

APPENDIX B
Vascular Plants Observed at Willow Springs II Project Site (July 16, 2010)
(* indicates non-native species)

GROUP Family	<i>Scientific Name</i>	Common Name
FLOWERING PLANTS -- DICOTS		
Apiaceae		
	<i>*Foeniculum vulgare</i>	fennel
Amaranthaceae		
	<i>*Amaranthus albus</i>	pigweed amaranth
Anacardiaceae		
	<i>Rhus integrifolia</i>	lemonade berry
Asclepiadaceae		
	<i>Asclepias fascicularis</i>	narrow leaf milkweed
Asteraceae		
	<i>Ambrosia psilostachya</i>	western ragweed
	<i>Artemisia californica</i>	California sagebrush
	<i>Baccharis pilularis</i>	coyote bush
	<i>*Carduus pycnocephalus</i>	Italian thistle
	<i>*Centaurea melitensis</i>	tochalote
	<i>*Conyza bonariensis</i>	Buenos Aires horseweed
	<i>Conyza canadensis</i>	Canada horseweed
	<i>Deinandra fasciculata</i>	common tarweed
	<i>Gnaphalium californicum</i>	California everlasting
	<i>Gnaphalium</i> sp.	everlasting
	<i>*Helminthotheca echioides</i> [<= <i>Picris echioides</i>]	bristly ox-tongue
	<i>Heterotheca grandiflora</i>	telegraph weed
	<i>*Lactuca serriola</i>	prickly lettuce
	<i>Madia gracilis</i>	gumweed
	<i>Malacothrix saxatilis</i>	cliff aster
	<i>*Sonchus asper</i>	prickly sow-thistle
	<i>Xanthium strumarium</i>	cocklebur
Boraginaceae		
	<i>Heliotropium curassavicum</i>	heliotrope
Brassicaceae		
	<i>*Brassica nigra</i>	black mustard
	<i>*Hirschfeldia incana</i>	summer mustard
	<i>*Raphanus sativus</i>	wild radish
Caryophyllaceae		
	<i>*Spergularia bocconei</i>	Boccon's sand spurry
Chenopodiaceae		
	<i>*Atriplex lentiformis</i>	big saltbush
	<i>*Bassia hyssopifolia</i>	five hook bassia
	<i>*Chenopodium</i> sp.	goosefoot
	<i>*Salsola tragus</i>	Russian thistle
Convolvulaceae		
	<i>Calystegia macrostegia</i>	morning glory

GROUP		
Family	<i>Scientific Name</i>	Common Name
Euphorbiaceae		
	<i>Croton setigerus</i>	prostrate spurge
	* <i>Ricinus communis</i>	castor bean
Fabaceae		
	* <i>Medicago lupulina</i>	black medic
	* <i>Medicago polymorpha</i>	California burclover
	* <i>Medicago sativa</i>	alfalfa
	* <i>Melilotus albus</i>	white sweet clover
	* <i>Melilotus indicus</i>	yellow sweet clover
	* <i>Trifolium hirtum</i>	rose clover
	<i>Trifolium</i> sp.	clover
Geraniaceae		
	* <i>Erodium botrys</i>	long-beaked filaree
	* <i>Erodium cicutarium</i>	red-stemmed filaree
Juglandaceae		
	<i>Juglans californica</i>	California black walnut
Lamiaceae		
	* <i>Marrubium vulgare</i>	horehound
Malvaceae		
	* <i>Malva nicaeensis</i>	bull mallow
	* <i>Malva parviflora</i>	cheeseweed
Myrsinaceae ¹		
	* <i>Anagallis arvensis</i>	scarlet pimpernel
Onagraceae		
	<i>Epilobium</i> sp.	willow herb
Plantaginaceae		
	* <i>Plantago lanceolata</i>	English plantain
Polygonaceae		
	* <i>Polygonum aviculare</i> ssp. <i>depressum</i> [<= <i>Polygonum arenastrum</i>]	common knotweed
	* <i>Rumex crispus</i>	curly dock
Rosaceae		
	<i>Rubus</i> sp.	blackberry
Salicaceae		
	<i>Salix lasiolepis</i>	arroyo willow
Solanaceae		
	<i>Datura wrightii</i>	jimson weed
	* <i>Nicotiana glauca</i>	tree tobacco
	<i>Solanum douglasii</i>	Douglas' nightshade
Verbenaceae		
	* <i>Verbena lasiostachys</i>	common vervain
FLOWERING PLANTS -- MONOCOTS		
Poaceae		
	* <i>Avena barbata</i>	slender oat
	* <i>Bromus</i> sp.	brome

¹ *Anagallis arvensis* was previously placed in the family Primulaceae.

GROUP	
Family	
<i>Scientific Name</i>	Common Name
<i>*Bromus diandrus</i>	ripgut brome
<i>*Bromus hordeaceus</i>	soft chess
<i>*Bromus madritensis</i>	foxtail brome
<i>*Cortaderia sp.</i>	Pampas grass
<i>*Cynodon dactylon</i>	Bermuda grass
<i>*Eragrostis sp.</i>	lovegrass
<i>*Hordeum murinum</i>	foxtail barley
<i>*Lolium multiflorum</i>	Italian rye grass
<i>*Pennisetum sp.</i>	fountain grass
<i>*Phalaris aquatica</i>	Harding grass
<i>*Piptatherum miliaceum</i>	mountain millet
<i>*Polypogon monspeliensis</i>	rabbit foot grass
<i>*Vulpia myuros</i>	rattail fescue

SENSITIVE PLANTS POTENTIAL FOR OCCURRENCE AT PROJECT SITE*
Summary of Sensitive Plants Reported by CNDDDB and CNPS Inventory in Goleta and Adjacent Quadrangles

*Including 200-foot buffer around project site

Common Name (<i>Scientific Name</i>)	Status			Occurrence at Site (Observed, Expected, Presumed Absent, Absent)
	Federal	State	CNPS	
Vascular Plants				
Slender silver moss (<i>Anomobryum julaceum</i>)	--	--	2	Presumed Absent
Santa Lucia dwarf rush (<i>Juncus luciensis</i>)	--	--	1B	Absent
Sonoran maiden fern (<i>Thelypteris puberula</i> var. <i>sonorensis</i>)	--	--	2	Absent
Southern tarplant (<i>Centromadia parryi</i> ssp. <i>australis</i>)	--	--	1B	Absent
Contra Costa goldfields (<i>Lasthenia conjugens</i>)	FE	--	1B	Presumed Absent
Coulter's goldfields (<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>)	--	--	1B	Presumed Absent
Carmel Valley Malacothrix (<i>Malacothrix saxatilis</i> var. <i>arachnoides</i>)	--	--	1B	Absent
Pale-yellow layia (<i>Layia heterotricha</i>)	--	--	1B	Presumed Absent
Coulter's saltbush (<i>Atriplex coulteri</i>)	--	--	1B	Absent
Davidson's saltscale (<i>Atriplex serenana</i> var. <i>davidsonii</i>)	--	--	1B	Absent
Estuary seablite (<i>Suaeda esteroa</i>)	--	--	1B	Absent
Santa Barbara morning glory (<i>Calystegia sepium</i> ssp. <i>binghamiae</i>)	--	--	1A	Absent
Refugio manzanita (<i>Arctostaphylos refugioensis</i>)	--	--	1B	Absent
Santa Ynez false lupine (<i>Thermopsis macrophylla</i>)	--	--	1B	Absent
Nuttall's scrub oak (<i>Quercus dumosa</i>)	--	--	1B	Absent
Umbrella larkspur (<i>Delphinium umbraculorum</i>)	--	--	1B	Absent
Mesa horkelia (<i>Horkelia cuneata</i> ssp. <i>puberula</i>)	--	--	1B	Absent
Black-flowered figwort (<i>Scrophularia atrata</i>)	--	--	1B	Absent

Common Name (<i>Scientific Name</i>)	Status			Occurrence on site (Observed, Expected, Presumed Absent, Absent)
	Federal	State	CNPS	
Late-flowered mariposa lily (<i>Calochortus weedii</i> var. <i>vestus</i>)	--	--	1B	Absent
Ojai fritillary (<i>Fritillaria ojaiensis</i>)	--	--	1B	Absent
Santa Barbara honeysuckle (<i>Lonicera subspicata</i> var. <i>subspicata</i>)	--	--	1B	Absent
Gambel's yellowcress (<i>Nasturtium gambelii</i>)	FE	CE	1B	Absent
FE = Federal Endangered Species; FT = Federal Threatened Species; CE = California Endangered Species; CT = California Threatened Species; CR = California Rare Species CNPS: List 1A = Plants presumed extinct. List 1B = Plants rare and endangered in California and elsewhere List 2 = Plants Rare, Threatened, or Endangered in CA, but more common elsewhere List 3 = Plants about which the State needs more information – A review list List 4 = Plants of limited distribution – a watch list				

Slender silver moss (*Anomobryum julaceum*) [CNPS 2] Broadleaf upland forest, lower montane coniferous forest, north coast coniferous forest. Moss which grows on damp rocks and soil; usually seen on roadcuts. 100-1000 m. Nearest reported location(s): W of San Marcos Pass along West Camino Cielo Road, Santa Ynez Mountains (CDFG 2010). **Presumed absent.**

Santa Lucia dwarf rush (*Juncus luciensis*) [CNPS 1B] Chaparral, Great Basin scrub, lower montane coniferous forest, meadows and seeps and vernal pools. 300-2040 m. Nearest reported location(s): Goleta quadrangle (CDFG 2010). **Absent.**

Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*) [CNPS 2] Meadows and seeps. Along streams, seepage areas. 50-550m. Nearest reported location(s): Mission Cyn.; Bartlett Cyn. (CDFG 2010). **Absent.**

Southern tarplant (*Centromadia parryi* ssp. *australis*) [CNPS 1B] Marshes and swamps (margins), valley and foothill grassland, vernal pools. Often in disturbed sites near the coast; also in alkaline soils, sometimes with saltgrass; also vernal pools. 0-425m. Nearest reported location(s): Mesa Stairway access to Isla Vista County Beach; 6.5 mi west of Goleta, south of 101; West of Goleta, corner 101 and Glen Annie Cyn Rd. [1947]; UCSB Lagoon area; Isla Vista, west end of Goleta Slough, just east of Carneros Rd.; Isla Vista, Del Sol Vernal Pool Preserve; Isla Vista, east side of Stork Rd, ca 0.5 mi south of Hollister Ave.; Campbell Marsh area, north of Coal Oil Pt, west of Goleta [Devereaux Lagoon Preserve] (CDFG 2010). **Absent.**

Contra Costa goldfields (*Lasthenia conjugens*) [FE] Valley and foothill grassland, vernal pools, cismontane woodland. Extirpated from most of its range, extremely endangered. Vernal pools, swales, low depressions, in open grassy areas. 1-445m. Nearest reported location(s): Isla Vista Tract, west of Goleta [extirpated] (CDFG 2010). Very low potential to occur at the project site due to long history of agricultural land use and disturbance and lack of suitable habitat. **Presumed Absent.**

Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*) [CNPS 1B] Coastal salt marshes, playas, valley and foothill grassland, vernal pools. Usually found on alkaline soils in playas, sinks and grasslands. 1-1400m. Nearest reported location(s): Goleta Slough (CDFG 2010). Very low potential to occur at the project site due to long history of agricultural land use and disturbance and lack of suitable habitat. **Presumed Absent.**

Carmel Valley Malacothrix (*Malacothrix saxatilis* var. *arachnoides*) [CNPS 1B] Chaparral, rocky outcrops or steep, rocky roadcuts. 25-1215m. Nearest reported location(s): San Rafael Mtns. (CDFG 2010). **Absent.**

Pale-yellow layia (*Layia heterotricha*) [CNPS 1B] Cismontane woodland, pinyon-juniper woodland, valley and foothill grassland. Alkaline or clay soils; open areas. 270-1365 m. Nearest reported location(s): Lake Cachuma Dam and Hwy 154 vicinity; San Marcos Pass (CDFG 2010). Very low potential to occur at the project site due to long history of agricultural land use and disturbance and lack of suitable habitat. **Presumed Absent.**

Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*) [CNPS 1B] Chaparral, cismontane woodland, coastal scrub. 35-1000m. Nearest reported location(s): Santa Barbara [3 locations: Rogue Canyon; Mountain Dr.; Bartlett Cyn.]; Brush Peak; San Marcos Pass vic.; Las Vegas Cr; Farren Rd.; Ellwood; Lake Cachuma (CDFG 2010). **Absent.**

Coulter's saltbush (*Atriplex coulteri*) [CNPS 1B] Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Ocean bluffs, ridgetopes, as well as low alkaline places. 10-440m. Nearest reported location(s): Goleta; UCSB; Oak Park [Santa Barbara] (CDFG 2010). **Absent.**

Davidson's saltscale (*Atriplex serenana* var. *davidsonii*) [CNPS 1B] Coastal bluff scrub, coastal scrub. Alkaline soil. 3-250m. Nearest reported location(s): Goleta; Hendry's Beach [Santa Barbara]; Marine Barracks [now UCSB] at Goleta, mesa above ocean [1948] (CDFG 2010). **Absent.**

Estuary seablite (*Suaeda esteroa*) [CNPS 1B] Marshes and swamps. Coastal salt marshes in clay, silt and sand substrates. 0-5m. Nearest reported location(s): Goleta Slough (CDFG 2010). **Absent.**

Santa Barbara morning glory (*Calystegia sepium* ssp. *binghamiae*) [CNPS 1A] Coastal marshes. 0-30m. Nearest reported location(s): Burton Mound; Ellwood (CDFG 2010). **Absent.**

Refugio manzanita (*Arctostaphylos refugioensis*) [CNPS 1B] Chaparral, on sandstone. 300-820m. Nearest reported location(s): "above Goleta"[San Pedro Canyon] (CDFG 2010). **Absent.**

Santa Ynez false lupine (*Thermopsis macrophylla*) [CNPS 1B] Chaparral. Includes *T. m.* var. *agnina*, state-listed Rare. In open areas such as fuel breaks, after burns; on sandstone. 420-2050m. Nearest reported location(s): [several locations] Santa Ynez Mountains (CDFG 2010). **Absent.**

Nuttall's scrub oak (*Quercus dumosa*) [CNPS 1B] Closed-cone coniferous forest, chaparral, coastal scrub. Generally on sandy soils near the coast; sometimes on clay loam. 15-400m. Nearest reported location(s): Mission Canyon (CDFG 2010). **Absent.**

Umbrella larkspur (*Delphinium umbracolorum*) [CNPS 1B] Cismontane woodland. Mesic sites. 400-1600m. Nearest reported location(s): Rogue Canyon, n side of Santa Barbara; Upper Santa Ynez River; Santa Cruz Trail, between Little Pine Spr. and Santa Cruz Cr.; Lower Oso Canyon, north of Santa Ynez River (CDFG 2010). **Absent.**

Mesa Horkelia (*Horkelia cuneata* ssp. *puberula*) [CNPS 1B] Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 70-810m. Nearest reported location(s): Santa Barbara [3 locations: Mountain Dr.; Las Positas Rd.; Hope Ranch]; San Marcos Pass; Farren Rd.; 0.5 mi w of San Antonio Cr, e bank of Dry Cr. (CDFG 2010). **Absent.**

Black-flowered figwort (*Scrophularia atrata*) [CNPS 1B] Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, riparian scrub. Sand, diatomaceous shales, and soils derived from other parent materials; around swales and in sand dunes. 10-250m. Nearest reported location(s): Devereaux dunes, Goleta; n side of SPRR embankment, oil fields near Ellwood (CDFG 2010). **Absent.**

Late-flowered mariposa lily (*Calochortus weedii* var. *vestus*) [CNPS 1B] Chaparral, cismontane woodland. Dry, open coastal woodland, chaparral, on serpentine. 270-1910m. Nearest reported location(s): La Cumbre Peak [2 locations]; San Marcos Pass (CDFG 2010). **Absent.**

Ojai fritillary (*Fritillaria ojaiensis*) [CNPS 1B] Broad-leaved upland forest (mesic), chaparral, lower montane coniferous forest. Rocky sites; one reported as “moist shale talus.” 300-670m. Nearest reported location(s): upper Oso Canyon; Tequepis Canyon (CDFG 2010). **Absent.**

Gambel’s yellowcress (*Nasturtium gambelii*) [FE] Freshwater or brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-1305m (CDFG 2010). **Absent.**

SENSITIVE PLANT COMMUNITIES AND SENSITIVE HABITATS

The following sensitive habitats are reported by the California Natural Diversity Database as occurring within the Goleta Quadrangle, or within one of five adjacent quadrangles.

Southern California Steelhead Stream [G?S?] Nearest reported location(s): Santa Ynez River (CDFG 2010). **Absent.**

Southern Coastal Salt Marsh [G2S2.1] Nearest reported location(s): Goleta Slough area (CDFG 2010). **Absent.**

Southern Vernal Pool [G?S?] Nearest reported location(s): [2 locations] Vic. of Happy Cyn. Rd. and Alisos Ave.; (CDFG 2010). **Absent.**

SENSITIVE ANIMALS

Summary of Sensitive Animals² Evaluated for Their Potential to Occur at the Project Site*

*Including 200-foot buffer around project site

Common Name (<i>Scientific Name</i>)	Status ³		Occurrence on site (Observed, Potentially Occurring, Presumed Absent, Absent)
	Federal	State	
Invertebrates			
Monarch butterfly (<i>Danaus plexippus</i>)	--	--	Absent (wintering sites)
Fishes			
Southern steelhead – southern California ESU (<i>Oncorhynchus mykiss irideus</i>)	FE	CSC	Absent
Tidewater goby (<i>Eucycloglobius newberryi</i>)	FE	CSC	Absent
Amphibian			
California tiger salamander (<i>Ambystoma californiense</i>)	FT	Candidate CE, CSC	Absent
Coast Range newt (<i>Taricha t. torosa</i>)	--	CSC	Absent
Western spadefoot (<i>Spea hammondi</i>)	--	CSC	Absent
Arroyo toad (<i>Anaxyrus californicus</i>)	FE	CSC	Absent
California red-legged frog (<i>Rana draytonii</i>)	FT	CSC	Absent
Reptiles			
Southwestern pond turtle (<i>Actinemys marmorata pallida</i>)	--	CSC	Absent
Coast horned lizard (<i>Phrynosoma blainvillii</i>)	--	CSC	Absent
Silvery legless lizard (<i>Anneilla p. pulchra</i>)	--	CSC	Absent
Coast patch-nosed snake (<i>Salvadora hexalepis virgulata</i>)	--	CSC	Absent
Two-striped garter snake (<i>Thamnophis hammondi</i>)	--	CSC	Absent
Birds			
California condor (<i>Gymnogyps californianus</i>)	FE	CE, CFP	Absent
Bald eagle (<i>Haliaeetus leucocephalus</i>)	FPD	CE, CFP	Absent
Golden eagle (<i>Aquila chrysaetos</i>)	--	CFP	Absent
Northern harrier	--	CSC	Potentially occurring as a

² Includes species reported by the CNDDDB (July, 2010) within the Goleta and eight surrounding quadrangles, as well as additional sensitive species known to occur in the region.

³ As reported in CDFG's Special Animals List (July, 2009).

Common Name (<i>Scientific Name</i>)	Status ³		Occurrence on site (Observed, Potentially Occurring, Presumed Absent, Absent)
	Federal	State	
(<i>Circus cyaneus</i>)			winter visitant, foraging only
White-tailed kite (<i>Elanus leucurus</i>)	--	CFP	Observed, foraging only
American peregrine falcon (<i>Falco peregrinus anatum</i>)	delisted	CE, CFP	Absent
Light-footed clapper rail (<i>Rallus longirostris levipes</i>)	FE	CE, CFP	Absent
Western snowy plover (<i>Charadrius alexandrinus nivosus</i>)	FT	CSC	Absent
Short-eared owl (<i>Asio flammeus</i>)	--	CSC	Potential visitant, transient, foraging only
Long-eared owl (<i>Asio otus</i>)	--	CSC	Absent
Burrowing owl (<i>Athene cunicularia</i>)	--	CSC	Potential visitant, transient, foraging only
Vaux's swift (<i>Chaetura vauxii</i>)	--	CSC	Potential visitant, transient, foraging only
Black swift (<i>Cypseloides niger</i>)	--	CSC	Potential visitant, transient, foraging only
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE	CE	Absent
Loggerhead shrike (<i>Lanius ludovicianus ludovicianus</i>)	--	CSC	Potential visitant
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE	CE	Absent
Bank swallow (<i>Riparia riparia</i>)	--	CT	Absent
Yellow-breasted chat (<i>Icteria virens</i>)	--	CSC	Potential visitant, transient, foraging only
Yellow warbler (<i>Dendroica petechia brewsteri</i>)	--	CSC	Potential visitant, transient, foraging only
Grasshopper Sparrow (<i>Ammodramus savannarum</i>)	--	CSC	Potential visitant, transient, foraging only
Belding's savannah sparrow (<i>Passerculus sandwichensis beldingi</i>)	--	CE	Absent
Tricolored blackbird (<i>Agelaius tricolor</i>)	--	CSC	Absent
Mammals			
Western red bat (<i>Lasiurus blossevillii</i>)	--	CSC	Potentially foraging
Pale big-eared bat (<i>Corynorhinus townsendii pallescens</i>)	--	CSC	Potentially foraging
Western mastiff bat	--	CSC	Potentially foraging

Common Name (<i>Scientific Name</i>)	Status ³		Occurrence on site (Observed, Potentially Occurring, Presumed Absent, Absent)
	Federal	State	
(<i>Eumops perotis californicus</i>)			
Big free-tailed bat (<i>Nyctinomops macrotis</i>)	--	CSC	Potentially foraging
Pallid bat (<i>Antrozous pallidus pacificus</i>)	--	CSC	Potentially foraging
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	--	CSC	Potentially occurring, but with low probability
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	--	CSC	Absent
American badger (<i>Taxidea taxus neglecta</i>)	--	CSC	Potentially occurring, but with low probability
<p>Endangered Species Act (Federal Listing): FE = Federally Endangered, FT = Federally Threatened California Department of Fish and Game Listing: CE = California Endangered. CFP – California Fully Protected Species. California Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. CSC - California Species of Special Concern. A California Species of Special Concern is a species, subspecies or distinct population of an animal native to California that currently satisfies one or more of the following (not necessary mutually exclusive) criteria:</p> <ul style="list-style-type: none"> • Is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role; • Is listed as Federally- but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed; • Is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; • Has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status. 			

Invertebrates

Monarch butterfly (*Danaus plexippus*) Overwinters in high altitude Mexican conifer forests or coastal California conifer or eucalyptus groves. Overwinters in eucalyptus woodland in several locations along Santa Barbara south coast. Wintering sites are considered sensitive by the State of California and by the City of Goleta. Adult of this species (butterflies) are expected to forage at the project site, but there is no potential to overwinter due to lack of suitable roosting habitat. The narrow Eucalyptus stand to the north of the project site adjacent to the 101 Freeway does not provide suitable overwintering habitat. **Absent** (overwintering sites).

Fishes

Southern steelhead- southern California ESU (*Oncorhynchus mykiss irideus*) [FE] Project site lacks aquatic habitats. **Absent.**

Tidewater goby (*Eucycloglobius newberryi*) [FE] Project site lacks aquatic habitats. **Absent.**

Amphibians

California tiger salamander (*Ambystoma californiense*) [FT] Annual grasslands, open woodlands, and vernal pools. Need underground refuges, especially ground squirrel burrows as well as vernal pools or other seasonal water sources for breeding (CDFG 2010). All records for Santa Barbara Co. reported by

CDFG (2010) and by Jennings and Hayes (1994) are substantially west of the site. Project site lacks suitable habitat for breeding and presence during overland dispersal is not expected. **Absent.**

Coast Range newt (*Taricha t. torosa*) [CSC] coastal drainages from Mendocino Co. to San Diego Co. Lives in terrestrial habitats and will migrate over 1km to breed in ponds, reservoirs, and slow moving streams (CDFG 2010). All records for Santa Barbara Co. reported by CDFG (2010) are substantially west of the site. **Absent.**

Western spadefoot (*Spea hammondi*) [CSC] Occurs primarily in grassland habitats, but can be found in valley foothill hardwood woodlands. Vernal pools are essential for breeding and egg laying (CDFG 2010). Project site lacks suitable habitats. All records for Santa Barbara Co. reported by CDFG (2010) are substantially west of the site. **Absent.**

Arroyo toad (*Anaxyrus californicus*) [FE] Semi-arid regions near washes or intermittent streams, including valley foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range. Nearest reported location(s): Mono Creek; Santa Ynez River (CDFG 2010). Project site lacks suitable habitat. **Absent.**

California red-legged frog (*Rana draytonii*) [FT] Lowlands and foothills in or near permanent source of deep water with dense, shrubby or emergent vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat. Nearest reported location(s): Cinquefoil Cr. (CDFG 2010). Project site lacks suitable habitat. **Absent.**

Reptiles

Southwestern pond turtle (*Actinemys marmorata pallida*) [CSC]. Inhabits permanently or nearly permanent bodies of water in many habitat types, below 6,000 ft elev. Requires basking sites such as partial submerged logs, vegetation mats, or open mud banks. Needs suitable nesting sites. Nearest reported location(s): San Rogue Canyon; Santa Ynez River; Mono Cr.; Indian Cr.; Lake Cachuma (CDFG 2010). Project site lacks suitable habitat. **Absent.**

Coast horned lizard (*Phrynosoma blainvillii*) [CSC] Inhabits a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects (CDFG 2010). The project site is within the species' range, as shown by maps in Zeiner et al. (1988) and Jennings and Hayes (1994). All records for Santa Barbara Co. reported by CDFG (2010) are substantially west of the site. **Absent.**

Silvery legless lizard (*Anniella p. pulchra*) [CSC] Sandy areas within other habitats, also in litter under live oaks. All records for Santa Barbara Co. reported by CDFG (2010) are substantially west of the site. **Absent.**

Coast patch nosed snake (*Salvadora hexalepis virgulata*) [CSC] Associated with brush or shrubby vegetation, such as chaparral. (CDFG 2006) The western patch-nosed snake is widely distributed throughout the lowlands, up to 2120 m (7000 ft), of southern California from the coast to the eastern border. Whiptail lizards are prey. **Absent.**

Two-striped garter snake (*Thamnophis hammondi*) [CSC] Coastal California from vicinity of Salinas to Northwest Baja California, from sea level to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth. Nearest reported location(s): Aliso Cyn.; Rattlesnake Cyn. (CDFG 2010). Project site lacks suitable habitat. **Absent.**

Birds

California condor (*Gymnogyps californianianus*) [FE, CE] Require vast expanses of open savannah, grassland, and foothill chaparral in mountain ranges of moderate altitude. Deep canyon,s containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest. Nearest reported location(s): Sisquoc-San Rafael Condor area (CDFG 2010). **Absent.**

Bald eagle (*Haliaeetus leucocephalus*) [FPD, CE] (Nesting and wintering) Ocean shore, lake margins and rivers for both nesting and wintering. Most nests within 1 mi of water. Nests in large, old-growth, or dominant live tree with open branches, especially Ponderosa Pine. Roosts communally in winter. Nearest reported location(s): Lake Cachuma territory (CDFG 2010). **Absent.**

Golden eagle (*Aquila chrysaetos*) [CFP; birds and their nests protected by F&G code 3503 and 3503.5] Uncommon resident, favoring grasslands, brushlands, deserts, oak savannahs, open coniferous forest, and montane valleys, nesting in rugged, mountainous country (Garrett and Dunn 1981). **Absent.**

Northern harrier (*Circus cyaneus*) [CSC; birds and their nests protected by F&G code 3503 and 3503.5]. Fairly common winter visitant to open grasslands, agricultural fields, freshwater and coastal salt marshes, estuaries, open desert and brushlands in all districts (Garrett and Dunn 1981). Has been observed roosting at Los Carneros Wetlands (GSEMP, 1997). Potentially a winter visitor at Goleta Slough, and may forage occasionally at the site, when present. **Potential winter visitant**, foraging only.

White-tailed kite (*Elanus leucurus*) [CFP, birds and their nests protected by F&G code 3503 and 3503.5] Open grasslands, savanna-like habitats, agricultural areas, wetlands, oak woodlands, riparian habitats. Regular breeder and year-round resident in the Goleta area. Winter roosts are often found in Goleta (Garrett and Dunn 1981). The Los Carneros Wetlands have been used as a nesting site (GSEMP, 1997). Three individuals were observed on July 16, 2010 by Envicom Corporation foraging over the project site. **Observed.**

American peregrine falcon (*Falco peregrinus anatum*) [delisted FE, CE, CFP, birds and their nests protected by F&G code 3503 and 3503.5] Primarily a rare fall transient and winter visitant along the immediate coast (Garrett and Dunn 1981). **Absent.**

Light-footed clapper rail (*Rallus longirostris levipes*) [FE, CE] Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Require dense growth of either pickleweed or cordgrass for nesting or escape cover; feeds on molluscs and crustaceans. Nearest reported location(s): Goleta Slough marshes [extirpated] (CDFG 2010). **Absent.**

Western snowy plover (*Charadrius alexandrinus nivosus*) [FT] (Nesting) Federal listing applies only to Pacific coastal population. Sandy beaches, salt ponds and levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting. Nearest reported location(s): Santa Barbara Beach; Goleta Slough flats; sandy beach near mouth of Devereaux Slough (CDFG 2010). **Absent.**

Short-eared owl (*Asio flammeus*) [CSC, birds and their nests protected by F&G code 3503 and 3503.5] Uncommon and local winter visitant along the coast, where it formerly nested. Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands (Zeiner et al. 1990b). Zeiner et al. (1990) indicate the project area is within the winter range of the species. Has been observed roosting at the Los Carneros Wetlands, but as a rare vagrant (GSEMP, 1997). **Potential visitant, transient**, foraging only.

Long-eared owl (*Asio otus*) [CSC, birds and their nests protected by F&G code 3503 and 3503.5]. Very rare transient and winter visitant along the coast (Garrett and Dunn 1981). Riparian habitat required; also

uses live oak thickets and other dense stands of trees (Zeiner et al. 1990b). **Absent.**

Burrowing owl (*Athene cunicularia*) [CSC, birds and their nests protected by F&G code 3503 and 3503.5]. Resident in open areas of the lowlands over much of the region (Garrett and Dunn 1981). Formerly a common breeder from coastal bluffs to foothills in Goleta area, and formerly a regular winter visitor. Now, occurs only occasionally in winter. An individual burrowing owl was observed at an undeveloped area in the vicinity of the project site to the west of Los Carneros Road on November 7, 2006 by City of Goleta staff personnel Patricia Miller and Laura Vlk. In addition, Julie Love observed a burrowing owl near the Goleta Slough on November 8, 2006 (Anne Wells, personal communication with Carl Wishner, Principal Biologist at Envicom Corporation). **Potential visitant, transient**, foraging only.

Vaux's swift (*Chaetura vauxi*) [CSC] Fairly common spring and fall transient in southern California, and rare and irregular winter visitant, primarily along the coast (Garrett and Dunn 1981). A summer resident of northern California. Breeds fairly commonly in the Coast Ranges from Sonoma Co. north, and very locally south to Santa Cruz Co.; in the Sierra Nevada; and possibly in the Cascade Range. Prefers redwood and Douglas-fir habitats with nest-sites in large hollow trees and snags, especially tall, burned-out stubs. Fairly common migrant throughout most of the state in April and May, and August and September. A few winter irregularly in southern coastal lowlands (Zeiner et al. 1990b). **Potential visitant, transient**, foraging only.

Black swift (*Cypseloides niger*) [CSC] Rare and irregular transient through coastal district, nesting at a few steep waterfall locations in the San Gabriel, San Bernardino, and San Jacinto mountains (Garrett and Dunn 1981). Breeds very locally in the Sierra Nevada and Cascade Range, the San Gabriel, San Bernardino, and San Jacinto Mts., and in coastal bluffs and mountains from San Mateo Co. south probably to San Luis Obispo Co. Nests in moist crevice or cave on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons. Forages widely over many habitats (Zeiner et al. 1990b). **Potential visitant, transient**, foraging only.

Southwestern willow flycatcher (*Empidonax traillii extimus*) [FE, CE] (Nesting) Riparian woodland in southern California. Uncommon spring transient and fairly common fall transient along the coast. Formerly breeding in riparian woodlands, but virtually extirpated from the region (Garrett and Dunn 1981). A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats at 2000-8000 ft. in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows (Zeiner et al. 1990b). Nearest reported location(s): Mono Campground; Santa Ynez River (CDFG 2010). Project site lacks suitable habitat for this species. **Absent.**

Loggerhead shrike (*Lanius ludovicianus ludovicianus*) [CSC] Fairly common resident in open areas throughout the region (Garrett and Dunn 1981). A common resident and winter visitor in lowlands and foothills throughout California. Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Occurs only rarely in heavily urbanized areas, but often found in open cropland. Sometimes uses edges of denser habitats (Zeiner et al. 1990b). Observed in October 2005 during surveys of undeveloped site in vicinity to the west of Los Carneros Road by C. Wishner. This species may occur at the site while foraging, but probably not nesting. **Potential visitant.**

Least Bell's vireo (*Vireo bellii pusillus*) [FE, CE] (Nesting) Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, *Baccharis*, mesquite. Now a rare and local summer resident in lowland riparian woodlands, breeding in willow thickets and other dense, low riparian growth in lowlands and the lower portions of the canyons, generally along permanent or semi-permanent streams. Casual in winter (Garrett and Dunn 1981). Nearest reported location(s): [3 locations] Santa Ynez River (CDFG 2010). Project site lacks suitable habitat. **Absent.**

Bank swallow (*Riparia riparia*) [CT] (Nesting) Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured sandy soils near streams, rivers, lakes, ocean to dig nesting hole. Very uncommon spring transient and rare fall transient, and casual winter transient along the coast, formerly a fairly common summer resident, now virtually extirpated as a breeder in the region (Garrett and Dunn 1981). Nearest reported location(s): Hendries Beach [aka Arroyo Burro Beach, 1927] (CDFG 2010). Nesting habitat for this species absent. **Absent.**

Yellow-breasted chat (*Icteria virens*) [CSC] Uncommon and local summer resident in riparian thickets and brushy tangles of the lowlands and lower portions of foothill canyons (Garrett and Dunn 1981). Recorded in the Goleta Slough but expected as only a rare migrant (GSEMP, 1997). Reported from Tecolotito Creek in previous years (Wes Fritz, personal communication with C. Wishner on October 18, 2005). **Potential visitant, transient**, foraging only.

Yellow warbler (*Dendroica petechia brewsteri*) [CSC] Common transient throughout region, and uncommon to locally common summer resident in lowland and foothill riparian woodlands, remaining rarely but regularly in lowlands in winter. Breed in tall riparian growth of cottonwoods, alders, willows, etc. (Garrett and Dunn 1981). Reported breeding at Tecolotito Creek in previous years (Wes Fritz, personal communication with C. Wishner on October 18, 2005). A common to very common spring and fall transient in nearly all shrubby and wooded habitats during migration with the Goleta Slough ecosystem (GSEMP, 1997). **Potential visitant, transient**, foraging only.

Grasshopper Sparrow (*Ammodramus savannarum*) [CSC] Uncommon and very local summer resident on grassy slopes and mesas west of the deserts. Breeding localities include west of Goleta (Garrett and Dunn 1981). **Potential visitant, transient**, foraging only.

Belding's savannah sparrow (*Passerculus sandwichensis beldingi*) [CE] Inhabits coastal salt marshes from Santa Barbara south through San Diego Co. Nests in *Salicornia* on and about the margins of tidal flats. Nearest reported location(s): Goleta Slough (CDFG 2010). Suitable habitat absent at the project site. **Absent.**

Tricolored blackbird (*Agelaius tricolor*) [CSC] Formerly more common, now an uncommon and very local breeder in Santa Barbara County in dense stands of bulrushes and cattails. Until the early 1980s, bred in the Goleta Slough (GSEMP, 1997). Project site lacks suitable habitat. **Absent.**

Mammals

Too little information is available to assess the potential for the occurrence of bat species in the region or vicinity of the project site. *All* of the bat species listed below are considered potentially present while foraging.

Big free-tailed bat (*Nyctinomops macrotis*) [CSC] Low-lying arid areas in southern California. Need high cliffs or rocky outcrops. Project site is included within the range of this species as reported by Constantine (1998). Rare in California, most records from coastal southern California to Santa Barbara

San Luis Obispo Counties. Nearest reported location(s): Santa Barbara (CDFG 2010). Project site lacks roosting habitat. Potential to occur cannot be discounted. **Potential to occur**, but foraging only.

Western mastiff bat (*Eumops perotis californicus*) [CSC] Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels. Nearest reported location(s): White Rock Recreation Area, Upper Santa Ynez Valley, north of Paradise Canyon (CDFG 2010). Project site lacks roosting habitat. Potential to occur cannot be discounted. **Potential to occur**, but foraging only.

Western red bat (*Lasiurus blossevillii*) [Status: CSC]. Roosts in forests and woodlands, and feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Foliage-dwelling, migratory bat occurs in California's Central Valley, foothills, and in similar areas of tree growth in southern California (Constantine 1998). Project site lacks roosting habitat. Potential to occur cannot be discounted. **Potential to occur**, but foraging only.

Townsend's big-eared bat (*Corynorhinus townsendii*) [Status: CSC]. Found in a wide variety of habitats except subalpine and alpine. Widely ranging in California. Roosts in caves, buildings and mines. Potential for occurrence of this species cannot be discounted. Project site lacks roosting habitat. **Potential to occur**, foraging only.

Pallid bat (*Antrozous pallidus pacificus*) [Status: CSC]. Occurs in a wide variety of habitats including grasslands, shrublands, woodlands and forests from sea level to mixed conifer forests. Roosts colonially in caves, buildings and occasionally hollow trees. Has been recorded foraging over the Goleta Slough (GSEMP, 1997). Project site lacks roosting habitat. Potential to occur cannot be discounted. **Potential to occur**, but foraging only.

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) [Status: CSC]. Inhabits desert scrub, coastal scrub and early stages of forest and chaparral habitats (Zeiner et al. 1990a). Found in open and semi-open grasslands and coastal sage scrub. Commonly occurred in grassland and disturbed habitat along runways within the Goleta Slough Ecosystem, but not present in the Ecosystem since late 1980s (GSEMP, 1997). This species could potentially reach the site from the foothills of the Santa Ynez Mountains byway of natural habitats adjacent to Los Carneros Creek, but given the fragmented and disturbed condition of the project site and vicinity, this is considered unlikely. **Potentially occurring**, but with low probability.

San Diego desert woodrat (*Neotoma lepida intermedia*) [Status: CSC]. Occurs in a variety of habitats from sea level to 8500 feet (Zeiner et al. 1990a). Project site lacks suitable habitat such as rock outcrops preferred by this species for nest structures. **Absent**.

American badger (*Taxidea taxus*) [Status: CSC]. Occurs in a diversity of habitats throughout California, except the extreme northern coast (Williams 1986; Zeiner et al. 1990a). Found in open grasslands where gophers and ground squirrels are abundant. Recorded in the Goleta Slough as late as 1986 (GSEMP, 1997). This species could potentially reach the site from undeveloped areas to the north byway of Los Carneros Creek, although given the fragmented and disturbed condition of the project site and vicinity, as well as its small size, this is considered unlikely. Any occurrence would likely be transient. **Potentially occurring**, but with low probability.