galilei</i>	None	None	SC			•		
Grubbs' cave harvestman	<i>Banksula grubbsi</i>	None	None	SC				•	
Martins' cave harvestman	<i>Banksula martinorum</i>	None	None	SC				•	
Melones Cave harvestman	<i>Banksula melones</i>	None	None	IUCN-V				•	
Rudolph's cave harvestman	<i>Banksula rudolphi</i>	None	None	SC				•	

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		Legal or Special Status <sup>1</sup>			Species with Special Status, by Subregion				
Common Name	Scientific Name	Federal	State	Other	North	North Central	Central	South Central	Southern
Tuolumne cave harvestman	<i>Banksula tuolumne</i>	None	None	SC				•	
King Tut Cave harvestman	<i>Banksula tutankhamen</i>	None	None	SC				•	
Clough Cave harvestman	<i>Calicina cloughensis</i>	None	None	SC					•
a harvestman	<i>Calicina dimorphica</i>	None	None	SC					•
Table Mountain harvestman	<i>Calicina mesaensis</i>	None	None	SC					•
Piedra harvestman	<i>Calicina piedra</i>	None	None	SC					•
Insects									
a vernal pool andrenid bee	<i>Andrena blennospermatis</i>	None	None	SC		•	•		
an andrenid bee	<i>Andrena macswaini</i>	None	None	SC					•
a vernal pool andrenid bee	<i>Andrena subapasta</i>	None	None	SC			•		
a cuckoo wasp	<i>Ceratochrysis gracilis</i>	None	None	SC					•
a cuckoo wasp	<i>Chrysis tularensis</i>	None	None	SC				•	•
a spring stonefly	<i>Cosumnoperla hypocrena</i>	None	None	SC			•		
Denning's cryptic caddisfly	<i>Cryptochia denningi</i>	None	None	SC					•
King's Creek parapsyche caddisfly	<i>Parapsyche extensa</i>	None	None	SC					•
spiny rhyacophilan caddisfly	<i>Rhyacophila spinata</i>	None	None	SC			•		
<b>valley elderberry longhorn beetle</b>	<i>Desmocerus californicus dimorphus</i>	<b>T</b>	<b>None</b>			•	•	•	•
Leech's skyline diving beetle	<i>Hydroporus leechi</i>	None	None	SC				•	•
moestan blister beetle	<i>Lytta moesta</i>	None	None	SC					•
Morrison's blister beetle	<i>Lytta morrisoni</i>	None	None	SC					•
Comstock's blue butterfly	<i>Euphilotes battoides comstocki</i>	None	None	SC					•
Boharts' blue butterfly	<i>Philotiella speciosa bohartorum</i>	None	None	SC				•	
San Emigdio blue butterfly	<i>Plebulina emigdionis</i>	None	None	SC					•
Sierra pygmy grasshopper	<i>Tetrix sierrana</i>	None	None	IUCN-V					•
<b>Total Invertebrates</b>					2	7	10	25	21
VERTEBRATES									
Fishes									
Red Hills roach	<i>Lavinia symmetricus</i> ssp.	BLM-S	SSC					•	
<b>Little Kern golden trout</b>	<i>Oncorhynchus mykiss whitei</i>	<b>T</b>	<b>None</b>						•
<b>spring-run chinook salmon</b>	<i>Oncorhynchus tshawytscha spring-run</i>	<b>T</b>	<b>T</b>		•	•	•		
<b>chinook salmon winter-run</b>	<i>Oncorhynchus tshawytscha winter-run</i>	<b>E</b>	<b>E</b>			•			
Amphibians									
<b>California tiger salamander</b>	<i>Ambystoma californiense</i>	<b>T</b>	<b>SSC</b>					•	•
Kings River slender salamander	<i>Batrachoseps regius</i>	None	None	IUCN-V					•

		Legal or Special Status <sup>1</sup>			Species with Special Status, by Subregion				
Common Name	Scientific Name	Federal	State	Other	North	North Central	Central	South Central	Southern
<b>Kern Canyon slender salamander</b>	<i>Batrachoseps simatus</i>	USFS-S	T						•
<b>Tehachapi slender salamander</b>	<i>Batrachoseps stebbinsi</i>	BLM/ USFS-S	T						•
yellow-blotched salamander	<i>Ensatina eschscholtzii croceator</i>	BLM-S	SSC	IUCN-V					•
Mount Lyell salamander	<i>Hydromantes platycephalus</i>	None	SSC	IUCN-V					•
<b>Shasta salamander</b>	<i>Hydromantes shastae</i>	BLM/ USFS-S	T	IUCN-V	•				
<b>California red-legged frog</b>	<i>Rana aurora draytonii</i>	T	SSC	IUCN-NT		•	•	•	
foothill yellow-legged frog	<i>Rana boylei</i>	BLM-S	SSC	IUCN-NT	•	•	•	•	•
<b>Sierra Madre yellow-legged frog</b>	<i>Rana muscosa</i>	E/ USFS-S	SSC	IUCN-V					•
Sierra Nevada yellow-legged frog	<i>Rana sierrae</i>	C	SSC	IUCN-V		•		•	•
western spadefoot	<i>Spea hammondi</i>	BLM-S	SSC	IUCN-NT		•		•	•
Reptiles									
southwestern pond turtle	<i>Actinemys marmorata pallida</i>	BLM/ USFS-S	None	IUCN-V			•	•	•
northwestern pond turtle	<i>Actinemys marmorata marmorata</i>	USFS-S	SSC	IUCN-V	•	•	•	•	
coast (San Diego) horned lizard	<i>Phrynosoma coronatum blainvillii</i>	USFS-S	SSC						•
coast (California) horned lizard	<i>Phrynosoma coronatum frontale population</i>	BLM-S	SSC			•	•	•	
Birds									
redhead (breeding)	<i>Aythya americana</i>	None	SSC						•
great egret (breeding)	<i>Ardea alba</i>	None	CDF-S	IUCN-LC			•		
great blue heron (breeding)	<i>Ardea herodias</i>	None	CDF-S	IUCN-LC					•
double-crested cormorant (breeding)	<i>Phalacrocorax auritus</i>	None	None	IUCN-LC				•	
<b>California condor</b>	<i>Gymnogyps californianus</i>	E	E/ CDF-S	IUCN-CR					•
osprey	<i>Pandion haliaetus</i>	None	CDF-S	IUCN-LC	•	•	•	•	•
white-tailed kite	<i>Elanus leucurus</i>	None	FP		•	•	•	•	•
<b>bald eagle</b>	<i>Haliaeetus leucocephalus</i>	D/EPA	E/FP/ CDF-S	IUCN-LC	•	•	•	•	•
<b>Swainson's hawk</b>	<i>Buteo swainsoni</i>	USFS-S	T/FP			•			•
ferruginous hawk	<i>Buteo regalis</i>	BLM-S		IUCN-NT	•	•	•	•	•
Cooper's hawk	<i>Accipiter cooperii</i>	None	None	IUCN-LC					•

B-II

		Legal or Special Status <sup>1</sup>			Species with Special Status, by Subregion				
Common Name	Scientific Name	Federal	State	Other	North	North Central	Central	South Central	Southern
northern goshawk	<i>Accipiter gentilis</i>	BLM/ USFS-S	SSC/ CDF-S	IUCN- LC	•	•	•	•	•
golden eagle	<i>Aquila chrysaetos</i>	EPA/ BLM-S	CDF-S	IUCN- LC		•		•	•
prairie falcon	<i>Falco mexicanus</i>			IUCN- LC	•	•	•	•	•
<b>American peregrine falcon</b>	<i>Falco peregrinus</i>	<b>D/ USFS-S</b>	<b>E/FP/ CDF-S</b>	<b>IUCN- LC</b>		•	•	•	•
<b>California black rail</b>	<i>Laterallus jamaicensis coturniculus</i>	<b>None</b>	<b>T/FP</b>	<b>IUCN- NT</b>		•	•		
long-eared owl	<i>Asio otus</i>	None	SSC				•		
short-eared owl	<i>Asio flammeus</i>	None	SSC	IUCN- LC		•			•
burrowing owl	<i>Athene cunicularia</i>	BLM-S	SSC	IUCN- LC		•	•	•	•
<b>great gray owl</b>	<i>Strix nebulosa</i>	<b>USFS-S</b>	<b>E/ CDF-S</b>	<b>IUCN- LC</b>				•	•
black swift	<i>Cypseloides niger</i>	None	SSC	IUCN- LC		•	•		•
<b>western yellow-billed cuckoo</b>	<i>Coccyzus americanus occidentalis</i>	<b>C/ USFS-S</b>	<b>E</b>	<b>IUCN- LC</b>					•
<b>willow flycatcher</b>	<i>Empidonax traillii</i>	<b>None</b>	<b>E</b>	<b>IUCN- LC</b>	•	•	•	•	•
<b>southwestern willow flycatcher</b>	<i>Empidonax traillii extimus</i>	<b>E</b>	<b>E</b>						•
<b>bank swallow</b>	<i>Riparia riparia</i>	<b>None</b>	<b>T</b>	<b>IUCN- LC</b>	•	•			
loggerhead shrike	<i>Lanius ludovicianus</i>	None	SSC	IUCN- LC	•	•	•	•	•
Le Conte's thrasher	<i>Toxostoma lecontei</i>	BLM-S	SSC	IUCN- LC					•
yellow warbler	<i>Dendroica petechia</i>	None	SSC	IUCN- LC			•		•
yellow-breasted chat	<i>Icteria virens</i>	None	SSC			•			•
grasshopper sparrow	<i>Ammodramus savannarum</i>	None	SSC				•		
summer tanager	<i>Piranga rubra</i>	None	SSC	IUCN- LC					•
tricolored blackbird	<i>Agelaius tricolor</i>	BLM-S	SSC	IUCN- LC		•	•	•	•
Mammals									
pallid bat	<i>Antrozous pallidus</i>	BLM-S	SSC	IUCN- LC		•		•	•
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	BLM/ USFS-S	SSC	IUCN-V		•	•	•	•
spotted bat	<i>Euderma maculatum</i>	BLM-S	SSC	IUCN- LC		•		•	•
western mastiff bat	<i>Eumops perotis californicus</i>	BLM-S	SSC	IUCN- LC		•		•	•
silver-haired bat	<i>Lasionycteris noctivagans</i>	None	None	IUCN- LC	•	•	•	•	

Common Name	Scientific Name	Legal or Special Status <sup>1</sup>			Species with Special Status, by Subregion				
		Federal	State	Other	North	North Central	Central	South Central	Southern
western red bat	<i>Lasiurus blossevillii</i>	USFS-S	SSC			•	•	•	
hoary bat	<i>Lasiurus cinereus</i>	None	SSC	IUCN-LC		•	•	•	•
western small-footed myotis	<i>Myotis ciliolabrum</i>	BLM-S	None	IUCN-LC					•
long-eared myotis	<i>Myotis evotis</i>	BLM-S	None	IUCN-LC		•			•
fringed myotis	<i>Myotis thysanodes</i>	BLM-S	None	IUCN-LC		•			•
long-legged myotis	<i>Myotis volans</i>	None	None	IUCN-LC				•	•
Yuma myotis	<i>Myotis yumanensis</i>	BLM-S	None	IUCN-LC		•	•	•	•
Sierra Nevada showshoe hare	<i>Lepus americanus tahoensis</i>	None	SSC	IUCN-LC		•			
<b>Mohave ground squirrel</b>	<i>Spermophilus mohavensis</i>	<b>None</b>	<b>T</b>	<b>IUCN-V</b>					•
lodgpole chipmunk	<i>Neotamias speciosus speciosus</i>	None	None	IUCN-LC					•
Tehachapi pocket mouse	<i>Perognathus alticolus inexpectatus</i>	None	SSC	IUCN-NT					•
San Joaquin pocket mouse	<i>Perognathus inornatus inornatus</i>	BLM-S	None						•
yellow-eared pocket mouse	<i>Perognathus parvus xanthonotus</i>	BLM-S	None						•
Tulare grasshopper mouse	<i>Onychomys torridus tularensis</i>	BLM-S	SSC						•
Merced kangaroo rat	<i>Dipodomys heermanni dixonii</i>	None	None	IUCN-NT				•	
Sierra marten	<i>Martes americana sierrae</i>	USFS-S	None	IUCN-LC				•	•
Pacific fisher	<i>Martes pennanti (pacific)</i>	C/BLM/USFS-S	SSC	IUCN-LC		•	•	•	•
American badger	<i>Taxidea taxus</i>	None	None	IUCN-LC					•
<b>San Joaquin kit fox</b>	<i>Vulpes macrotis mutica</i>	<b>E</b>	<b>T</b>	<b>IUCN-LC</b>					•
<b>Total Vertebrates:</b>					14	38	29	35	59
<b>Total Species</b>					18	52	49	85	101

### <sup>1</sup>Legal and/or Special Status Codes

#### Federal

E = Endangered  
T = Threatened  
C = Candidate for Listing  
EPA = Bald and Golden Eagle Protection Act  
SOC = Species of Concern  
USFS-S = U.S. Forest Service Sensitive  
BLM-S = U.S. BLM Sensitive  
None = No Listing or Other Status  
D = Delisted

#### State

E = Endangered  
T = Threatened  
FP = Fully Protected  
SSC = Species of Special Concern  
CDF-S = California Department Forestry-Sensitive  
None = No Listing or Other Status

#### Other

IUCN-DD = IUCN "Data Deficient"  
IUCN-E = IUCN "Endangered"  
IUCN-V = IUCN "Vulnerable"  
IUCN-NT = IUCN "Near Threatened"  
IUCN-LC = IUCN "Least Concern"  
SC = Scientific Concern; no status

<sup>2</sup>**Bold type** indicates state- and federally-listed species.

## Appendix C-I

### Common and Scientific Names of Plants

Common Name	Scientific Name
Aspen	<i>Populus tremuloides</i>
Bigleaf maple	<i>Acer macrophyllum</i>
Bitterbrush	<i>Purshia tridentata</i>
Blackberries	<i>Rubus species</i>
Black cottonwood	<i>Populus balsamifera ssp. trichocarpa</i>
Blue oak	<i>Quercus douglasii</i>
Blue wildrye	<i>Elymus glaucus</i>
California black oak	<i>Quercus kelloggii</i>
California buckeye	<i>Aesculus californica</i>
California grape	<i>Vitis californica</i>
Canyon live oak	<i>Quercus chrysolepis</i>
Ceanothus	<i>Ceanothus species</i>
Chamise	<i>Adenostema fasciculatum</i>
Closed-cone cypresses	<i>Cupressus species</i>
Deergrass	<i>Muhlenbergia rigens</i>
Douglas Fir	<i>Pseudotsuga menziesii</i>
Foothill pine	<i>Pinus sabiniana</i>
Fremont's cottonwood	<i>Populus fremontii</i>
Giant ricegrass	<i>Achnatherum coronatum</i>
Himalayan blackberry	<i>Rubus armeniacus</i>
Interior live oak	<i>Quercus wislizenii</i>
Ione Manzanita	<i>Arctostaphylos myrtifolia</i>
Jeffrey pine	<i>Pinus jeffreyi</i>
Joshua tree	<i>Yucca brevifolia</i>
Juniper	<i>Juniperus species</i>
Knobcone pine	<i>Pinus attenuata</i>
Lodgepole pine	<i>Pinus contorta</i>
Manzanita	<i>Arctostaphylos species</i>
McNab cypress	<i>Cupressus macnabiana</i>
Mesquite	<i>Prosopis species</i>
Oaks	<i>Quercus species</i>
Oregon ash	<i>Fraxinus latifolia</i>
Pinyon pine	<i>Pinus monophylla</i>
Piute cypress	<i>Cupressus nevadensis</i>
Pines	<i>Pinus species</i>
Poison oak	<i>Toxicodendron diversilobum</i>

Common Name	Scientific Name
Ponderosa pine	<i>Pinus ponderosa</i>
Purple needlegrass	<i>Nassella pulchra</i>
Redbud	<i>Cercis occidentalis</i>
Red fir	<i>Abies magnifica</i>
Rushes	<i>Juncus species</i>
Sagebrush	<i>Artemisia species</i>
Sandberg bluegrass	<i>Poa secunda</i>
Scrub oak	<i>Quercus berberidifolia</i>
Sedges	<i>Carex species</i>
Stork's-bill	<i>Erodium cicutarium</i>
Tamarisk	<i>Tamarix species</i>
Thinleaf alder	<i>Alnus incana ssp. tenuifolia</i>
Toyon	<i>Heteromeles arbutifolia</i>
Valley oak	<i>Quercus lobata</i>
White alder	<i>Alnus rhombifolia</i>
White fir	<i>Abies concolor</i>
Whiteleaf manzanita	<i>Arctostaphylos viscida</i>
Willows	<i>Salix species</i>

## Appendix C-II

### Crosswalk of Foothills Map Units and Vegetation Types with CWHR Habitats and CDFG Vegetation Types

FOOTHILLS MAP UNIT Foothills Vegetation Type	Corresponding CWHR Habitat Type	Corresponding CDFG Northern Sierra Foothills Vegetation Type
FOOTHILL GRASSLAND		
Foothill Grassland	Annual Grassland Perennial Grassland	California Annual and Perennial Grassland
FOOTHILL CHAPARRAL		
Foothill Chaparral	Chamise-Redshank Chaparral Mixed Chaparral	<i>Adenostoma fasciculatum</i> <i>Arctostaphylos Manzanita</i> <i>Arctostaphylos viscida</i> <i>Baccharis pilularis</i> Broom Californian mesic chapparal <i>Ceanothus cuneatus</i> <i>Cercocarpus montanus</i> <i>Eriodictyon californicum</i> <i>Frangula californica</i> <i>Heteromeles arbutifolia</i> <i>Quercus berberidifolia</i> <i>Quercus durata</i>
BLUE OAK SAVANNA AND WOODLAND		
Blue Oak Savanna and Woodland	Blue Oak Woodland Blue Oak-Foothill Pine	<i>Quercus douglassii</i> <i>Pinus sabiniana</i>
FOOTHILL HARDWOOD-CONIFER WOODLANDS		
Closed-Cone Pine-Cypress Woodland	Closed-Cone Pine-Cypress Woodland	<i>Callitropsis macnabiana</i> <i>Pinus attenuata</i>
Foothill Hardwood-Conifer Woodland	Coastal Oak Woodland Live Oak Woodland Valley Oak Woodland	<i>Pinus sabiniana</i> <i>Quercus chrysolepis</i> <i>Quercus lobata</i> <i>Quercus wislizenii</i> <i>Umbellularia californica</i> <i>Juglans hindsii</i>
MONTANE CHAPARRAL		
Montane Chaparral	Montane Chaparral	<i>Ceanothus integerrimus</i>
MONTANE HARDWOOD AND CONIFER FORESTS		
Montane Hardwood/Hardwood-Conifer Forest	Montane Hardwood Montane Hardwood-Conifer	<i>Arbutus menziesii</i> <i>Quercus garryana</i> var. <i>fruticosa</i> <i>Quercus kelloggii</i>
Lower Montane Conifer Forest	Douglas Fir Ponderosa Pine Sierran Mixed Conifer White Fir	<i>Calocedrus decurrens</i> <i>Pinus ponderosa</i> – <i>Calocedrus decurrens</i> <i>Pseudotsuga menziesii</i>

FOOTHILLS MAP UNIT Foothills Vegetation Type	Corresponding CWHR Habitat Type	Corresponding CDFG Northern Sierra Foothills Vegetation Type
Upper Montane Conifer Forest	Eastside Pine Jeffrey Pine Juniper Lodgepole Pine Red Fir Subalpine Conifer	River and Lacustrine Flats and Streambeds
RIPARIAN, FRESH EMERGENT WETLAND, AND WET MEADOW		
Foothill Riparian	Valley Foothill Riparian	<i>Cephalanthus occidentalis</i> <i>Fraxinus latifolia</i> <i>Juglans hindsii</i> <i>Rubus armeniacus</i> <i>Salix exigua</i> <i>Salix goodingii</i> <i>Salix laevigata</i> <i>Salix lasiolepis</i> Southwestern North American Riparian Evergreen and Deciduous Woodland Southwestern North American Riparian/Wash Scrub <i>Toxicodendron diversilobum</i> Vancouverian Coastal Deciduous Scrub
Fresh Emergent Wetland	Fresh Emergent Wetland	Arid West Freshwater Emergent Marsh <i>Eleocharis macrostachya</i> ; <i>Downingia</i> ; <i>Trifolium variegatum</i> ; <i>Eryngium</i>
Montane Riparian	Aspen Montane Riparian	<i>Acer macrophyllum</i> <i>Alnus rhombifolia</i>
Wet Meadow	Wet meadow	Wet meadows Western North America Wet Meadow and Low Shrub
Desert Riparian	Desert Riparian Desert Wash	-
AGRICULTURAL		
Agricultural	Cropland Deciduous Orchard Eucalyptus Evergreen Orchard Irrigated Grain Crops Irrigated Hayfield Irrigated Row and Field Crops Pasture Vineyard	Agriculture, Excluding Fallow and Irrigated Pasture Conifer Plantation Eucalyptus Irrigated Pasture Lands
URBAN		
Urban	Urban	Built-Up and Urban Disturbance Non-Native/Ornamental Conifer/ Hardwood Exotic Trees Urban Window

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FOOTHILLS MAP UNIT Foothills Vegetation Type	Corresponding CWHR Habitat Type	Corresponding CDFG Northern Sierra Foothills Vegetation Type
OTHER/UNLABELED		
Alpine Dwarf Shrub	Alpine Dwarf-Shrub	
Barren	Barren	Areas of Little or No Vegetation Cliffs and Rock Outcroppings Undefined Areas with Little or No Vegetation
Desert Scrub and Woodland	Bitterbrush Desert Scrub Sagebrush Pinyon-Juniper Joshua tree woodland	-
Lacustrine	Lacustrine	Reservoirs Small Earthen Dam Ponds and Natural Lakes River and Lacustrine Flats and Streambeds Water
Riverine	Riverine	Perennial Stream Channel River and Lacustrine Flats and Streambeds Water

## Appendix C-III

### Special-Status and Endemic Vascular Plants of the Sierra Cascade Foothills

Scientific Name	Status <sup>1</sup>			Subregions <sup>2</sup>					Habitat
	CNPS	CA	FED	N	NC	C	SC	S	
<i>Ageratina shastensis</i>	4.2	-	-	•					Chaparral, LMC Forest
<i>Agrostis hendersonii</i>	3.2	-	-	•	•		•		Grassland, Vernal pools
<i>Allium jepsonii</i> <sup>3</sup>	1B.2	-	-		•	•	•		Serpentine: Chaparral, Woodland, LMC Forest
<i>Allium sanbornii</i> var. <i>congdonii</i>	4.3	-	-			•	•		Serpentine: Chaparral, Woodland
<i>Allium sanbornii</i> var. <i>sanbornii</i>	4.2	-	-	•	•	•	•		Serpentine (often): Chaparral, Woodland, LMC Forest
<i>Allium tuolumnense</i>	1B.2	-	-				•		Serpentine: Woodland
<i>Allium yosemitense</i>	1B.3	R	-				•		MH/MH-C Forest, Chaparral, Woodland, LMC Forest
<i>Arabis constancei</i>	1B.1	-	-		•				Chaparral, LMC Forest, UMC Forest
<i>Arctostaphylos manzanita</i> subsp. <i>wieslanderi</i>	-	-	-						Chaparral, LMC Forest, Woodland
<i>Arctostaphylos mewukka</i> subsp. <i>truei</i>	4.2	-	-		•	•			Chaparral, LMC Forest
<i>Arctostaphylos myrtifolia</i>	1B.2	-	T				•		Ione Formation: Chaparral, Woodland
<i>Arctostaphylos nissenana</i>	1B.2	-	-			•	•		Woodland (CCC Forest), Chaparral
<i>Astragalus congdonii</i>	-	-	-				•	•	Chaparral, Woodland
<i>Astragalus pauperculus</i>	4.3	-	-	•	•	•			Chaparral, Woodland, Grassland
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	1B.2	-	-		•	•	•		Serpentine (sometimes): Chaparral, Woodland, Grassland
<i>Brodiaea insignis</i>	1B.2	E	-					•	Woodland, Wet meadow (and seeps), Grassland
<i>Brodiaea pallid</i>	1B.1	E	T				•		Serpentine: Woodland, Grassland
<i>Brodiaea purdyi</i>	-	-	-	•	•	•			Serpentine (sometimes): Woodland, Grassland
<i>Calandrinia breweri</i>	4.2	-	-	•			•		Chaparral
<i>Calochortus amoenus</i>	-	-	-			•		•	LMC Forest, MH/MH-C Forest, Woodland
<i>Calochortus clavatus</i> var. <i>avius</i>	1B.2	-	-			•	•		LMC Forest
<i>Calochortus monophyllus</i>	-	-	-	•	•	•	•	•	LMC Forest, Woodland
<i>Calochortus westonii</i>	-	-	-					•	LMC Forest, Wet Meadow (incl. seeps)
<i>Calycadenia hooveri</i>	1B.3	-	-				•	•	Woodland, Grassland
<i>Calyptridium pulchellum</i>	1B.1	-	T				•	•	Chaparral, Woodland

## C-III

Scientific Name	Status <sup>1</sup>			Subregions <sup>2</sup>					Habitat
	CNPS	CA	FED	N	NC	C	SC	S	
<i>Calystegia atriplicifolia</i> subsp. <i>buttensis</i>	1B.2	-	-	•	•				Chaparral, LMC Forest
<i>Calystegia stebbinsii</i>	1B.1	E	E			•			Gabbro: Chaparral, Woodland
<i>Camissonia integrifolia</i>	1B.3	-	-					•	Chaparral
<i>Camissonia sierrae</i> subsp. <i>sierrae</i>	4.3	-	-				•	•	Woodland, LMC Forest
<i>Canbya candida</i>	4.2	-	-					•	Desert scrub and woodland
<i>Carex scoparia</i>	2.2	-	-	•	•				Desert scrub and woodland
<i>Carex tompkinsii</i>	4.3	R	-				•	•	Chaparral, Woodland, LMC Forest, UMC Forest
<i>Carpenteria californica</i>	1B.2	T	-					•	Chaparral, Woodland
<i>Castilleja campestris</i> subsp. <i>succulenta</i>	1B.2	E	T					•	Vernal pools
<i>Castilleja lineariloba</i>	-	-	-	•	•	•	•	•	Grassland, Woodland
<i>Castilleja plagiotoma</i>	4.3	-	-					•	Desert scrub and woodland, LMC Forest
<i>Ceanothus fresnensis</i>	4.3	-	-			•	•	•	Woodland, LMC Forest
<i>Ceanothus roderickii</i>	1B.2	R	E			•			Gabbro, Serpentine: Chaparral, Woodland
<i>Chlorogalum grandiflorum</i>	1B.2	-	-			•	•		Gabbro, Serpentine: Chaparral, Woodland, LMC Forest
<i>Clarkia arcuata</i>	-	-	-		•	•	•		Serpentine (sometimes): Chaparral, Grassland, Woodland
<i>Clarkia australis</i>	1B.2	-	-				•	•	Woodland, LMC Forest
<i>Clarkia biloba</i> subsp. <i>australis</i>	1B.2	-	-				•		Chaparral, Woodland
<i>Clarkia biloba</i> subsp. <i>brandegeae</i>	1B.2	-	-		•	•			Chaparral, Woodland
<i>Clarkia borealis</i> subsp. <i>arida</i>	1B.1	-	-	•	•				Woodland, LMC Forest
<i>Clarkia exilis</i>	4.3	-	-					•	Woodland
<i>Clarkia gracilis</i> subsp. <i>albicaulis</i>	1B.2	-	-		•				Serpentine (often): Chaparral, Woodland
<i>Clarkia lingulata</i>	1B.1	E	-				•		Chaparral, Woodland
<i>Clarkia mildrediae</i> subsp. <i>lutescens</i>	4.2	-	-		•	•			Woodland, LMC Forest
<i>Clarkia mildrediae</i> subsp. <i>mildrediae</i>	1B.3	-	-		•				Woodland, LMC Forest
<i>Clarkia mosquinii</i>	1B.1	-	-		•				Woodland, LMC Forest
<i>Clarkia rostrata</i>	1B.3	-	-				•		Woodland, Grassland
<i>Clarkia speciosa</i> subsp. <i>nitens</i>	-	-	-					•	Woodland
<i>Clarkia speciosa</i> subsp. <i>polyantha</i>	-	-	-					•	Woodland
<i>Clarkia springvillensis</i>	1B.2	E	T					•	Chaparral, Woodland, Grassland

Scientific Name	Status <sup>1</sup>			Subregions <sup>2</sup>					Habitat
	CNPS	CA	FED	N	NC	C	SC	S	
<i>Clarkia tembloriensis</i> subsp. <i>calientensis</i>	1B.1	-	-					●	Grassland
<i>Clarkia tembloriensis</i> subsp. <i>calientensis</i>	-	-	-					●	Grassland
<i>Clarkia virgata</i>	4.3	-	-		●	●	●		Woodland, LMC Forest
<i>Clarkia williamsonii</i>	-	-	-			●	●	●	Chaparral, LMC Forest, Woodland
<i>Clarkia xantiana</i> subsp. <i>parviflora</i>	4.2	-	-					●	Chaparral, Woodland, Desert scrub and woodland, Grassland
<i>Claytonia parviflora</i> subsp. <i>grandiflora</i>	4.2	-	-		●	●	●	●	Woodland
<i>Collomia rawsoniana</i>	1B.2	-	-					●	LMC Forest, Wet meadow (and seeps), Riparian
<i>Cordylanthus pilosus</i> subsp. <i>trifidus</i>	-	-	-		●	●	●	●	Woodland
<i>Cordylanthus tenuis</i> subsp. <i>barbatus</i>	-	-	-					●	LMC Forest, MH/MH-C Forest, Woodland
<i>Crataegus castlegarensis</i>	3	-	-	●					Riparian
<i>Cryptantha crinite</i>	1B.2	-	-	●	●				Woodland, LMC Forest, Riparian, Grassland
<i>Cryptantha mariposae</i>	1B.3	-	-				●		Serpentine: Chaparral
<i>Cypripedium californicum</i>	4.2	-	-	●	●	●			Fresh emergent wetland (and Bogs and fens), LMC Forest, Riparian
<i>Cypripedium fasciculatum</i>	4.2	-	-	●	●	●			LMC Forest
<i>Cypripedium montanum</i>	4.2	-	-	●	●		●	●	MH/MH-C Forest, Woodland, LMC Forest
<i>Delphinium gypsophilum</i> subsp. <i>gypsophilum</i>	4.2	-	-					●	Chenopod scrub, Woodland, Grassland
<i>Delphinium hansenii</i> subsp. <i>ewanianum</i>	4.2	-	-				●	●	Woodland, Grassland
<i>Delphinium purpusii</i>	1B.3	-	-					●	Chaparral, Woodland, Desert Scrub and Woodland
<i>Delphinium recurvatum</i>	1B.2	-	-		●			●	Woodland, Grassland
<i>Erigeron foliosus</i> var. <i>hartwegii</i>	-	-	-		●	●	●		Woodland
<i>Erigeron mariposanus</i>	1A	-	-				●		Woodland
<i>Erigeron petrophilus</i> var. <i>sierrensis</i>	4.3	-	-		●	●			Serpentine: Woodland, LMC Forest, UMC Forest
<i>Eriogonum apricum</i> var. <i>apricum</i>	1B.1	E	E				●		Ione Formation: Chaparral
<i>Eriogonum apricum</i> var. <i>prostratum</i>	1B.1	E	E				●		Ione Formation: Chaparral
<i>Eriogonum gossypinum</i>	4.2	-	-					●	Grassland
<i>Eriogonum kennedyi</i> var. <i>pinicola</i>	-	-	-					●	Chaparral

## C-III

Scientific Name	Status <sup>1</sup>			Subregions <sup>2</sup>					Habitat
	CNPS	CA	FED	N	NC	C	SC	S	
<i>Eriogonum nudum</i> var. <i>murinum</i>	1B.2	-	-					●	Chaparral, Woodland, Grassland
<i>Eriogonum nudum</i> var. <i>regirivum</i>	1B.2	-	-					●	Woodland
<i>Eriogonum tripodum</i>	4.2	-	-		●	●	●		Serpentine: Chaparral, Woodland
<i>Eriophyllum confertiflorum</i> var. <i>tanacetiflorum</i>	4.3	-	-				●		Serpentine (sometimes): Woodland, LMC Forest
<i>Eriophyllum congdonii</i>	1B.2	R	-				●		Chaparral, Woodland, LMC Forest, Grassland
<i>Eryngium pinnatisectum</i>	1B.2	-	-				●		Woodland, LMC Forest, Vernal pools
<i>Eryngium spinosepalum</i>	1B.2	-	-				●	●	Grassland, Vernal pools
<i>Erythronium multiscapideum</i>	-	-	-	●	●	●	●		Serpentine (often): Chaparral, LMC Forest, Woodland
<i>Erythronium tuolumnense</i>	1B.2	-	-				●		Serpentine (often): MH/MH-C Forest, Chaparral, Woodland, LMC Forest
<i>Fremontodendron decumbens</i>	1B.2	R	E			●			Serpentine (often), Gabbro: Chaparral, Woodland
<i>Fritillaria agrestis</i>	4.2	-	-			●	●	●	Serpentine (sometimes): Chaparral, Woodland, Desert scrub and woodland, Grassland
<i>Fritillaria eastwoodiae</i>	3.2	-	-	●	●	●			Serpentine (sometimes): Chaparral, Woodland, LMC Forest
<i>Fritillaria pluriflora</i>	1B.2	-	-		●				Serpentine (sometimes): Chaparral, Woodland, Grassland
<i>Fritillaria striata</i>	1B.1	T	-					●	Woodland, Grassland
<i>Galium californicum</i> subsp. <i>sierrae</i>	1B.2	R	E			●			Gabbro: Chaparral, Woodland, LMC Forest
<i>Gilia capitata</i> subsp. <i>pedemontana</i>	-	-	-		●	●	●	●	LMC Forest, Woodland
<i>Gilia interior</i>	4.3	-	-					●	Desert scrub and woodland, Woodland, LMC Forest
<i>Githopsis pulchella</i> subsp. <i>serpentinicola</i>	4.3	-	-			●	●		Serpentine: Woodland
<i>Gratiola heterosepala</i>	1B.2	E	-	●	●	●		●	FE wetland, Vernal pools
<i>Hesperovax caulescens</i>	4.2	-	-		●		●	●	Grassland, Vernal pools
<i>Heterotheca shevockii</i>	1B.3	-	-					●	Chaparral, Woodland
<i>Horkelia parryi</i>	1B.2	-	-			●	●		Chaparral, Woodland
<i>Iliamna bakeri</i>	4.2	-	-	●	●				Chaparral, LMC Forest, Desert scrub and woodland
<i>Iris munzii</i>	1B.3	-	-					●	Woodland
<i>Jepsonia heterandra</i>	4.3	-	-			●	●		Woodland, LMC Forest
<i>Juncus leiospermus</i> var. <i>leiospermus</i>	1B.1	-	-	●	●	●			Chaparral, Woodland, Wet meadow (and seeps), Grassland (incl. vernal pools)

Scientific Name	Status <sup>1</sup>			Subregions <sup>2</sup>					Habitat
	CNPS	CA	FED	N	NC	C	SC	S	
<i>Leptosiphon montanus</i>	-	-	-			•	•	•	Woodland
<i>Leptosiphon serrulatus</i>	1B.2	-	-				•	•	Woodland, LMC Forest
<i>Lewisia congdonii</i>	1B.3	R	-				•	•	Chaparral, Woodland, LMC Forest, UMC Forest
<i>Limnanthes floccosa</i> subsp. <i>floccosa</i>	4.2	-	-	•	•				Chaparral, Woodland, Grassland, Vernal pools
<i>Limnanthes Montana</i>	-	-	-				•	•	Wet Meadow (incl. seeps), Woodland
<i>Lithophragma parviflorum</i> var. <i>trifoliatum</i>	-	-	-		•	•	•		Woodland
<i>Lomatium congdonii</i>	1B.2	-	-				•		Serpentine: Chaparral, Woodland
<i>Lupinus citrinus</i> var. <i>citrinus</i>	1B.2	-	-					•	Chaparral, Woodland, LMC Forest
<i>Lupinus citrinus</i> var. <i>deflexus</i>	1B.2	T	-				•		Chaparral, Woodland
<i>Lupinus spectabilis</i>	1B.2	-	-				•		Serpentine: Chaparral, Woodland
<i>Madia subspicata</i>	-	-	-	•	•	•	•	•	Grassland, Woodland
<i>Mentzelia crocea</i>	-	-	-				•	•	Grassland, Woodland
<i>Microseris sylvatica</i>	4.2	-	-		•	•	•	•	Chaparral, Desert scrub and woodland, Grassland, Woodland
<i>Mimulus glaucescens</i>	4.3	-	-	•	•	•			Serpentine (often): Chaparral, Woodland, LMC Forest, Grassland
<i>Mimulus gracilipes</i>	1B.2	-	-				•	•	Chaparral, Woodland, LMC Forest
<i>Mimulus inconspicuus</i>	4.3	-	-		•		•	•	Chaparral, Woodland, LMC Forest
<i>Mimulus norrisii</i>	1B.3	-	-					•	Chaparral, Woodland
<i>Mimulus pictus</i>	1B.2	-	-					•	MH/MH-C Forest, Woodland
<i>Mimulus pulchellus</i>	1B.2	-	-				•		LMC Forest, Wet meadow (and seeps), Riparian
<i>Mimulus shevockii</i>	1B.2	-	-					•	Desert scrub and woodland
<i>Mimulus viscidus</i>	-	-	-			•	•	•	Chaparral, LMC Forest
<i>Monardella candicans</i>	4.3	-	-			•	•	•	Chaparral, Woodland, LMC Forest
<i>Monardella douglasii</i> subsp. <i>venosa</i>	1B.1	-	-		•	•	•		Woodland, Grassland
<i>Navarretia eriocephala</i>	4.3	-	-			•	•		Woodland, Grassland
<i>Navarretia filicaulis</i>	-	-	-		•	•	•		Chaparral, LMC Forest, Woodland
<i>Navarretia heterandra</i>	4.3	-	-	•	•	•			Grassland, Vernal pools
<i>Navarretia myersii</i> subsp. <i>myersii</i>	1B.1	-	-			•	•		Vernal pools
<i>Navarretia nigelliformis</i> subsp. <i>nigelliformis</i>	4.2	-	-		•	•		•	Grassland, Vernal pools
<i>Navarretia prolifera</i> subsp. <i>lutea</i>	4.3	-	-			•			Chaparral, Woodland
<i>Navarretia prolifera</i> subsp. <i>prolifera</i>	-	-	-			•			LMC Forest

## C-III

Scientific Name	Status <sup>1</sup>			Subregions <sup>2</sup>					Habitat
	CNPS	CA	FED	N	NC	C	SC	S	
<i>Navarretia subuligera</i>	4.3	-	-	●	●		●		Chaparral, Woodland, LMC Forest
<i>Nemophila parviflora</i> var. <i>quercifolia</i>	4.3	-	-					●	Woodland, LMC Forest
<b><i>Nemophila pulchella</i> var. <i>gracilis</i></b>	-	-	-			●	●	●	Woodland
<i>Neviusia cliftonii</i>	1B.2	-	-	●					Woodland, LMC Forest, Riparian
<i>Orcuttia tenuis</i>	1B.1	E	T	●	●				Vernal pools
<b><i>Packeria layneae</i></b>	1B.2	R	T		●	●	●		Gabbro: Chaparral, Woodland
<i>Paronychia ahartii</i>	1B.1	-	-	●	●				Woodland, Grassland, Vernal pools
<b><i>Perideridia bacigalupii</i></b>	4.2	-	-		●	●	●	●	Serpentine: Chaparral, LMC Forest
<b><i>Perideridia bolanderi</i></b> subsp. <i>involucrata</i>	-	-	-		●	●	●		Woodland
<b><i>Phacelia platyloba</i></b>	-	-	-				●	●	Chaparral, Woodland
<i>Phacelia stebbinsii</i>	1B.2	-	-			●			Woodland, LMC Forest, Wet Meadow (and seeps)
<i>Piperia leptopetala</i>	4.3	-	-	●	●	●	●	●	Woodland, LMC Forest, UMC Forest
<i>Piperia michaelii</i>	4.2	-	-		●	●	●	●	Chaparral, Woodland (incl. CCC Forest), LMC Forest
<b><i>Plagiobothrys distantiflorus</i></b>	-	-	-			●	●	●	Grassland, Wet Meadow (incl. seeps), Woodland
<b><i>Plagiobothrys glyptocarpus</i></b> var. <i>modestus</i>	3	-	-			●			Woodland, Grassland
<i>Plagiobothrys myosotoides</i>	4.3	-	-					●	Chaparral
<b><i>Plagiobothrys scriptus</i></b>	-	-	-		●	●			Grassland (and vernal pools), Woodland
<b><i>Poa sierra</i></b>	-	-	-		●	●		●	LMC Forest, Wet Meadow (incl. seeps)
<i>Polygonum bidwelliae</i>	4.3	-	-	●	●				Chaparral, Woodland, Grassland
<i>Pseudobahia bahiifolia</i>	1B.1	E	E			●	●	●	Woodland, Grassland
<i>Pseudobahia peirsonii</i>	1B.1	E	T					●	Woodland, Grassland
<i>Rhynchospora californica</i>	1B.1	-	-		●				LMC Forest, Wet meadow (and seeps), Fresh emergent wetland (and bogs and fens)
<i>Rhynchospora capitellata</i>	2.2	-	-		●	●	●		LMC Forest, Wet meadow (and seeps), Fresh Emergent wetland, UMC Forest
<b><i>Rupertia hallii</i></b>	1B.2	-	-		●				Woodland, LMC Forest
<i>Sanicula tracyi</i>	4.2	-	-		●				Serpentine (sometimes): Woodland, LMC Forest, UMC Forest
<b><i>Sedum albomarginatum</i></b>	1B.2	-	-		●				Serpentine: Chaparral, LMC Forest
<b><i>Sidalcea robusta</i></b>	1B.2	-	-		●				Chaparral, Woodland
<b><i>Sidalcea stipularis</i></b>	1B.1	E	-			●			Fresh emergent wetland
<i>Stellaria obtuse</i>	4.3	-	-	●	●	●	●		LMC Forest, Riparian, UMC Forest

Scientific Name	Status <sup>1</sup>			Subregions <sup>2</sup>					Habitat
	CNPS	CA	FED	N	NC	C	SC	S	
<b><i>Stephanomeria exigua</i></b> <b>subsp. <i>macrocarpa</i></b>	-	-	-		•		•	•	Woodland
<b><i>Streptanthus diversifolius</i></b>	-	-	-		•	•	•	•	LMC Forest, Woodland
<i>Streptanthus drepanoides</i>	4.3	-	-	•	•				Serpentine: Chaparral, Woodland, LMC Forest
<b><i>Streptanthus farnsworthianus</i></b>	4.3	-	-					•	Woodland
<b><i>Streptanthus polygaloides</i></b>	-	-	-		•	•	•	•	Serpentine: Chaparral, LMC Forest, MH/ MH-C Forest, Woodland (CCC Forest)
<i>Trichostema rubisepalum</i>	4.3	-	-				•		Serpentine: MH/MH-C Forest, Chaparral, Woodland, LMC Forest, Grassland (vernal pools)
<b><i>Triteleia ixioides</i></b> subsp. <b><i>scabra</i></b>	-	-	-	•	•	•	•	•	Chaparral, LMC Forest, MH/MH-C Forest, Woodland
<b><i>Verbena californica</i></b>	1B.1	T	T				•		Serpentine: Woodland, Grassland
<i>Viburnum ellipticum</i>	2.3	-	-	•	•	•		•	Chaparral, Woodland, LMC Forest
<b><i>Wyethia bolanderi</i></b>	-	-	-		•	•	•		Serpentine (often): Chaparral, Grassland
<b><i>Wyethia elata</i></b>	4.3	-	-				•	•	Woodland, LMC Forest
<b><i>Wyethia reticulata</i></b>	1B.2	-	-			•			Gabbro: Chaparral, Woodland, LMC Forest
<b><i>Zigadenus exaltatus</i></b>	-	-	-		•	•	•		Chaparral, Woodland (CCC Forest)

Sources: Derived from Hickman 1993, Safford et al. 2005, Viers et al. 2006, CCH 2011, CNPS 2011 by AECOM during 2008–2011.

<sup>1</sup> Status Codes:

California Native Plant Society (CNPS) Listing Categories:

1A = Presumed extinct in California

1B = Plants rare, threatened, or endangered in California and elsewhere

2 = Plants rare, threatened, or endangered in California but more common elsewhere

3 = Plants for which more information is needed – a review list

4 = Plants of limited distribution or otherwise rare in California but not threatened or endangered at this time

Extensions:

.1 = Seriously endangered in California (>80% of occurrences are threatened and/or high degree and immediacy of threat)

.2 = Fairly endangered in California (20–80% of occurrences are threatened)

.3 = Not very threatened in California (low degree/immediacy of threats or no current threats known)

California Department of Fish and Game (DFG) State Listing Category:

E = California listed as endangered

T = California listed as threatened

U.S. Fish and Wildlife Service (USFWS) Federal Listing Categories:

T = Federally listed as threatened

E = Federally listed as endangered

<sup>2</sup> Subregion Codes: N = North Subregion, NC = North Central Subregion, C = Central Subregion, SC = South Central Subregion, and S = Southern Subregion

<sup>3</sup> Endemic species are in bold font. Endemism determined on the basis of Hickman (1993) and Viers et al. 2006.

## Appendix C-IV

### Invasive Species of the Foothills Area Rated Moderate or High by Cal-IPC

Species	Common Name	Rating	Habitat
<i>Acroptilon repens</i>	Russian knapweed	Moderate	Foothill Grassland
<i>Aegilops triuncialis</i>	Barb goatgrass	High	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland
<i>Ailanthus altissima</i>	Tree-of-Heaven	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland, Foothill Riparian
<i>Anthoxanthum odoratum</i>	Sweet vernalgrass	Moderate	Lower Montane Conifer Forest, Montane Hardwood/Hardwood-Conifer Forest
<i>Arundo donax</i>	Giant reed	High	Foothill Riparian
<i>Avena fatua</i>	Wild oat	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland
<i>Avena barbata</i>	Slender wild oat	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland
<i>Brassica nigra</i>	Black mustard	Moderate	Foothill Grassland
<i>Bromus diandrus</i>	Ripgut brome	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland
<i>Bromus madritensis</i> ssp. <i>rubens</i>	Red brome	High	Desert Scrub and Woodland, Desert Riparian, Closed-Cone Pine-Cypress Woodland
<i>Bromus tectorum</i>	Cheatgrass	High	Blue Oak Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland, Desert Scrub and Woodland, Closed-Cone Pine-Cypress Woodland
<i>Cardaria chalepensis</i>	Lens-podded whitetop	Moderate	Foothill Riparian, Fresh Emergent Wetland
<i>Cardaria draba</i>	Hoary cress	Moderate	Foothill Riparian, Fresh Emergent Wetland

Species	Common Name	Rating	Habitat
<i>Carduus nutans</i>	Musk thistle	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland
<i>Carduus pycnocephalus</i>	Italian thistle	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland
<i>Carthamnus lanatus</i>	Woolly distaff thistle	Moderate	Foothill Grassland, Blue Oak Savanna and Woodland
<i>Centaurea diffusa</i>	Diffuse knapweed	Moderate	Foothill Grassland
<i>Centaurea solstitialis</i>	Yellow starthistle	High	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Riparian
<i>Chondrilla juncea</i>	Rush skeletonweed	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland
<i>Cirsium arvense</i>	Canada thistle	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland, Foothill Riparian, Lower Montane Conifer Forest, Montane Riparian, Wet Meadow
<i>Cirsium vulgare</i>	Bull thistle	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland, Foothill Riparian, Lower Montane Conifers Forest, Montane Riparian, Wet Meadow
<i>Conium maculatum</i>	poison-hemlock	Moderate	Foothill Grassland, Foothill Riparian
<i>Cynosurus echinatus</i>	Hedgehog, dogtail grass	Moderate	Blue Oak Savanna and Woodland, Foothill Chaparral, Foothill Grassland, Foothill Riparian
<i>Cytisus scoparius</i>	Scotch broom	High	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland, Foothill Riparian
<i>Dipsacus fullonum</i>	Common teasel	Moderate	Foothill Grassland, Foothill Riparian
<i>Egeria densa</i>	Brazilian egeria	High	Lacustrine, Riverine
<i>Euphorbia esula</i>	Leafy spurge	High	Foothill Grassland, Foothill Riparian
<i>Festuca arundinacea</i>	Tall fescue	Moderate	Foothill Grassland

## C-IV

Species	Common Name	Rating	Habitat
<i>Foeniculum vulgare</i>	Fennel	High	Foothill Grassland, Foothill Riparian
<i>Halogeton glomeratus</i>	Halogeton	Moderate	Desert Scrub and Woodland
<i>Hedera helix/H. canariensis</i>	English ivy, Algerian Ivy	High	Foothill Riparian
<i>Hirschfeldia incana</i>	Shortpod mustard, summer mustard	Moderate	Foothill Grassland
<i>Holcus lanatus</i>	Common velvetgrass	Moderate	Foothill Grassland, Wet Meadow
<i>Hordeum marinum</i>	Mediterranean barley	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland
<i>Hordeum murinum</i>	Mediterranean barley	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland
<i>Hydrilla verticillata</i>	Hydrilla	High	Lacustrine, Riverine
<i>Hypericum perforatum</i>	Common St. Johnswort, klamathweed	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland
<i>Hypochaeris radicata</i>	Rough catsear, hairy dandelion	Moderate	Foothill Grassland
<i>Isatis tinctoria</i>	Dyer's woad	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Hardwood-Conifer Woodland, Lower Montane Conifer Forest
<i>Lepidium latifolium</i>	Perennial pepperweed, tall whitetop	High	Foothill Grassland, Foothill Riparian, Fresh Emergent Wetland
<i>Linaria genistifolia</i> ssp. <i>dalmatica</i>	Dalmation toadflax	Moderate	Foothill Grassland
<i>Lolium multiflorum</i>	Italian ryegrass	Moderate	Blue Oak Savanna and Woodland, Foothill Grassland
<i>Ludwigia peploides</i> ssp. <i>montevidensis</i>	Creeping water-primrose	High	Fresh Emergent Wetland, Lacustrine, Riverine
<i>Myriophyllum aquaticum</i>	Parrotfeather	High	Fresh Emergent Wetland, Lacustrine, Riverine
<i>Nicotiana glauca</i>	Tree tobacco	Moderate	Foothill Riparian
<i>Onopordum acanthium</i>	Scotch thistle	High	Desert Scrub and Woodland, Foothill Grassland, Foothill Riparian, Montane Riparian, Wet Meadow
<i>Phalaris aquatica</i>	hardinggrass	Moderate	Foothill Riparian, Wet Meadow
<i>Polygonum cuspidatum</i>	Japanese knotweed	Moderate	Foothill Riparian

Species	Common Name	Rating	Habitat
<i>Polygonum sachalinense</i>	Sakhalin knotweed	Moderate	Foothill Riparian
<i>Rumex acetosella</i>	red sorrel, sheep sorrel	Moderate	Foothill Grassland, Foothill Riparian, Lower Montane Conifer Forest, Montane Hardwood/Hardwood-Conifer Forest, Montane Riparian
<i>Rubus armeniacus</i>	Himalayan blackberry	High	Blue Oak Savanna and Woodland , Foothill Riparian, Fresh Emergent Wetland, Foothill Hardwood-Conifer Woodland
<i>Taeniatherum caput-medusae</i>	medusahead	High	Blue Oak Savanna and Woodland, Foothill Chaparral, Foothill Grassland, Foothill Hardwood-Conifer Woodland
<i>Tamarix ramosissima</i>	saltcedar, tamarisk	High	Foothill Riparian, Desert Riparian
<i>Torilis arvensis</i>	hedge parsley	Moderate	Blue Oak Savanna and Woodland, Foothill Hardwood-Conifer Woodland
<i>Trifolium hirtum</i>	rose clover	Moderate	Foothill Grassland
<i>Ulex europaeus</i>	Gorse	High	Blue Oak Savanna and Woodland, Foothill Grassland, Foothill Foothill Hardwood-Conifer Woodland, Foothill Riparian
<i>Vulpia myuros</i>	rattail fescue	Moderate	Blue Oak Savanna and Woodland, Foothill Chaparral, Foothill Grassland, Foothill Hardwood-Conifer Woodland, Montane Chaparral

Source: Cal-IPC 2006, DiTomaso and Healy 2007, CCH 2011

## Appendix C-V

### Acreage of Vegetation Types by Region

Vegetation Type	North	North Central	Central	South Central	Southern	Total
Agricultural	6,815	6,408	14,757	12,901	14,765	55,645
Alpine Dwarf Shrub	0	0	0	0	233	233
Barren	256	5,156	12,519	7,677	37,680	63,287
Blue Oak Savanna and Woodland	120,559	276,616	201,567	394,615	597,732	1,591,092
Desert Riparian	0	0	0	0	1,269	1,269
Desert Scrub and Woodland	0	0	0	3	154,143	154,146
Foothill Chaparral	29,439	98,644	50,825	218,484	288,044	685,435
Foothill Grassland	48,624	198,024	173,469	419,658	686,156	1,525,935
Foothill Hardwood and Conifer Woodland	1,593	2,639	10,659	30,194	202,577	247,660
Foothill Riparian	648	1,173	33	185	9,430	11,469
Fresh Emergent Wetland	0	12	49	7	21	90
Lacustrine	141	15,433	23,068	39,347	27,428	105,425
Lower Montane Conifer Forest	30,697	221,309	282,999	137,332	376,017	1,048,353
Montane Chaparral	0	5,355	1,926	3,053	58,288	68,622
Montane Hardwood/ Hardwood-Conifer Forest	20,819	164,598	411,263	406,339	440,634	1,443,652
Montane Riparian	4	520	2,185	1,073	5,489	9,271
Riverine	358	552	217	147	620	1,893
Unlabeled	0	0	0	0	7	7
Upper Montane Conifer Forest	0	1,312	0	223	164,659	166,194
Urban	180	4,612	40,913	9,268	12,445	67,419
Wet Meadow	455	316	323	980	8,774	10,849
(Unclassified)	1	629	78	1	2,227	3,016
<b>Grand Total</b>	<b>260,589</b>	<b>1,003,307</b>	<b>1,226,848</b>	<b>1,681,488</b>	<b>3,088,637</b>	<b>7,260,964</b>

Source: DFG 2009 and USFS 2010 data reclassified by SNC in 2010

## Appendix C-VI

### Vegetation Type Acreages in the Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	1,105	13,011	11,157	6,745	22,944	683	55,645
Alpine Dwarf Shrub	233	0	0	0	0	0	233
Barren	41,782	7,128	3,269	2,023	7,553	1,531	63,287
Blue Oak Savanna and Woodland	260,390	698,642	225,377	105,556	289,909	11,219	1,591,092
Desert Riparian	598	461	165	23	0	23	1,269
Desert Scrub and Woodland	89,205	45,477	9,538	5,161	4,062	702	154,146
Foothill Chaparral	368,226	144,141	61,509	32,359	76,193	3,007	685,435
Foothill Grassland	218,886	742,913	194,665	81,620	272,243	15,609	1,525,935
Foothill Hardwood and Conifer Woodland	49,547	87,385	27,863	10,449	70,607	1,809	247,660
Foothill Riparian	1,911	3,008	1,111	862	4,113	464	11,469
Fresh Emergent Wetland	0	6	2	0	69	12	90
Lacustrine	73,421	2,205	1,078	719	1,982	26,019	105,425
Lower Montane Conifer Forest	599,379	150,701	63,664	40,143	188,759	5,707	1,048,353
Montane Chaparral	51,039	11,116	2,453	1,420	2,429	164	68,622
Montane Hardwood/Hardwood-Conifer Forest	552,784	236,714	128,130	85,932	432,913	7,178	1,443,652
Montane Riparian	4,549	1,374	814	448	1,775	311	9,271
Riverine	664	411	274	143	274	127	1,893
Unlabeled	7	0	0	0	0	0	7
Upper Montane Conifer Forest	138,688	16,101	3,632	6,360	937	476	166,194
Urban	3,658	1,406	1,132	2,448	53,945	4,830	67,419
Wet Meadow	4,944	2,125	1,065	302	2,264	150	10,849
(Unclassified)	1,377	902	450	28	164	95	3,016
<b>Grand Total</b>	<b>2,462,394</b>	<b>2,165,229</b>	<b>737,348</b>	<b>382,740</b>	<b>1,433,137</b>	<b>80,117</b>	<b>7,260,964</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010

Notes:

- 1 – GAP status 1,2, or 3 in GIN 2010
- 2 – Gap status 4 or blank in GIN 2010
- 3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005
- 4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005
- 5 – Data not available in Theobald 2005

## Appendix C-VII

### Vegetation Type Acreages in the Northern Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	4	3,118	1,417	410	1,858	7	6,815
Alpine Dwarf Shrub	0	0	0	0	0	0	0
Barren	1	42	22	42	147	2	256
Blue Oak Savanna and Woodland	12,738	67,502	23,145	9,079	8,017	77	120,559
Desert Riparian	0	0	0	0	0	0	0
Desert Scrub and Woodland	0	0	0	0	0	0	0
Foothill Chaparral	1,843	12,147	6,485	3,948	5,002	14	29,439
Foothill Grassland	4,437	27,840	8,190	2,428	5,706	23	48,624
Foothill Hardwood and Conifer Woodland	203	282	236	171	694	6	1,593
Foothill Riparian	66	28	102	81	356	16	648
Fresh Emergent Wetland	0	0	0	0	0	0	0
Lacustrine	0	50	18	12	32	29	141
Lower Montane Conifer Forest	1,213	13,135	7,424	4,006	4,904	15	30,697
Montane Chaparral	0	0	0	0	0	0	0
Montane Hardwood/Hardwood-Conifer Forest	1,203	9,434	4,775	2,669	2,733	4	20,819
Montane Riparian	4	0	0	0	0	0	4
Riverine	30	27	55	51	183	11	358
Unlabeled	0	0	0	0	0	0	0
Upper Montane Conifer Forest	0	0	0	0	0	0	0
Urban	1	0	22	15	141	1	180
Wet Meadow	0	192	111	6	145	1	455
(Unclassified)	0	1	0	0	0	0	1
<b>Grand Total</b>	<b>21,744</b>	<b>133,798</b>	<b>52,003</b>	<b>22,919</b>	<b>29,920</b>	<b>205</b>	<b>260,589</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

<sup>1</sup> – GAP status 1, 2, or 3 in GIN 2010

<sup>2</sup> – Gap status 4 or blank in GIN 2010

<sup>3</sup> – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005

<sup>4</sup> – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005

<sup>5</sup> – Data not available in Theobald 2005

## Appendix C-VIII

### Vegetation Type Acreages in the North Central Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	576	1,299	567	514	3,318	133	6,408
Alpine Dwarf Shrub	0	0	0	0	0	0	0
Barren	3,298	1,042	351	180	210	76	5,156
Blue Oak Savanna and Woodland	96,121	99,125	32,112	15,763	31,780	1,715	276,616
Desert Riparian	0	0	0	0	0	0	0
Desert Scrub and Woodland	0	0	0	0	0	0	0
Foothill Chaparral	46,527	32,294	8,996	2,895	7,239	692	98,644
Foothill Grassland	90,554	68,423	17,964	6,415	13,459	1,209	198,024
Foothill Hardwood and Conifer Woodland	1,127	559	246	221	395	90	2,639
Foothill Riparian	437	263	159	49	207	58	1,173
Fresh Emergent Wetland	0	0	1	0	6	6	12
Lacustrine	13,975	105	79	40	68	1,166	15,433
Lower Montane Conifer Forest	108,492	63,401	16,074	8,860	22,715	1,767	221,309
Montane Chaparral	3,304	1,789	131	79	49	4	5,355
Montane Hardwood/Hardwood-Conifer Forest	65,573	34,484	19,840	16,417	27,044	1,239	164,598
Montane Riparian	281	69	39	34	91	7	520
Riverine	269	148	29	14	16	75	552
Unlabeled	0	0	0	0	0	0	0
Upper Montane Conifer Forest	1,294	5	3	0	9	0	1,312
Urban	258	175	155	103	3,544	377	4,612
Wet Meadow	26	229	48	0	12	1	316
(Unclassified)	187	297	139	5	0	0	629
<b>Grand Total</b>	<b>432,300</b>	<b>303,707</b>	<b>96,935</b>	<b>51,590</b>	<b>110,161</b>	<b>8,614</b>	<b>1,003,307</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

- 1 – GAP status 1,2, or 3 in GIN 2010
- 2 – Gap status 4 or blank in GIN 2010
- 3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005
- 4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005
- 5 – Data not available in Theobald 2005

## Appendix C-IX

### Vegetation Type Acreages in the Central Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/ Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40–160 Acres	Parcels < 40 Acres			
Agricultural	400	1,174	1,026	596	11,459	103	14,757
Alpine Dwarf Shrub	0	0	0	0	0	0	0
Barren	3,090	2,671	1,454	1,014	4,015	274	12,519
Blue Oak Savanna and Woodland	29,375	33,233	21,668	17,699	98,516	1,076	201,567
Desert Riparian	0	0	0	0	0	0	0
Desert Scrub and Woodland	0	0	0	0	0	0	0
Foothill Chaparral	15,354	5,450	5,459	3,497	20,906	159	50,825
Foothill Grassland	15,408	28,404	16,870	12,704	98,696	1,386	173,469
Foothill Hardwood and Conifer Woodland	972	421	674	392	8,054	146	10,659
Foothill Riparian	9	1	7	0	16	0	33
Fresh Emergent Wetland	0	6	1	0	35	6	49
Lacustrine	17,926	169	313	339	785	3,535	23,068
Lower Montane Conifer Forest	98,285	41,575	25,680	19,028	96,520	1,912	282,999
Montane Chaparral	571	431	221	130	570	3	1,926
Montane Hardwood/ Hardwood-Conifer Forest	74,557	43,170	37,104	29,285	224,640	2,506	411,263
Montane Riparian	259	252	120	159	1,360	36	2,185
Riverine	180	0	25	6	2	3	217
Unlabeled	0	0	0	0	0	0	0
Upper Montane Conifer Forest	0	0	0	0	0	0	0
Urban	1,417	464	321	1,212	35,853	1,645	40,913
Wet Meadow	0	42	22	16	235	8	323
(Unclassified)	76	0	0	0	1	0	78
<b>Grand Total</b>	<b>257,880</b>	<b>157,464</b>	<b>110,965</b>	<b>86,077</b>	<b>601,665</b>	<b>12,797</b>	<b>1,226,848</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

<sup>1</sup> – GAP status 1,2, or 3 in GIN 2010

<sup>2</sup> – Gap status 4 or blank in GIN 2010

<sup>3</sup> – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005

<sup>4</sup> – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005

<sup>5</sup> – Data not available in Theobald 2005

## Appendix C-X

### Vegetation Type Acreages in the South Central Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	52	3,501	4,838	1,174	3,205	131	12,901
Alpine Dwarf Shrub	0	0	0	0	0	0	0
Barren	2,295	1,784	936	405	1,684	573	7,677
Blue Oak Savanna and Woodland	36,820	178,630	72,677	32,430	69,910	4,148	394,615
Desert Riparian	0	0	0	0	0	0	0
Desert Scrub and Woodland	3	0	0	0	0	0	3
Foothill Chaparral	108,400	40,172	27,552	13,091	28,382	886	218,484
Foothill Grassland	26,252	209,663	70,955	24,776	82,404	5,609	419,658
Foothill Hardwood and Conifer Woodland	2,838	8,122	3,834	1,603	13,734	62	30,194
Foothill Riparian	5	60	8	40	68	5	185
Fresh Emergent Wetland	0	0	0	0	7	0	7
Lacustrine	21,098	1,099	364	229	524	16,034	39,347
Lower Montane Conifer Forest	58,000	13,456	10,441	5,725	49,084	626	137,332
Montane Chaparral	1,636	276	437	187	514	3	3,053
Montane Hardwood/Hardwood-Conifer Forest	119,159	63,231	49,508	29,625	143,040	1,776	406,339
Montane Riparian	104	387	264	66	204	49	1,073
Riverine	79	20	20	2	22	4	147
Unlabeled	0	0	0	0	0	0	0
Upper Montane Conifer Forest	197	26	0	0	0	0	223
Urban	231	351	360	556	7,066	705	9,268
Wet Meadow	87	284	73	9	508	19	980
(Unclassified)	0	0	0	0	0	0	1
<b>Grand Total</b>	<b>377,256</b>	<b>521,062</b>	<b>242,266</b>	<b>109,917</b>	<b>400,357</b>	<b>30,630</b>	<b>1,681,488</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

- 1 – GAP status 1,2, or 3 in GIN 2010
- 2 – Gap status 4 or blank in GIN 2010
- 3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005
- 4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005
- 5 – Data not available in Theobald 2005

## Appendix C-XI

### Vegetation Type Acreages in the Southern Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	73	3,919	3,309	4,051	3,103	310	14,765
Alpine Dwarf Shrub	233	0	0	0	0	0	233
Barren	33,097	1,590	507	382	1,497	606	37,680
Blue Oak Savanna and Woodland	85,335	320,152	75,775	30,584	81,685	4,201	597,732
Desert Riparian	598	461	165	23	0	23	1,269
Desert Scrub and Woodland	89,202	45,477	9,538	5,161	4,062	702	154,143
Foothill Chaparral	196,102	54,078	13,016	8,929	14,663	1,256	288,044
Foothill Grassland	82,234	408,584	80,685	35,295	71,977	7,381	686,156
Foothill Hardwood and Conifer Woodland	44,406	78,000	22,873	8,062	47,731	1,505	202,577
Foothill Riparian	1,395	2,656	835	692	3,466	385	9,430
Fresh Emergent Wetland	0	0	0	0	21	1	21
Lacustrine	20,415	782	303	99	572	5,255	27,428
Lower Montane Conifer Forest	333,389	19,134	4,045	2,523	15,538	1,387	376,017
Montane Chaparral	45,529	8,620	1,663	1,025	1,296	155	58,288
Montane Hardwood/Hardwood-Conifer Forest	292,292	86,395	16,902	7,936	35,457	1,653	440,634
Montane Riparian	3,901	667	392	190	120	219	5,489
Riverine	107	215	144	70	51	33	620
Unlabeled	7	0	0	0	0	0	7
Upper Montane Conifer Forest	137,196	16,070	3,629	6,359	928	476	164,659
Urban	1,750	416	273	562	7,341	2,103	12,445
Wet Meadow	4,831	1,378	812	270	1,364	120	8,774
(Unclassified)	1,114	603	310	22	162	15	2,227
<b>Grand Total</b>	<b>1,373,206</b>	<b>1,049,197</b>	<b>235,178</b>	<b>112,236</b>	<b>291,031</b>	<b>27,788</b>	<b>3,088,637</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

1 – GAP status 1,2, or 3 in GIN 2010

2 – Gap status 4 or blank in GIN 2010

3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005

4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005

5 – Data not available in Theobald 2005

## Appendix C-XII

### Vegetation Type Acreages in Riparian Corridors of the Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	147	2,135	858	363	2,221	66	5,790
Alpine Dwarf Shrub	6	0	0	0	0	0	6
Barren	6,875	565	462	512	856	445	9,715
Blue Oak Savanna and Woodland	33,538	56,905	21,243	10,912	27,965	2,426	152,989
Desert Riparian	75	79	44	15	0	15	227
Desert Scrub and Woodland	1,625	1,087	618	496	194	120	4,140
Foothill Chaparral	26,778	9,497	4,973	3,131	6,554	637	51,569
Foothill Grassland	17,152	44,291	13,849	6,242	22,839	2,530	106,904
Foothill Hardwood and Conifer Woodland	6,356	9,412	3,413	1,209	9,739	389	30,516
Foothill Riparian	1,261	1,982	717	567	2,635	305	7,467
Fresh Emergent Wetland	0	0	0	0	10	2	12
Lacustrine	6,614	759	413	393	772	2,941	11,893
Lower Montane Conifer Forest	94,199	19,654	8,245	5,528	25,371	1,159	154,155
Montane Chaparral	4,431	607	225	181	202	41	5,688
Montane Hardwood/Hardwood-Conifer Forest	79,498	26,152	15,264	10,423	52,975	1,781	186,092
Montane Riparian	2,143	791	503	274	705	220	4,636
Riverine	563	252	222	118	221	59	1,435
Unlabeled	7	0	0	0	0	0	7
Upper Montane Conifer Forest	13,714	420	150	254	88	72	14,699
Urban	848	170	115	301	5,392	609	7,434
Wet Meadow	1,352	522	241	44	212	26	2,397
(Unclassified)	164	90	104	18	59	7	443
<b>Grand Total</b>	<b>297,344</b>	<b>175,369</b>	<b>71,658</b>	<b>40,982</b>	<b>159,010</b>	<b>13,849</b>	<b>758,212</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010; and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

- 1 – GAP status 1,2, or 3 in GIN 2010
- 2 – Gap status 4 or blank in GIN 2010
- 3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005
- 4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005
- 5 – Data not available in Theobald 2005

## Appendix C-XIII

### Vegetation Type Acreages in Riparian Corridors of the Northern Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	1	936	266	84	337	5	1,629
Alpine Dwarf Shrub	0	0	0	0	0	0	0
Barren	0	2	6	21	26	0	55
Blue Oak Savanna and Woodland	1,959	6,367	2,491	1,321	1,224	27	13,389
Desert Riparian	0	0	0	0	0	0	0
Desert Scrub and Woodland	0	0	0	0	0	0	0
Foothill Chaparral	253	1,514	954	468	800	2	3,992
Foothill Grassland	447	1,776	742	188	556	8	3,718
Foothill Hardwood and Conifer Woodland	95	126	95	95	259	5	675
Foothill Riparian	27	12	61	55	287	14	456
Fresh Emergent Wetland	0	0	0	0	0	0	0
Lacustrine	0	6	3	4	0	1	14
Lower Montane Conifer Forest	81	1,243	679	336	749	12	3,100
Montane Chaparral	0	0	0	0	0	0	0
Montane Hardwood/Hardwood-Conifer Forest	234	1,621	761	407	533	0	3,556
Montane Riparian	4	0	0	0	0	0	4
Riverine	22	23	44	41	164	9	304
Unlabeled	0	0	0	0	0	0	0
Upper Montane Conifer Forest	0	0	0	0	0	0	0
Urban	0	0	7	1	31	1	40
Wet Meadow	0	82	47	0	3	0	132
(Unclassified)	0	0	0	0	0	0	0
<b>Grand Total</b>	<b>3,124</b>	<b>13,708</b>	<b>6,155</b>	<b>3,021</b>	<b>4,970</b>	<b>84</b>	<b>31,063</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

1 – GAP status 1,2, or 3 in GIN 2010

2 – Gap status 4 or blank in GIN 2010

3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005

4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005

5 – Data not available in Theobald 2005

## Appendix C-XIV

### Vegetation Type Acreages in Riparian Corridors of the North Central Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	117	157	60	9	304	23	669
Alpine Dwarf Shrub	0	0	0	0	0	0	0
Barren	770	102	36	31	25	15	979
Blue Oak Savanna and Woodland	13,152	10,328	3,809	1,897	4,420	299	33,906
Desert Riparian	0	0	0	0	0	0	0
Desert Scrub and Woodland	0	0	0	0	0	0	0
Foothill Chaparral	3,828	2,051	820	203	395	54	7,352
Foothill Grassland	5,792	4,175	1,393	394	1,257	97	13,106
Foothill Hardwood and Conifer Woodland	697	262	152	111	186	44	1,452
Foothill Riparian	261	113	64	17	71	15	541
Fresh Emergent Wetland	0	0	0	0	1	0	1
Lacustrine	400	80	41	23	29	132	706
Lower Montane Conifer Forest	17,082	8,499	1,950	879	2,249	231	30,889
Montane Chaparral	341	93	5	4	0	0	442
Montane Hardwood/ Hardwood-Conifer Forest	11,489	4,222	1,649	1,237	2,889	169	21,654
Montane Riparian	90	55	22	17	72	5	260
Riverine	232	66	16	5	1	10	330
Unlabeled	0	0	0	0	0	0	0
Upper Montane Conifer Forest	77	0	1	0	5	0	83
Urban	116	78	27	22	327	21	591
Wet Meadow	25	67	2	0	0	0	95
(Unclassified)	17	11	7	2	0	0	37
<b>Grand Total</b>	<b>54,485</b>	<b>30,359</b>	<b>10,052</b>	<b>4,851</b>	<b>12,231</b>	<b>1,115</b>	<b>113,094</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

- 1 – GAP status 1,2, or 3 in GIN 2010
- 2 – Gap status 4 or blank in GIN 2010
- 3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005
- 4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005
- 5 – Data not available in Theobald 2005

## Appendix C-XV

### Vegetation Type Acreages in Riparian Corridors of the Central Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	14	73	48	35	1,029	11	1,210
Alpine Dwarf Shrub	0	0	0	0	0	0	0
Barren	1,342	83	296	359	392	183	2,655
Blue Oak Savanna and Woodland	4,483	2,353	2,060	1,270	9,563	302	20,031
Desert Riparian	0	0	0	0	0	0	0
Desert Scrub and Woodland	0	0	0	0	0	0	0
Foothill Chaparral	1,410	467	311	320	1,572	38	4,118
Foothill Grassland	1,423	1,277	1,124	788	8,457	159	13,227
Foothill Hardwood and Conifer Woodland	128	162	135	117	2,237	42	2,820
Foothill Riparian	1	0	0	0	11	0	12
Fresh Emergent Wetland	0	0	0	0	9	2	12
Lacustrine	1,619	91	158	213	397	951	3,428
Lower Montane Conifer Forest	15,400	4,361	3,320	2,939	12,331	383	38,734
Montane Chaparral	70	24	20	15	21	1	151
Montane Hardwood/Hardwood-Conifer Forest	12,956	4,686	4,898	4,042	26,323	596	53,500
Montane Riparian	191	160	62	103	438	10	965
Riverine	174	0	12	6	0	3	195
Unlabeled	0	0	0	0	0	0	0
Upper Montane Conifer Forest	0	0	0	0	0	0	0
Urban	244	51	42	171	3,378	252	4,138
Wet Meadow	0	7	6	1	20	1	35
(Unclassified)	13	0	0	0	0	0	13
<b>Grand Total</b>	<b>39,469</b>	<b>13,795</b>	<b>12,493</b>	<b>10,376</b>	<b>66,175</b>	<b>2,933</b>	<b>145,242</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

1 – GAP status 1,2, or 3 in GIN 2010

2 – Gap status 4 or blank in GIN 2010

3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005

4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005

5 – Data not available in Theobald 2005

## Appendix C-XVI

### Vegetation Type Acreages in Riparian Corridors of the South Central Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40–160 Acres	Parcels < 40 Acres			
Agricultural	3	638	321	49	296	12	1,319
Alpine Dwarf Shrub	0	0	0	0	0	0	0
Barren	568	201	61	47	262	140	1,278
Blue Oak Savanna and Woodland	4,872	17,722	6,910	4,086	7,077	997	41,664
Desert Riparian	0	0	0	0	0	0	0
Desert Scrub and Woodland	0	0	0	0	0	0	0
Foothill Chaparral	7,692	2,379	2,015	1,428	2,649	280	16,444
Foothill Grassland	2,779	15,381	4,815	2,405	7,070	1,079	33,527
Foothill Hardwood and Conifer Woodland	164	946	406	223	2,009	31	3,781
Foothill Riparian	0	29	2	19	58	5	113
Fresh Emergent Wetland	0	0	0	0	0	0	0
Lacustrine	2,510	318	157	119	99	1,646	4,848
Lower Montane Conifer Forest	7,186	1,540	1,457	856	7,572	203	18,813
Montane Chaparral	47	11	16	9	41	1	126
Montane Hardwood/ Hardwood-Conifer Forest	15,599	6,259	6,242	3,800	18,330	640	50,869
Montane Riparian	95	185	174	40	104	36	635
Riverine	79	20	20	2	22	4	147
Unlabeled	0	0	0	0	0	0	0
Upper Montane Conifer Forest	4	0	0	0	0	0	4
Urban	83	12	16	58	1,061	133	1,363
Wet Meadow	30	58	36	1	26	5	155
(Unclassified)	0	0	0	0	0	0	0
<b>Grand Total</b>	<b>41,710</b>	<b>45,699</b>	<b>22,647</b>	<b>13,143</b>	<b>46,677</b>	<b>5,212</b>	<b>175,088</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

- 1 – GAP status 1,2, or 3 in GIN 2010
- 2 – Gap status 4 or blank in GIN 2010
- 3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005
- 4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005
- 5 – Data not available in Theobald 2005

## Appendix C-XVII

### Vegetation Type Acreages in Riparian Corridors of the Southern Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	12	331	163	188	255	14	963
Alpine Dwarf Shrub	6	0	0	0	0	0	6
Barren	4,196	177	63	54	151	107	4,747
Blue Oak Savanna and Woodland	9,071	20,135	5,974	2,338	5,680	801	43,998
Desert Riparian	75	79	44	15	0	15	227
Desert Scrub and Woodland	1,625	1,087	618	496	194	120	4,140
Foothill Chaparral	13,595	3,086	872	711	1,138	263	19,664
Foothill Grassland	6,711	21,683	5,775	2,467	5,500	1,189	43,325
Foothill Hardwood and Conifer Woodland	5,271	7,915	2,624	663	5,048	267	21,789
Foothill Riparian	973	1,827	589	476	2,208	271	6,345
Fresh Emergent Wetland	0	0	0	0	0	0	0
Lacustrine	2,086	264	55	34	247	211	2,898
Lower Montane Conifer Forest	54,450	4,012	839	518	2,470	330	62,619
Montane Chaparral	3,973	480	184	153	140	40	4,970
Montane Hardwood/Hardwood-Conifer Forest	39,220	9,365	1,714	937	4,900	375	56,512
Montane Riparian	1,763	391	244	114	91	168	2,771
Riverine	56	142	131	65	33	32	460
Unlabeled	7	0	0	0	0	0	7
Upper Montane Conifer Forest	13,633	420	149	254	83	72	14,611
Urban	404	29	23	48	594	202	1,301
Wet Meadow	1,296	308	149	43	164	21	1,981
(Unclassified)	134	79	97	17	59	7	393
<b>Grand Total</b>	<b>41,710</b>	<b>45,699</b>	<b>22,647</b>	<b>13,143</b>	<b>46,677</b>	<b>5,212</b>	<b>175,088</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

<sup>1</sup> – GAP status 1,2, or 3 in GIN 2010

<sup>2</sup> – Gap status 4 or blank in GIN 2010

<sup>3</sup> – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005

<sup>4</sup> – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005

<sup>5</sup> – Data not available in Theobald 2005

## Appendix C-XVIII

### Vegetation Type Acreages in Vernal Pool Landscapes of the Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	256	163	98	36	54	1	609
Alpine Dwarf Shrub	0	0	0	0	0	0	0
Barren	0	27	24	1	81	0	135
Blue Oak Savanna and Woodland	1,470	4,394	1,113	308	505	11	7,800
Desert Riparian	0	0	0	0	0	0	0
Desert Scrub and Woodland	0	0	0	0	3	1	4
Foothill Chaparral	25	214	96	22	89	3	448
Foothill Grassland	19,524	30,345	6,567	1,737	5,802	160	64,135
Foothill Hardwood and Conifer Woodland	70	35	3	7	75	0	190
Foothill Riparian	3	15	6	0	2	0	27
Fresh Emergent Wetland	0	0	0	0	0	0	0
Lacustrine	16	31	14	4	39	13	116
Lower Montane Conifer Forest	0	0	0	0	11	0	11
Montane Chaparral	0	0	0	0	0	0	0
Montane Hardwood/Hardwood-Conifer Forest	33	58	40	9	67	3	210
Montane Riparian	0	6	0	0	0	0	6
Riverine	0	0	2	0	0	0	2
Unlabeled	0	0	0	0	0	0	0
Upper Montane Conifer Forest	0	0	0	0	0	0	0
Urban	15	4	2	17	176	3	216
Wet Meadow	0	89	0	0	1	1	91
(Unclassified)	0	0	0	0	0	0	0
<b>Grand Total</b>	<b>21,412</b>	<b>35,380</b>	<b>7,965</b>	<b>2,142</b>	<b>6,905</b>	<b>196</b>	<b>74,000</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

- 1 – GAP status 1,2, or 3 in GIN 2010
- 2 – Gap status 4 or blank in GIN 2010
- 3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005
- 4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005
- 5 – Data not available in Theobald 2005

## Appendix C-XIX

### Vegetation Type Acreages in Serpentine Landscapes of the Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	0	129	7	1	64	1	201
Alpine Dwarf Shrub	0	0	0	0	0	0	0
Barren	274	353	111	37	212	60	1,046
Blue Oak Savanna and Woodland	9,260	17,080	7,910	4,657	5,849	201	44,956
Desert Riparian	0	0	0	0	0	0	0
Desert Scrub and Woodland	0	0	0	0	0	0	0
Foothill Chaparral	13,434	6,995	4,321	2,141	4,186	95	31,173
Foothill Grassland	2,640	19,361	6,089	3,160	5,053	147	36,450
Foothill Hardwood and Conifer Woodland	257	1,651	580	223	770	11	3,491
Foothill Riparian	0	119	17	25	31	2	194
Fresh Emergent Wetland	0	0	0	0	0	0	0
Lacustrine	608	51	29	23	37	647	1,394
Lower Montane Conifer Forest	11,279	6,613	1,797	608	1,614	70	21,980
Montane Chaparral	637	293	11	4	13	1	959
Montane Hardwood/Hardwood-Conifer Forest	6,275	6,014	2,468	2,045	8,096	149	25,047
Montane Riparian	90	78	30	34	14	3	249
Riverine	14	0	0	0	0	0	15
Unlabeled	0	0	0	0	0	0	0
Upper Montane Conifer Forest	489	4	2	0	3	0	498
Urban	13	8	16	21	1,097	87	1,242
Wet Meadow	14	0	0	0	0	0	14
(Unclassified)	0	0	0	0	0	0	0
<b>Grand Total</b>	<b>45,284</b>	<b>58,748</b>	<b>23,388</b>	<b>12,978</b>	<b>27,039</b>	<b>1,473</b>	<b>168,911</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

1 – GAP status 1,2, or 3 in GIN 2010

2 – Gap status 4 or blank in GIN 2010

3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005

4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005

5 – Data not available in Theobald 2005

## Appendix C-XX

### Vegetation Type Acreages in Gabbro Landscapes of the Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40-160 Acres	Parcels < 40 Acres			
Agricultural	0	429	67	40	945	19	1,499
Alpine Dwarf Shrub	0	0	0	0	0	0	0
Barren	179	309	201	68	930	40	1,727
Blue Oak Savanna and Woodland	2,373	13,088	4,945	2,173	7,739	159	30,476
Desert Riparian	0	0	0	0	0	0	0
Desert Scrub and Woodland	47	5	0	0	9	0	61
Foothill Chaparral	4,767	1,034	737	568	5,360	28	12,494
Foothill Grassland	2,372	17,240	3,937	1,124	7,195	257	32,125
Foothill Hardwood and Conifer Woodland	583	1,388	115	129	1,380	35	3,630
Foothill Riparian	81	94	4	13	52	1	245
Fresh Emergent Wetland	0	0	0	0	9	0	10
Lacustrine	135	72	63	53	103	387	814
Lower Montane Conifer Forest	6,919	3,816	2,160	1,168	8,115	236	22,414
Montane Chaparral	60	130	1	3	23	2	219
Montane Hardwood/Hardwood-Conifer Forest	6,074	7,041	4,971	3,767	21,719	400	43,972
Montane Riparian	31	131	52	7	60	3	285
Riverine	6	0	0	0	0	0	6
Unlabeled	0	0	0	0	0	0	0
Upper Montane Conifer Forest	595	3	0	3	192	1	794
Urban	218	148	31	70	3,628	79	4,174
Wet Meadow	1	0	4	0	0	0	5
(Unclassified)	0	0	0	0	0	0	0
<b>Grand Total</b>	<b>24,442</b>	<b>44,928</b>	<b>17,289</b>	<b>9,184</b>	<b>57,459</b>	<b>1,647</b>	<b>154,949</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

- 1 – GAP status 1,2, or 3 in GIN 2010
- 2 – Gap status 4 or blank in GIN 2010
- 3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005
- 4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005
- 5 – Data not available in Theobald 2005

## Appendix C-XXI

### Vegetation Type Acreages in Ione Formation Landscapes of the Foothills by Protection Status, Housing Density, and Parcel Size

Vegetation Type	Protected <sup>1</sup>	Unprotected <sup>2</sup>					Total
		Rural-Undeveloped <sup>3</sup>			Urban-Suburban/Exurban <sup>4</sup>	Housing Density Not Available <sup>5</sup>	
		Parcels > 160 Acres	Parcels 40–160 Acres	Parcels < 40 Acres			
Agricultural	1	791	1,485	328	615	56	3,276
Alpine Dwarf Shrub	0	0	0	0	0	0	0
Barren	66	1,362	629	226	407	99	2,789
Blue Oak Savanna and Woodland	372	6,578	2,955	1,746	2,531	287	14,469
Desert Riparian	0	0	0	0	0	0	0
Desert Scrub and Woodland	0	0	0	0	0	0	0
Foothill Chaparral	245	2,793	1,479	1,110	1,435	21	7,083
Foothill Grassland	189	4,985	2,775	1,703	2,539	399	12,589
Foothill Hardwood and Conifer Woodland	0	94	69	47	141	5	357
Foothill Riparian	0	2	2	5	22	0	31
Fresh Emergent Wetland	0	0	0	0	1	4	6
Lacustrine	5	266	70	32	93	854	1,320
Lower Montane Conifer Forest	1,387	2,445	1,837	1,405	2,273	92	9,438
Montane Chaparral	0	0	0	0	0	0	0
Montane Hardwood/Hardwood-Conifer Forest	341	3,085	1,713	1,085	1,326	72	7,622
Montane Riparian	0	57	35	11	151	8	263
Riverine	0	2	2	0	1	0	5
Unlabeled	0	0	0	0	0	0	0
Upper Montane Conifer Forest	0	0	0	0	0	0	0
Urban	28	245	165	198	728	66	1,430
Wet Meadow	0	0	10	2	0	0	12
(Unclassified)	0	0	0	0	0	0	0
<b>Grand Total</b>	<b>2,633</b>	<b>22,707</b>	<b>13,226</b>	<b>7,898</b>	<b>12,262</b>	<b>1,963</b>	<b>60,690</b>

Source: Theobald 2005, County parcel data compiled by GIN in 2008, GIN 2010, and DFG 2009 and USFS 2010 data reclassified by SNC in 2010.

Notes:

1 – GAP status 1,2, or 3 in GIN 2010

2 – Gap status 4 or blank in GIN 2010

3 – Categories Undeveloped Private > 80 acres (0) and Rural (1, 2, 3) in Theobald 2005

4 – Categories Commercial/Industrial (10), Urban/Suburban (7, 8, 9) and Exurban (4, 5, 6) in Theobald 2005

5 – Data not available in Theobald 2005

Foothills Area Portion of Watersheds											Foothills Portion of Watersheds				Entire Watersheds					
SCLTC Geographic Group	SCLTC Watershed Name	County	Hydrologic Unit Name	Perennial Stream Length (as % of total)	Intermittent Stream Length (as % of total)	Ephemeral Stream Length (as % of total)	Perennial Stream Length (miles)	Intermittent Stream Length (miles)	Ephemeral Stream Length (miles)	All Stream Length (miles)	All Streams Density (miles/sq. mile)	Foothills Area Watershed (sq. miles)	Portion of Entire Watershed Area (%)	Minimum Elevation in Foothills (feet)	Maximum Elevation in Foothills (feet)	All Stream Length (miles)	All Streams Density (miles/sq. miles)	Entire Watershed Area (sq. miles)	Minimum Elevation of Watershed (feet)	Maximum Elevation of Watershed (feet)
North	Pit River	Shasta	PIT RIVER	100.0%	0.0%	0.0%	1	0	0	1	3.63	0	0.0%	2,066	2,188	8,733	1.70	5,135	1,271	10,418
North	Upper Clover/Bear/Battle Creeks	Shasta, Tehama	WHITMORE	41.0%	58.4%	0.6%	305	434	4	743.3	2.02	369	44.6%	544	3,613	1,591	1.93	827	542	10,368
North	Upper Clover/Bear/Battle Creeks	Shasta, Tehama	REDDING	5.3%	94.7%	0.0%	27	482	0	508.7	2.82	180	28.3%	257	1,484	1,868	2.93	637	251	1,485
North Central	Mill/Deer Creeks	Tehama, Butte	EASTERN TEHAMA	20.4%	76.0%	3.6%	243	905	43	1,190.5	2.34	509	56.9%	297	3,868	2,125	2.37	895	297	10,343
North Central	Tehama Basin	Tehama, Butte	TEHAMA	13.3%	86.7%	0.0%	21	138	0	158.8	2.52	63	5.8%	219	1,371	2,547	2.33	1,093	112	1,371
North Central	Chico/Butte Creeks	Butte	BUTTE CREEK	32.6%	66.5%	0.9%	100	203	3	305.5	2.17	141	56.9%	322	3,378	555	2.24	248	146	7,176
North Central	Colusa Basin	Butte	COLUSA BASIN	14.6%	85.4%	0.0%	7	43	0	50.8	2.04	25	1.0%	172	1,001	2,208	0.93	2,370	12	1,926
North Central	Feather River	Butte	FEATHER RIVER	14.3%	35.2%	50.4%	388	953	1,365	2,705.2	4.77	567	15.6%	225	6,230	17,969	4.96	3,625	143	9,148
Central	Yuba River	Butte, Yuba, Nevada	YUBA RIVER	15.1%	49.8%	35.2%	275	908	641	1,824.2	2.93	622	41.6%	127	4,617	7,089	4.74	1,495	106	9,066
Central	Marysville	Yuba, Nevada	MARYSVILLE				0	0	0	0	0	0	0.0%	145	355	430	1.06	405	17	605
Central	Bear River	Yuba, Nevada, Placer	BEAR RIVER	17.2%	75.8%	7.0%	112	492	45	649.4	2.07	313	77.9%	124	3,876	1,067	2.65	402	107	5,811
Central	American River	Placer, El Dorado	AMERICAN RIVER	20.1%	33.3%	46.6%	500	829	1,162	2,490.4	3.16	787	38.4%	173	4,603	9,215	4.49	2,050	129	10,352
Central	Valley-American	El Dorado	VALLEY-AMERICAN	24.4%	75.6%	0.0%	3	9	0	11.9	1.96	6	0.8%	177	591	847	1.10	770	0	601
South Central	Cosumnes/Mokelumne Rivers	El Dorado, Amado, Calaveras	MIDDLE SIERRA	18.9%	70.1%	11.0%	299	1,110	175	1,584.1	2.23	711	48.9%	196	4,149	6,442	4.43	1,456	135	10,358
South Central	Lower Cosumnes/Mokelumne Rivers	Amador, Calaveras	NORTH VALLEY FLOOR	0.2%	99.8%	0.0%	1	358	0	358.2	2.68	134	11.3%	166	1,082	2,123	1.79	1,187	6	1,140
South Central	Calaveras River	Calaveras	UPPER CALAVERAS	13.4%	59.2%	27.4%	157	691	319	1,166	3.10	376	95.0%	864	6,247	1,318	3.33	396	864	8,078
South Central	Little John Creek	Calaveras	GOPHER RIDGE	0.0%	100.0%	0.0%	0	226	0	225.5	2.33	97	84.0%	281	2,575	281	2.4	115	274	2,575

Foothills Area Portion of Watersheds											Foothills Portion of Watersheds					Entire Watersheds				
SCLTC Geographic Group	SCLTC Watershed Name	County	Hydrologic Unit Name	Perennial Stream Length (as % of total)	Intermittent Stream Length (as % of total)	Ephemeral Stream Length (as % of total)	Perennial Stream Length (miles)	Intermittent Stream Length (miles)	Ephemeral Stream Length (miles)	All Stream Length (miles)	All Streams Density (miles/sq. mile)	Foothills Area Watershed (sq. miles)	Portion of Entire Watershed Area (%)	Minimum Elevation in Foothills (feet)	Maximum Elevation in Foothills (feet)	All Stream Length (miles)	All Streams Density (miles/sq. miles)	Entire Watershed Area (sq. miles)	Minimum Elevation of Watershed (feet)	Maximum Elevation of Watershed (feet)
South Central	Stanislaus River	Calaveras, Tuolumne	STANISLAUS RIVER	8.4%	36.6%	55.0%	95	413	620	1,127.2	4.12	273	27.4%	204	4,912	7,163	7.18	997	183	11,539
South Central	Tuolumne River	Tuolumne	TUOLUMNE RIVER	6.5%	47.0%	46.5%	79	572	565	1,216.3	2.81	433	26.8%	282	4,914	6,077	3.76	1,616	183	13,031
South Central	Merced River	Mariposa	MERCED RIVER	5.1%	26.8%	68.1%	125	658	1,672	2,455.1	5.68	432	39.3%	347	6,889	4,701	4.28	1,099	339	13,018
South Central	Mariposa/Owen Creeks	Mariposa	MARIPOSA	3.1%	96.9%	0.0%	16	494	0	509.7	2.15	237	72.6%	323	4,249	765	2.34	327	311	4,249
Southern	Chowchilla/Fresno rivers	Mariposa, Madera	AHWAHNEE	11.2%	60.3%	28.5%	224	1,212	573	2,009.1	3.60	558	86.7%	362	6,568	2,272	3.53	644	347	7,143
Southern	San Joaquin Valley Floor	Tuolumne, Mariposa, Madera, Fresno	SAN JOAQUIN VALLEY FLOOR	0.0%	100.0%	0.0%	0	4	0	3.9	2.01	2	0.1%	200	674	2,439	0.87	2,801	8	984
Southern	San Joaquin River	Madera, Fresno	SAN JOAQUIN RIVER	7.2%	41.2%	51.6%	235	1,350	1,690	3,274.7	7.14	458	26.9%	367	7,890	12,713	7.45	1,706	317	13,926
Southern	Kings River	Fresno, Tulare	KINGS RIVER	12.5%	42.6%	44.9%	512	1,746	1,843	4,100.5	5.76	711	38.5%	479	9,568	8,149	4.40	1,849	383	14,138
Southern	Kaweah River	Tulare, Fresno	KAWEAH RIVER	34.7%	65.3%	0.0%	536	1,009	0	1,544.6	1.85	835	89.1%	453	11,952	1,667	1.78	938	406	12,566
Southern	Tule River	Tulare, Kern	SOUTHERN SIERRA	28.9%	71.1%	0.0%	545	1,340	0	1,884.4	2.09	901	86.4%	632	10,222	2,206	2.11	1,043	521	10,222
Southern	Kern River	Kern, Fresno	KERN RIVER	24.8%	75.2%	0.0%	472	1,431	0	1,903	2.29	830	35.0%	1,172	11,950	5,061	2.13	2,371	502	14,476
Southern	South Valley Floor	Fresno, Tulare, Kern	SOUTH VALLEY FLOOR	0.0%	100.0%	0.0%	0	83	0	83.3	1.98	42	0.5%	428	2,941	4,888	0.59	8,235	156	4,108
Southern	Tehachapi Creek	Kern	GRAPEVINE	3.8%	96.2%	0.0%	39	1,008	0	1,047	2.97	353	34.2%	1,120	8,320	2,646	2.56	1,032	608	8,815
Southern	Cottonwood/East Tehachapi Creeks	Kern	FREMONT	1.9%	98.1%	0.0%	10	500	0	510.1	2.66	192	21.1%	2,570	7,670	2,302	2.53	909	2,353	7,671
Southern	Indian Wells	Kern	INDIAN WELLS	1.1%	98.9%	0.0%	0	26	0	26.7	3.02	9	0.8%	3,556	6,327	2,810	2.47	1,138	2,176	10,047
<b>Totals (or Averages)</b>				16.1%	68.5%	15.4%	5,324.7	19,625.3	10,719.1	35,669.1	2.90	11,168.75	22.4%	124	11,952	132,264.3	2.92	49,809.60	0	14,476
North				48.8%	51.0%	0.2%	332.7	916	4.3	1,253	2.28	549.33	8.3%	257	3,613	12,191.6	1.85	6,599.06	251	10,418
North Central				19.0%	70.0%	11.0%	758.3	2,242.7	1,409.8	4,410.8	3.38	1,304.60	15.8%	172	6,230	25,403.5	3.09	8,231.10	12	10,343
Central				19.2%	58.6%	22.2%	889.9	2,237.8	1,848.2	4,975.9	2.88	1,728.71	33.7%	124	4,617	18,647.6	3.64	5,122.36	0	10,352
South Central				6.9%	67.1%	26.0%	770.9	4,520	3,351.2	8,642.1	3.21	2,693.53	37.5%	166	6,889	28,869.6	4.01	7,191.47	6	13,031
Southern				11.5%	77.2%	11.4%	2,572.9	9,708.8	4,105.6	16,387.3	3.35	4,892.58	21.6%	200	11,952	47,152	2.08	22,665.62	8	14,476
<b>Totals cross checks</b>							5,324.7	19,625.3	10,719.1	35,669.1		11,168.75	22.4%			132,264.3		49,809.60		

## Appendix D-II

### Reservoirs: Surface Area, Proportion of Foothills Area Watershed, and Capacity within Foothills Area

SCLTC Watershed Name	Reservoir Surface Area within Foothills Area (square miles)	Reservoir Area Proportion of Foothills Area Watershed (percent)	Reservoir Capacity* within Foothills Area (1000s AF)
Pit River			
Upper Clover/Bear/Battle Creeks			
Lower Clover/Bear/Battle Creeks	0.0		
Mill/Deer Creeks			
Tehama Basin			
Chico/Butte Creeks	0.5	0.3%	
Colusa Basin			
Feather River	26.3	4.6%	3,616
Yuba River	10.6	1.7%	1,090
Marysville			
Bear River	5.2	1.7%	171
American River	18.6	2.4%	975
Valley-American			
Cosumnes/Mokelumne Rivers	4.4	0.6%	1,905
Lower Cosumnes/Mokelumne Rivers	12.0	9.0%	
Calaveras River	5.3	1.4%	317
LittleJohn Creek	1.5	1.5%	15
Stanislaus River	21.1	7.7%	2,468
Tuolumne River	17.6	4.1%	2,030
Merced River	8.8	2.0%	1,032
Mariposa/Owen Creeks	1.4	0.6%	
Chowchilla/Fresno Rivers	1.4	0.2%	90
San Joaquin Valley Floor			
San Joaquin River	12.8	2.8%	525
Kings River	8.5	1.2%	1,000
Kaweah River	2.7	0.3%	185
Tule River	3.9	0.4%	82
Kern River	12.1	1.5%	568
South Valley Floor			

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SCLTC Watershed Name	Reservoir Surface Area within Foothills Area (square miles)	Reservoir Area Proportion of Foothills Area Watershed (percent)	Reservoir Capacity* within Foothills Area (1000s AF)
Tehachapi Creek	0.2	0.1%	
Cottonwood/East Tehachapi Creeks			
Indian Wells			
	174.8	1.6%	16,068
North	0.0	0.0%	0
North Central	26.7	2.0%	3,616
Central	34.4	2.0%	2,235
South Central	72.0	2.7%	7,768
Southern	41.6	0.8%	2,450
<b>Totals or Averages</b>	<b>174.8</b>	<b>1.6%</b>	<b>16,068</b>

\* Capacity information available for the major reservoirs only.

## Appendix D-III

### Reservoirs: Watersheds and Other Statistics

SCLTC Watershed Name	Water Body Name	Latitude (degrees N)	Longitude (degrees W)	Elevation (feet)	Surface Area (acres)	Capacity (TAF)	Operator
Pit River	none						
Upper Clover/Bear/Battle Creeks	none						
Lower Clover/Bear/Battle Creeks	Coleman Forebay	40.41	(122.11)	942	9.6		
Mill/Deer Creeks	none						
Tehama Basin	none						
Chico/Butte Creeks	A L Chaffin Dam	39.60	(121.58)	978	22.3		
Chico/Butte Creeks	Tom Jones Reservoir	39.63	(121.53)	1,352	1.3		
Chico/Butte Creeks	Littlefield Reservoir	39.63	(121.53)	1,357	23.8		
Chico/Butte Creeks	Grub Flat Reservoir	39.64	(121.53)	1,367	3.0		
Chico/Butte Creeks	Morgan Reservoir	39.62	(121.53)	1,368	2.1		
Chico/Butte Creeks	Magalia Reservoir	39.82	(121.59)	2,224	77.0		
Chico/Butte Creeks	Paradise Lake	39.86	(121.58)	2,546	150.2		
Chico/Butte Creeks	Lake De Sabla	39.87	(121.61)	2,760	9.9		
Colusa Basin	none						
Feather River	Thermalito Diversion Pool	39.54	(121.53)	229	269.1		
Feather River	Lake Oroville	39.59	(121.45)	902	15,455.3	3,538	DWR
Feather River	Ponderosa Reservoir	39.55	(121.29)	961	95.8		
Feather River	Cannon Reservoir	39.61	(121.53)	1,309	16.7		
Feather River	Wilson Reservoir	39.63	(121.53)	1,370	2.2		
Feather River	Kunkle Reservoir	39.71	(121.57)	1,441	17.3	0	PG&E
Feather River	Spring Valley Reservoir	39.62	(121.51)	1,449	4.4		
Feather River	Madrone Lake	39.65	(121.41)	1,972	21.8		
Feather River	Concow Reservoir	39.77	(121.52)	2,002	199.0	6	Thermalito ID

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SCLTC Watershed Name	Water Body Name	Latitude (degrees N)	Longitude (degrees W)	Elevation (feet)	Surface Area (acres)	Capacity (TAF)	Operator
Feather River	Lost Creek Reservoir	39.58	(121.13)	3,282	90.4	6	So Feather Water & Power
Feather River	Sly Creek Reservoir	39.59	(121.11)	3,530	617.6	65	Oroville_ Wyandotte ID
Feather River	Grizzly Forebay	39.89	(121.29)	4,360	33.5	1	PG&E
Yuba River	Englebright Lake	39.27	(121.25)	525	754.4	70	USACE
Yuba River	Union Reservoir	39.20	(121.28)	847	5.8		
Yuba River	Miners Ranch Reservoir	39.51	(121.46)	889	43.9	1	So Feather Water & Power
Yuba River	Collins Lake	39.34	(121.32)	1,163	1,015.0		
Yuba River	Lake Wyandotte	39.50	(121.42)	1,385	61.0		
Yuba River	Lake Mildred	39.37	(121.28)	1,391	74.7		
Yuba River	Lake Francis	39.36	(121.20)	1,677	46.3		
Yuba River	Rex Reservoir	39.21	(121.14)	1,809	3.9		
Yuba River	New Bullards Bar Reservoir	39.44	(121.13)	1,906	4,046.1	970	Yuba Co. WA
Yuba River	Pine Grove Reservoir	39.32	(121.13)	1,961	14.4		
Yuba River	Log Cabin Dam	39.44	(121.06)	1,978	2.7		
Yuba River	Rough and Ready Reservoir	39.24	(121.13)	2,107	1.3		
Yuba River	Lake Vera	39.30	(121.03)	2,410	11.3		
Yuba River	Sunset View Reservoir	39.23	(121.09)	2,547	0.2		
Yuba River	Alta Hill Reservoir	39.23	(121.07)	2,663	1.1		
Yuba River	Deer Creek Reservoir	39.27	(120.95)	2,898	35.4		
Yuba River	Scotts Flat Reservoir	39.28	(120.92)	3,071	660.0	49	NID
Marysville	none						
Bear River	Middle Turret Lakes	39.11	(121.34)	183	2.1		
Bear River	Camp Far West Reservoir	39.05	(121.30)	287	1,951.2	105	So. Sutter WD
Bear River	Lake of the Pines	39.04	(121.06)	1,500	213.7		
Bear River	Lake Combie	39.02	(121.04)	1,603	362.0		
Bear River	Rollins Reservoir	39.15	(120.94)	2,173	773.7	66	NID
Bear River	Grass Valley Reservoir	39.23	(121.07)	2,644	2.2		
Bear River	Banner Reservoir	39.24	(121.02)	3,041	4.7		

SCLTC Watershed Name	Water Body Name	Latitude (degrees N)	Longitude (degrees W)	Elevation (feet)	Surface Area (acres)	Capacity (TAF)	Operator
Bear River	Herring Reservoir	39.24	(121.01)	3,065	1.2		
Bear River	Idaho-Maryland Reservoir	39.22	(121.01)	3,069	0.7		
Bear River	Yuba Reservoir	39.22	(120.99)	3,149	10.5		
Bear River	Lava Cap Reservoir	39.24	(120.97)	3,379	0.5		
American River	Baldwin Reservoir	38.71	(121.18)	399	18.5		
American River	Hunkle Reservoir	38.71	(121.17)	402	9.0		
American River	Folsom Lake	38.75	(121.12)	466	11,062.9	975	usace
American River	Columbian	38.89	(121.20)	532	4.0		
American River	Valley View Reservoir	38.97	(121.25)	567	0.9		
American River	Caperton Reservoir	38.86	(121.22)	625	1.5		
American River	Mammoth	38.82	(121.14)	646	5.1		
American River	Clover Valley Reservoir	38.87	(121.20)	652	3.0		
American River	Lake Clementine	38.95	(121.00)	716	231.3		
American River	Chili Bar Reservoir	38.77	(120.80)	993	94.4		
American River	Oxbow Reservoir	39.00	(120.74)	1,166	64.7		
American River	Aeree	38.84	(121.02)	1,183	6.8		
American River	Schubin Dam	38.76	(120.92)	1,344	13.9		
American River	Jacobs Creek Dam	38.79	(120.94)	1,390	31.0		
American River	Rock Creek Lake	38.95	(121.09)	1,443	67.5		
American River	Volo Mining Co. Dam	38.71	(120.87)	1,471	14.9		
American River	Halsey Afterbay	38.96	(121.04)	1,508	6.0		
American River	Lake Arthur	38.96	(121.02)	1,613	5.8		
American River	Lake Theodore	38.97	(121.01)	1,741	17.3		
American River	Halsey Forebay	38.97	(121.04)	1,754	14.5		
American River	Slab Creek Reservoir	38.97	(120.67)	1,855	217.9		
American River	Finnon Reservoir	38.80	(120.75)	2,408	21.2		
American River	Larsen Reservoir	38.76	(120.70)	2,708	4.5		
American River	Blakeley Reservoir	38.74	(120.71)	2,897	9.7		
American River	Lake Walton	38.92	(120.78)	3,136	4.2		
American River	Chiquita Lake	38.94	(120.73)	3,300	2.8		

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SCLTC Watershed Name	Water Body Name	Latitude (degrees N)	Longitude (degrees W)	Elevation (feet)	Surface Area (acres)	Capacity (TAF)	Operator
Valley-American	none						
Cosumnes/Mokelumne Rivers	Lake Amador	38.31	(120.88)	405	298.5	1,308	PG&E
Cosumnes/Mokelumne Rivers	Pardee Reservoir	38.27	(120.83)	568	2,185.2	180	EBMUD
Cosumnes/Mokelumne Rivers	Goffinet Reservoir	38.38	(120.88)	699	17.6		
Cosumnes/Mokelumne Rivers	Henderson Reservoir	38.39	(120.87)	781	29.2		
Cosumnes/Mokelumne Rivers	Big Canyon Reservoir	38.63	(120.90)	909	11.1		
Cosumnes/Mokelumne Rivers	Bass Lake	38.68	(121.02)	1,172	66.3		
Cosumnes/Mokelumne Rivers	Cameron Park Lake	38.68	(120.99)	1,250	37.1		
Cosumnes/Mokelumne Rivers	Barnett Dam	38.64	(120.95)	1,372	14.2		
Cosumnes/Mokelumne Rivers	Shenandoah	38.53	(120.81)	1,507	12.0		
Cosumnes/Mokelumne Rivers	Kennedy Reservoir	38.37	(120.79)	1,650	1.5		
Cosumnes/Mokelumne Rivers	Tanner Reservoir	38.38	(120.79)	1,713	3.0		
Cosumnes/Mokelumne Rivers	Lake Tabeaud	38.35	(120.66)	1,973	30.8		
Cosumnes/Mokelumne Rivers	Aukum View	38.57	(120.71)	2,175	13.4		
Cosumnes/Mokelumne Rivers	Tiger Creek Reservoir	38.45	(120.50)	2,339	68.0		
Cosumnes/Mokelumne Rivers	Clark Reservoir	38.33	(120.51)	2,711	3.7		
Cosumnes/Mokelumne Rivers	Little Reservoir	38.55	(120.58)	3,341	1.8		
Cosumnes/Mokelumne Rivers	Big Reservoir	38.55	(120.56)	3,697	2.5		
Lower Cosumnes/Mokelumne Rivers	Camanche Reservoir	38.22	(120.97)	222	7,647.5	417	EBMUD
Lower Cosumnes/Mokelumne Rivers	Hein Dam	38.16	(120.93)	273	10.6		
Lower Cosumnes/Mokelumne Rivers	Preston Reservoir	38.37	(120.94)	355	17.6		
Lower Cosumnes/Mokelumne Rivers	Pacific Placer Reservoir	38.19	(120.80)	695	2.2		

SCLTC Watershed Name	Water Body Name	Latitude (degrees N)	Longitude (degrees W)	Elevation (feet)	Surface Area (acres)	Capacity (TAF)	Operator
Calaveras River	New Hogan Lake	38.16	(120.79)	631	3,204.4	317	USACE
Calaveras River	Calaveras Cement	38.16	(120.67)	822	15.4		
Calaveras River	Old McCormick Reservoir	38.08	(120.81)	994	9.7		
Calaveras River	Cherokee Dam	38.08	(120.61)	1,119	31.4		
Calaveras River	Pine Peak Reservoir	38.25	(120.70)	1,243	5.6		
Calaveras River	Gourley Reservoir	38.24	(120.74)	1,262	5.0		
Calaveras River	Christensen No. 1	38.13	(120.70)	1,494	6.8		
Calaveras River	Kiefer Reservoir	38.11	(120.54)	1,673	3.5		
Calaveras River	Ross Reservoir	38.12	(120.51)	1,915	12.8		
Calaveras River	Emery Reservoir	38.25	(120.50)	2,596	28.5		
Calaveras River	Reid Reservoir	38.30	(120.46)	2,738	7.6		
Calaveras River	Calaveras Reservoir	38.33	(120.49)	2,762	66.0		
LittleJohn Creek	Salt Spring Valley Reservoir	38.03	(120.75)	1,076	929.6	15	PG&E
Stanislaus River	Tulloch Reservoir	37.90	(120.58)	512	992.0	68	Oakdale & SS JID
Stanislaus River	New Melones Lake	37.99	(120.51)	939	12,439.5	2,400	USBOR
Stanislaus River	Copperopolis Reservoir	37.99	(120.65)	1,004	26.3		
Stanislaus River	San Diego Reservoir	38.03	(120.39)	2,267	3.0		
Stanislaus River	Matelot Reservoir	38.05	(120.39)	2,460	2.1		
Stanislaus River	Stanislaus Forebay	38.15	(120.36)	2,618	17.1		
Stanislaus River	Hunter Reservoir	38.20	(120.36)	3,202	16.4		
Tuolumne River	La Grange Reservoir	37.68	(120.44)	292	41.7		
Tuolumne River	Don Pedro Reservoir	37.76	(120.38)	801	11,075.3	2,030	Turlock ID
Tuolumne River	Moccasin Reservoir	37.81	(120.30)	918	18.1		
Tuolumne River	O'Neil Reservoir	37.97	(120.44)	1,631	2.7		
Tuolumne River	Lambert Lake	37.96	(120.33)	2,136	6.1		

## D-III

SCLTC Watershed Name	Water Body Name	Latitude (degrees N)	Longitude (degrees W)	Elevation (feet)	Surface Area (acres)	Capacity (TAF)	Operator
Tuolumne River	Priest Reservoir	37.80	(120.27)	2,230	41.5		
Tuolumne River	Phoenix Reservoir	38.00	(120.32)	2,385	82.1		
Tuolumne River	Brentwood Park	38.04	(120.25)	3,499	6.5		
Tuolumne River	Twain Harte	38.03	(120.24)	3,504	8.1		
Merced River	Lake McClure	37.63	(120.25)	821	5,628.4	1,032	Merced ID
Merced River	Mcmahon	37.70	(120.20)	1,636	18.2		
Mariposa/Owen Creeks	Bear Reservoir	37.37	(120.21)	397	297.4		
Mariposa/Owen Creeks	Mariposa Lake	37.30	(120.14)	417	561.1		
Mariposa/Owen Creeks	Stockton Creek	37.50	(119.96)	2,311	25.5		
Chowchilla/Fresno Rivers	Hensley Lake	37.12	(119.88)	540	1,661.4	90	USACE
Chowchilla/Fresno Rivers	Lake Jane Reservoir	37.06	(119.82)	551	16.6		
Chowchilla/Fresno Rivers	Spring	37.18	(119.77)	1,211	9.7		
San Joaquin Valley Floor	none						
San Joaquin River	Millerton Lake	37.02	(119.66)	561	4,363.5	521	USBOR
San Joaquin River	Kerckhoff Lake	37.15	(119.51)	982	171.7	4	PG&E
San Joaquin River	Redinger Lake	37.15	(119.43)	1,401	452.8		
San Joaquin River	Dam 6 Lake	37.21	(119.33)	2,227	25.2		
San Joaquin River	Corrine Lake	37.16	(119.50)	2,385	7.6		
San Joaquin River	Manzanita Lake	37.25	(119.52)	2,830	17.1		
San Joaquin River	Bass Lake	37.31	(119.55)	3,366	1,002.0	56	PG&E
San Joaquin River	Shaver Lake	37.13	(119.29)	5,371	2,161.3	135	Southern CA Edison
Kings River	Pine Flat Lake	36.87	(119.29)	952	5,378.7	1,000	USACE
Kings River	Sequoia Lake	36.73	(118.99)	5,338	83.8		
Kaweah River	Lake Kaweah	36.40	(118.97)	692	1,701.8	185	terminous dam
Tule River	Lake Success	36.08	(118.91)	653	2,486.7	82	
Kern River	Isabella Lake	35.67	(118.43)	2,544	7,731.1	568	USACE
South Valley Floor	none						
Tehachapi Creek	Tom Sawyer Lake	35.15	(118.49)		146.4		
Cottonwood/East Tehachapi Creeks	none						
Indian Wells	none						

## Appendix D-IV

### IRWM Planning Regions

SCLTC Watershed Name	IRWM planning regions*
Pit River	Upper Pit River Watershed
Upper Clover/Bear/Battle Creeks	Northern Sac Valley-Four County Group
Lower Clover/Bear/Battle Creeks	Northern Sac Valley-Four County Group
Mill/Deer Creeks	Northern Sac Valley-Four County Group
Tehama Basin	Northern Sac Valley-Four County Group; Sacramento Valley
Chico/Butte Creeks	Northern Sac Valley-Four County Group
Colusa Basin	Northern Sac Valley-Four County Group; Sacramento Valley
Feather River	Upper Feather River Watershed; Northern Sac Valley-Four County Group
Yuba River	Yuba County; Cosumnes American Bear Yuba
Marysville	Yuba County; Sacramento Valley
Bear River	Cosumnes American Bear Yuba
American River	Cosumnes American Bear Yuba
Valley-American	American River Basin
Cosumnes/Mokelumne Rivers	Cosumnes American Bear Yuba
Cosumnes	Cosumnes American Bear Yuba
Mokelumne	Mokelumne/Amador/Calaveras
Lower Cosumnes/Mokelumne Rivers	Cosumnes American Bear Yuba
Calaveras River	Mokelumne/Amador/Calaveras
LittleJohn Creek	Mokelumne/Amador/Calaveras
Stanislaus River	Tuolumne-Stanislaus
Tuolumne River	Tuolumne-Stanislaus
Merced River	Central California
Mariposa/Owen Creeks	Central California
Chowchilla/Fresno Rivers	Madera
San Joaquin Valley Floor	Madera; Upper Kings Basin Water Forum; Kaweah River Basin; Tule
San Joaquin River	Southern Sierra
Kings River	Southern Sierra; Upper Kings Basin Water Forum
Kaweah River	Southern Sierra; Kaweah River Basin
Tule River	Southern Sierra; Tule
Kern River	Kern County
South Valley Floor	Kern County
Tehachapi Creek	Antelope Valley
Cottonwood/East Tehachapi Creeks	Antelope Valley
Indian Wells	n/a

\*Data Source: DWR 2009 California Water Plan Update