4.3 BIOLOGICAL RESOURCES

4.3.1 Setting

This discussion is based on prior analyses conducted for the 1998 CSUCI Master Plan EIR, the 2000 Facilities Projects Supplemental EIR, additional habitat assessment and jurisdictional delineation studies conducted by Rincon Consultants in 2008 for the 153-acre New Access Road Area parcel, and prior wetland and habitat assessments conducted for the County of Ventura concerning the 370-acre potential future conveyance parcel.

Natural areas within the campus site are largely confined to the hillsides, which are covered primarily by Venturan coastal sage scrub. Open areas in the flatlands have historically been maintained by mowing and occasional disking. The developed portions of the campus have been extensively landscaped primarily with grass and many trees, most being English plane trees (*Platanus* sp.), Peruvian pepper trees (*Schinus molle*), and various gums (*Eucalyptus* sp.). The plant and animal communities and special-status species present within the main campus area have been previously described in the prior environmental documentation to which this document is a supplement. Therefore, the following analysis is limited to those areas within which the currently proposed facilities are to be constructed and the proposed open space conveyance area located to the north of the main campus. Figure 4.3-1 generally illustrates the habitats present within the entire campus and the proposed open space conveyance area.

a. Vegetation

New Access Road Area. This 153-acre area was recently acquired by the CSU and was formerly mostly in agricultural production. The southwest corner of this parcel had been developed as an irrigation pond that stores water from Long Grade Canyon channel for use during the summer, and this pond may have also received pumped water from the agricultural field. The total pond size is 4.4 acres, of which approximately 0.7 acres was already within the CSUCI property prior to conveyance of the 153 acres. A berm containing ruderal vegetation separates this pond from a linear ditch (1.1 acres) that is used to collect runoff water from the agricultural fields. Based on the field visits, it appears that water was pumped from this pond during the winter through the culverts under Old Lewis Road to Calleguas Creek. During the summer, overflow irrigation water was pumped from the ditch to the irrigation pond for later reuse. The irrigation pond also eventually connects to Calleguas Creek via the Long Grade Canyon Creek flapgates.

Long Grade Canyon Creek adjacent the New Access Road Area contains a mix of riparian, freshwater marsh, and non-native, ruderal and ornamental communities. Riparian vegetation within the central portion of the drainage consists of willow/mule fat scrub dominated by arroyo willow (*Salix lasiolepis*) and mule fat (*Baccharis salicifolia*), with scattered black willow (*Salix gooddingii*). Emergent stands of freshwater marsh species such as bulrush (*Scirpus* sp.) and cattail (*Typha* sp.) are scattered within the central portion of the creek and are dominant within a detention pond located in the furthest downstream (western) portion. Non-native ruderal weeds such as summer mustard (*Hirschfeldia incana*), cocklebur (*Xanthium strumarium*), and poison hemlock (*Conium maculatum*) are dominant along large portions of the Creek's southern embankment. The far eastern portion of the Creek is dominated by non-native, ornamental vegetation including Peruvian pepper trees (*Schinus sp.*) and fan palms (*Washingtonia robusta*).

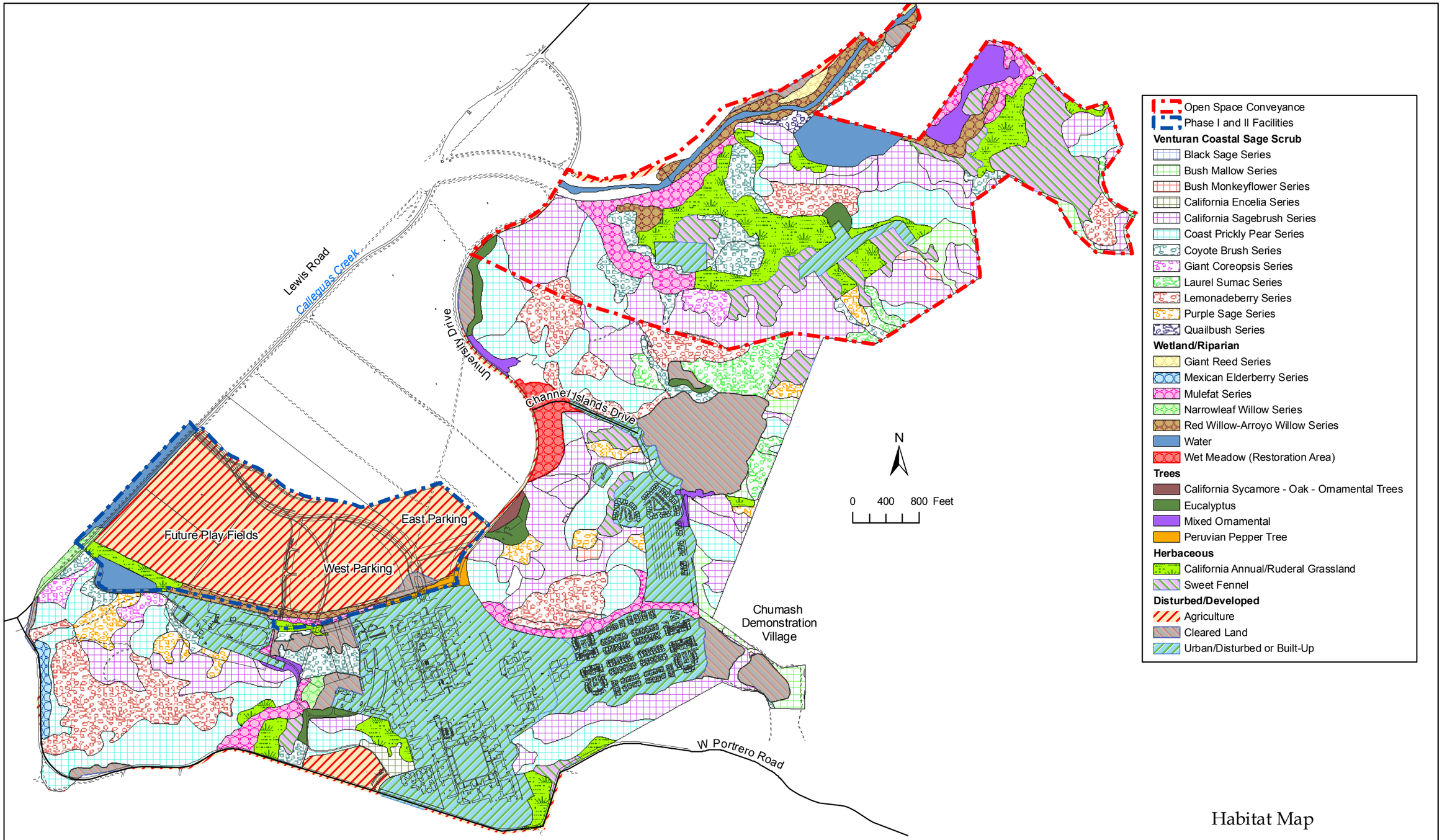
The portion of Calleguas Creek adjacent the New Access Road Area contains a mix of freshwater marsh and ruderal vegetation. Dominant species present within the channel bottom include cattail, white sweet-clover (*Melilotus alba*), and cocklebur. Bulrush, tall flatsedge (*Cyperus eragrostis*), and tree tobacco (*Nicotiana glauca*) are common. The adjacent levee embankments contain cemented rip-rap with minimal vegetation. Sparsely scattered species include red brome (*Bromus madritensis* ssp. *rubens*), and tumbleweed (*Amaranthus albus*).

The former agricultural field north of Long Grade Canyon Creek now lies fallow and contains a mix of remnant crop species, ruderal vegetation, and bare ground. Dominant species present include cilantro (*Coriandrum sativum*), prostrate knotweed (*Polygonum aviculare*), nettleleaf goosefoot (*Chenopodium murale*), cheeseweed (*Malva parviflora*), and common sow-thistle (*Sonchus oleraceus*). The agricultural ditch that traverses along the northern levee of Long Grade Canyon Creek contains ruderal weeds, grasses such as Bermuda grass (*Cynodon dactylon*), Mexican sprangletop (*Leptochloa uninervia*), and rabbitsfoot grass (*Polygonum monspeliensis*), and sparsely scattered stands of bulrush. Duckweed (*Lemna minor*) is present in the western portion of the ditch.

Potential Future Open Space Conveyance Area (Camarillo Regional Park). This potential future conveyance area includes about 370 acres of natural habitats and disturbed open space along Calleguas Creek, which is within the northern boundary of the site and flows in a southwesterly direction. The primary general habitat types in this area are Venturan coastal sage scrub, California annual grassland, ruderal grassland, and willow riparian forest.

Venturan coastal sage scrub occupies most of the potential future conveyance area and is dominated by drought-tolerant, drought-deciduous, low-growing, soft-leaved, grayish-green, spring-flowering, fire-adapted shrubs and subshrubs. Venturan coastal sage scrub forms various stands with specific characteristics and site requirements; therefore, it is often considered as a collection of species-specific plant series. Venturan coastal sage scrub occurs on dry, more or less rocky slopes, often at lower elevations (Holland, 1986). The predominant Venturan coastal sage scrub habitats existing within the potential future conveyance area include plant communities dominated by chaparral bush mallow (*Malacothamnnus fasciculatus*), California sagebrush (*Artemisia californica*), coast prickly pear (*Opuntia litorallis*), coyote brush (*Baccharis pilularis*), giant coreopsis (*Coreopsis gigantea*), laurel sumac (*Malosma laurina*), lemonadeberry (*Rhus integrifolia*), and purple sage (*Salvia leucophylla*). Other important associates include purple sage (*Salvia leucophylla*), California bush sunflower (*Encelia californica*), ashy-leaved buckwheat (*Eriogonum cinereum*), California buckwheat (*Eriogonum fasciculatum* var. *foliolosum*), bladderpod (*Isomeris arborea*), giant wildrye (*Leymus condensatus*), bush monkeyflower (*Mimulus aurantiacus*), sawtooth goldenbush (*Hazardia squarrosa* var. *grindelioides*), and deerweed (*Lotus scoparius*). This habitat is considered a sensitive habitat by the California Department of Fish and Game (CDFG).

California annual grassland is dominated by annual grasses that are primarily Mediterranean in origin. Dominant genera include *Bromus, Avena, Vulpia,* and *Hordeum*. Many species of native forbs and bulbs, as well as naturalized annual forbs are found in California annual grassland. Floristic richness is affected to a high degree by past and present land use activity. California annual grassland occurs on all aspects on most geomorphic features where soils are deep, particularly where slopes are gradual, at elevations between sea level and 1,200 meters. Grassland species composition may vary from stand to stand (Sawyer and Keeler-Wolf 1995). California annual grassland occurs on gradual slopes within the potential future conveyance



Habitat Map

Base Map Source: Boyle Engineering, 2008 and Ventura County RMA, 2008.

Figure 4.3-1

area below 300 feet in elevation. Common forbs found onsite include: rancher's fire (*Amsinckia menziesii* var. *intermedia*), fasciculed tarplant (*Deinandra fasciculata*), purple owl's-clover (*Castilleja exserta* ssp. *exserta*), lupines (*Lupinus* spp.), dove weed (*Eremocarpus setigerus*), California poppy (*Eschscholzia californica*), common eucrypta (*Eucrypta chrysanthemifolia* ssp. *chrysanthemifolia*), everlastings (*Gnaphalium* and *Pseudognaphalium* spp.), caterpillar phacelia (*Phacelia cicutaria*), western ragweed (*Ambrosia psilostachya* var. *californica*), narrowleaf milkweed (*Asclepias fascicularis*), goldenstars (*Bloomeria crocea*), blue dicks (*Dichelostemma capitatum* ssp. *capitatum*), and western verbena (*Verbena lasiostachys*).

Ruderal grassland also occupies a large portion of this potential future conveyance area. Ruderal grassland is a plant community that is typically in early successional stages as a result of a severe human disturbance, or because the land was formerly disturbed by humans and is now subject to recurrent natural disturbance. This plant community is dominated by annual and perennial, introduced/nonnative, pioneering, herbaceous plants that readily colonize disturbed ground. Such communities are a threat to natural biodiversity because they continually distribute invasive, highly competitive non-native propagules into otherwise native vegetation. Ruderal grassland that is left undisturbed can typically undergo succession towards more stable, less weedy, plant communities. Predominant and characteristic plants of the ruderal grassland plant communities include: Russian knapweed (*Acroptilon repens*), purple pampas grass (*Cortedaria jubata*), Bermuda grass (*Cynodon dactylon*), Prickly wild lettuce (*Lactuca serriola*), white horehound (*Marrubium vulgare*), milk thistle (*Silybum marianum*), tree tobacco (*Nicotiana glauca*), prickly ox-tongue (*Picris echioides*), wild radish (*Raphanus sativus*), castor bean (*Ricinus communis*), Russian thistle (*Salsola tragus*), cheeseweed (*Malva parviflora*), black mustard (*Brassica nigra*), and summer mustard (*Hirschfeldia incana*). Large patches of sweet fennel (*Foeniculum vulgare*) have been mapped as a separate unit on Figure 4.3-1.

A portion of Calleguas Creek within the potential future conveyance area is **narrowleaf willow-arroyo willow scrub**, which is co-dominated by narrow-leaf willow (*Salix exigua*) and arroyo willow (*Salix lasiolepis*), with mulefat (*Baccharis salicifolia*) as an important constituent. This scrub, also called southern willow scrub (Holland 1986), forms dense riparian thickets with little understory development. Site factors include loose, sandy, or fine gravelly alluvium deposited near stream channels during flood flows. This early seral type requires repeated flooding to prevent succession to southern willow riparian forest, and generally occurs in seasonally flooded or saturated, freshwater, wetland habitats, such as floodplains and low-gradient depositions along rivers and streams, at elevations below 1,800 meters (Sawyer and Keeler-Wolf 1995). This wetland habitat is considered sensitive by CDFG.

Narrowleaf willow-arroyo willow scrub was observed primarily along Calleguas Creek, and important additional associate riparian species include mugwort (*Artemisia douglasiana*), poison hemlock (*Conium maculatum*), water cress (*Rorippa nasturtium-aquaticum*), red willow (*S. laevigata*), and common speedwell (*Veronica anagallis-aquatica*).

Southern willow riparian forest (Holland 1986) dominated by arroyo willow and stands of red willow (*Salix laevigata*) occupies much of Calleguas Creek. This riparian forest is characterized as a tall, open, winter-deciduous, broad-leaved willow canopy growing over a shrubby understory. Site factors include sub-irrigated and frequently overflowed lands along rivers and stream, and the dominant species require moist, bare mineral soil for germination and establishment. This habitat is considered sensitive by CDFG. This plant community can also be classified as red willow-arroyo willow series (see Figure 4.3-1), which occurs in seasonally

flooded or saturated freshwater wetland habitats, such as floodplains and low-gradient depositions along rivers and streams, and it is abundant in marshes, meadows, and springs. This series occurs at elevations below 1,800 meters and forms a continuous canopy over a sparse shrub layer and variable ground layer (depending on canopy thickness). Other emergent winter-deciduous riparian trees may be present (Sawyer and Keeler-Wolf 1995). Important associate tree and shrub species include narrowleaf willow and mulefat. Scattered trees include California sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii* ssp. *fremontii*), and velvet ash (*Fraxinus velutina*). One coast live oak (*Quercus agrifolia*) tree was also observed in this plant community.

b. Flora

The flora of the CSUCI campus and project site are discussed below and each respective plant list is attached as an appendix.

Campus Area. A botanical survey was conducted within the then planned residential area and an adjacent 100-foot fuel modification zone during June and July 1999 by Rincon Consultants, Inc. This survey was floristic in nature; namely, every plant encountered was identified sufficiently to determine whether or not it was a listed rare species. When rare species were encountered, they were field mapped. The entire survey area was examined by walking through the habitat by wandering transects. Specific plants of interest looked for included Verity's dudleya (known to be within the fuel modification area), Blochman's dudleya, Plummer's mariposa-lily, Catalina mariposa-lily, and Conejo buckwheat. The plant species reported within the CSUCI campus includes 215 species, and those species are listed in Appendix C.

Potential Future Open Space Conveyance Area. The plant species reported within Camarillo Regional Park by David Magney Environmental Consulting (DMEC) in a 2004 study are presented in Appendix C. The flora of Camarillo Regional Park consists of 225 vascular plant taxa, of which 153 (68%) are native and 73 (32%) are nonnative. This ratio of native to nonnative species is higher than found for the entire California flora, which is 25% naturalized nonnative (Hickman 1993). Approximately 83 species of the plants found onsite are typically found in wetland habitats (includes all OBL, FACW, and FAC wetland indicator status plants as listed in Reed [1988]), while the remaining species are typically found in upland/terrestrial habitats. The wetland plants at Camarillo Regional Park represent 37% of the flora within the park. At least 29 species of lichens occur at Camarillo Regional Park, which occur primarily in upland habitats (DMEC 2004.)

c. Fish and Wildlife Habitats

The vegetation of the project site provides habitat for a variety of common native and nonnative vertebrate species. While some species are entirely dependent on a particular vegetation type or habitat, most of the larger vertebrate species occur throughout the habitats present. Discussed below are the common vertebrate species noted or expected within the habitats present within the proposed conveyance areas.

New Access Road Area. The majority of this parcel was until recently an agricultural field that provides little fish and wildlife habitat. The irrigation pond provides open water used by several common waterfowl, particularly coot and mallard. Limited breeding by these two

species may occur around this pond. Other species found in this pond include the non-native mosquito fish and bullfrog, and native tree frogs and western toad. The ruderal vegetation along the edges of the parcel provides limited habitat to several common bird and mammal species. The pond does not provide suitable basking sites for southwest pond turtle and this species is not expected to occur within this area. Similarly, the California red-legged frog has not been recorded in this area, nor is the habitat present at the site considered suitable for breeding by this species. Common wildlife species observed or detected in the riparian, and/or freshwater marsh communities include great egret (*Ardea alba*), black-crowned night-heron (*Nycticorax nyticorax*), black phoebe (*Sayornis nigricans*), phainopepla (*Phainopepla nitens*), orange-crowned warbler (*Vermivora celata*), common yellowthroat (*Geothlypis trichas*), spotted towhee (*Pipilo maculatus*), and song sparrow (*Melospiza melodia*). Species observed or detected in the ruderal/agricultural communities include red-shouldered hawk (*Buteo jamaicensis*), ash-throated flycatcher (*Myiarchus cinerascens*), western kingbird (*Tyrannus verticalis*), red-winged blackbird (*Agelaius phoeniceus*), house finch (*Carpodacus mexicanus*), and lesser goldfinch (*Carduelis psaltria*).

Potential Future Open Space Conveyance Area. Many species of wildlife are known to occur at Camarillo Regional Park and within Calleguas Creek, and frequent the riparian and aquatic habitats on a seasonal basis provided by the creek. The fauna reported by DMEC (2004) and Impact Sciences (1997) at Camarillo Regional Park are provided in Appendix C. A total of 137 species of wildlife present or expected onsite in both wetland and upland habitat include:

- Fishes (3 native species, 3 nonnative);
- Amphibians (4 native species, 1 nonnative);
- Reptiles (16 native species);
- Birds (82 native species, 3 nonnative); and
- Mammals (26 native species, 1 nonnative).

Fish species richness and diversity in Calleguas Creek are low compared to other similar-sized streams in the region. Amphibian species richness is relatively low at the park, due primarily because of farming activities to the west and past disturbances within the park. Reptile species richness is normal for this area with five species observed and another nine native species expected and likely present. Bird species richness is relatively high, due to the variety of habitats present. Mammal species diversity is relatively high, also likely a result of the variety of habitats present, and proximity to extensive natural habitats eastward in the Conejo Mountains. Invertebrate species richness and diversity is expected to be high as a result of the presence of a wide variety of habitats.

The structure of the riparian community, in addition to the relatively high plant species diversity and richness, provides habitat necessary for foraging, nesting, and cover for many species. The riparian zone is used as migration/movement corridors by various species of wildlife including small and large mammals, birds, and reptiles. These movement corridors often connect habitat patches, and allow for physical and genetic exchange between animal populations. Wildlife use riparian zones for cover while traveling across otherwise open areas.

d. Regulatory Setting

Federal, state, and local authorities under a variety of legislative acts share regulatory authority over biological resources. The primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions, in this instance, the California State University. The California Environmental Quality Act (CEQA) provides a mechanism through which biological resources must be considered in the decision-making process regarding land use by the local authority. The CDFG is a trustee agency for biological resources throughout the state under CEQA and also is considered a regulatory agency regarding Streambed Alteration Agreements with direct jurisdiction under law under the Fish and Game Code of California. The U.S. Army Corps of Engineers (USACE) has regulatory authority over specific biological resources, namely wetlands and waters of the United States, under Section 404 of the federal Clean Water Act. Protection for wetlands and riparian habitat is also afforded through the California Fish and Game Code, and the Los Angeles Regional Water Quality Control Board (RWQCB). Additionally, Section 3503.5 of the Fish and Game Code of California protects birds of prey, their nests and eggs against take, possession, or destruction. Under the State and Federal Endangered Species Acts, the CDFG and the U.S. Fish and Wildlife Service (USFWS) also have direct regulatory authority over species formally listed as Threatened or Endangered. The state and federal Endangered Species Acts (ESAs) are relevant to significance criteria considered under CEQA in that they provide a regulatory framework that defines "take" of an organism, and also the appropriate means and methods to mitigate such action.

California Endangered Species Act. The California ESA take restrictions are encoded at Section 2080, while Section 2081 details the requirements regarding incidental take. The following criteria regarding "incidental take" are relevant per Section 2081 and the CDFG Code of Regulations (Section 783.4):

- The take will be incidental to an otherwise lawful activity.
- The applicant will minimize and fully mitigate the impacts of the authorized take. Measures to meet this obligation are to be roughly proportional to the extent of authorized take. Where various measures are available, measures shall maintain the applicant's objectives to the greatest extent possible. All required measures shall be capable of successful implementation.
- The applicant is to ensure adequate funding to implement the measures and to monitor compliance and effectiveness of the measures.
- No incidental take permit shall be issued if such issuance would jeopardize the continued existence of the species.

Federal Endangered Species Act. Pursuant to the Federal Endangered Species Act (FESA), a permit from USFWS is required for "take" of a federally listed species through either the Section 7 or Section 10 consultation process. Section 7 of the FESA provides for the issuance of an incidental take permit subject to mitigating requirements where a federal agency has direct permit responsibility for the action. This consultation process includes a Biological Assessment of the predicted impacts of a project on the species with measures to minimize and mitigate for such impacts. The result is a Biological Opinion rendered by USFWS that includes a specified allowable incidental take, as well as terms and conditions to minimize and offset such take.

Section 10(a) of the FESA provides for the submittal of a voluntary Habitat Conservation Plan (HCP) where direct federal jurisdiction is lacking, but the mitigation requirements are similar as

for Section 7. An incidental take permit may be issued pursuant to a finding that take will be minimized and mitigated to the maximum extent practicable and that the taking will not appreciably reduce the likelihood of the survival and recovery of the taxa in the wild. Conveyance of the take permit includes development of an HCP for protecting and enhancing the federally listed species at a specific location in perpetuity. Under Section 10(a), an HCP is required to contain:

- The impact likely to occur due to the action;
- Steps taken to minimize and mitigate impacts and the funding that will be available to implement those steps;
- Alternative actions considered and reasons why such alternatives are not utilized; and
- Any measures or conditions required by the federal government as being necessary or appropriate.

Section 9(a)(2) of the federal Endangered Species Act contains the prohibitions against take of listed plant species, while Section 9(a)(1) contains the restrictions regarding fish and wildlife. Because of differences in these two code sections, federal control over change in habitat land use for plants under the federal ESA is limited. While animals are protected no matter where they are located, protection for plants extends only to those areas in federal jurisdiction, or where listed plants are removed in knowing violation of state law.

e. Special-Status Species Definitions

In response to their legislative mandates, regulatory authorities have designated sensitive biological resources to include those specific organisms that have regionally declining populations such that they may become extinct if population trends continue. Habitats are also considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance.

Listed species are those taxa that are formally listed as endangered or threatened by the federal government (e.g. USFWS), pursuant to the Federal Endangered Species Act (FESA) or as endangered, threatened, or rare (for plants only) by the State of California (i.e. California Fish and Game Commission), pursuant to the California Endangered Species Act (CESA) or the California Native Plant Protection Act. Some species are considered rare (but not formally listed) by resource agencies, organizations with biological interests/expertise (e.g. Audubon Society, California Native Plant Society [CNPS], The Wildlife Society), and the scientific community.

Special-status habitats are vegetation types, associations, or sub-associations that support concentrations of special-status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife.

The CNPS' *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001, 2006) categorizes rare California plants into one of five lists (1A, 1B, 2, 3, and 4) representing five levels of species status, one of which is assigned to a sensitive species to indicate its status of rarity or endangerment and distribution. Most taxa also receive a threat code extension following the List (e.g. 1B.1, 2.3), which replaces the old R-E-D Code previously used by CNPS. Table 4.3-1 provides a definition for each List code number, and Table 4.3-2 defines the Threat Code Extensions that indicates the level of endangerment within the state as determined by this

organization. Please note that the CNPS *Inventory* is used as a tool by CDFG to help identify those plants that may qualify for listing under the CESA, with the formal list kept by CDFG being the *Special Vascular Plants, Bryophytes and Lichens List* (CDFG 2008c).

Table 4.3-1 California Native Plant Society List Definitions

CNPS List	Definition
1A	Presumed Extinct in California
1B	Rare, Threatened, or Endangered in California and elsewhere
2	Rare, Threatened, or Endangered in California, but more common elsewhere
3	Need more information (a Review List)
4	Plants of Limited Distribution (a Watch List)

Table 4.3-2 California Native Plant Society List Threat Code Extensions

CNPS Threat Code Extension	Definition
.1	Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2	Fairly endangered in California (20-80% occurrences threatened)
.3	Not very endangered in California (<20% of occurrences threatened)

The CNDDB Element Ranking system (Table 4.3-3, following page) provides a numeric global and state-ranking system for all special-status species tracked by the CNDDB. The global rank (G-rank) is a reflection of the overall condition of an element (species or natural community) throughout its global range. The state rank (S-rank) is assigned much the same way as the global rank, except state ranks in California often also contain a threat designation attached to the S-rank.

f. Special-Status Biological Resources

This section lists those rare or otherwise sensitive species that were observed, are reported, and have the potential to occur onsite, in the potential future conveyance area, and in the project vicinity. The potential for occurrence of sensitive resources is based on site characteristics, the species' known regional distribution, and habitat affinities of the species.

Rincon Consultants conducted a search of CDFG's California Natural Diversity Database (CNDDB) utilizing the RareFind3 software (CDFG 2008a) for the area within a five-mile-radius of the project site. This database search was conducted to account for special-status species tracked by CDFG in the area and with potential to occur at the project site. A literature search of California Native Plant Society's *Inventory of Rare and Endangered Plants of California* (CNPS 2001, 2006), CDFG's *Special Animals List* (CDFG 2008b), and CDFG's *Special Vascular Plants, Bryophytes, and Lichens List* (CDFG 2008c) were also conducted to account for other special-status species not tracked by CNDDB with potential to occur in the vicinity of the proposed project site. Additional resources used to characterize the site include review of USGS computer topographic maps, *Soil Survey of Ventura County* (NRCS 1970), *Wetland Functional*

Table 4.3-3 California Natural Diversity Database Element Ranking System

Global Ranking (G)	
G1	Less than 6 viable element occurrences (pops for species), OR less than 1,000 individuals, OR <809.4 hectares (ha) (2,000 acres [ac]).
G2	6 to 20 element occurrences OR 809.4 to 4,047 ha (2,000 to 10,000 ac).
G3	21 to 100 occurrences OR 3,000 to 10,000 individuals OR 4,047 to 20,235 ha (10,000 to 50,000 ac).
G4	Apparently secure; rank lower than G3, factors exist to cause some concern (i.e. there is some threat, or somewhat narrow habitat).
G5	Population, or stand, demonstrably secure to ineradicable due to being commonly found in the world.
GH	All sites are historic; the element has not been seen for at least 20 years, but suitable habitat still exists.
GX	All sites are extirpated; this element is extinct in the wild.
GXC	Extinct in the wild; exists in cultivation.
G1Q	The element is very rare, but there is a taxonomic question associated with it.
Subspecies Level: Subspecies receive a T-rank attached to the G-rank. With the subspecies, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies or variety. For example: *Chorizanthe robusta* var. *hartwegii* is ranked G2T1. The G-rank refers to the whole species range (*Chorizanthe robusta*), whereas the T-rank refers only to the global condition of the variety (var. *hartwegii*).	
State Ranking (S)	
S1	Less than 6 element occurrences OR less than 1,000 individuals OR less than 809.4 ha (2,000 ac). S1.1 = very threatened S1.2 = threatened S1.3 = no current threats known
S2	6 to 20 element occurrences OR 3,000 individuals OR 809.4 to 4,047 ha (2,000 to 10,000 ac). S2.1 = very threatened S2.2 = threatened S2.3 = no current threats known
S3	21 to 100 element occurrences OR 3,000 to 10,000 individuals OR 4,047 to 20,235 ha (10,000 to 50,000 ac). S3.1 = very threatened S3.2 = threatened S3.3 = no current threats known
S4	Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern (i.e., there is some threat, or somewhat narrow habitat). NO THREAT RANK.
S5	Demonstrably secure to ineradicable in California. NO THREAT RANK.
SH	All California sites are historic; the element has not been seen for at least 20 years, but suitable habitat still exists.
SX	All California sites are extirpated; this element is extinct in the wild.
Notes	
1. Other considerations used when ranking a species or natural community include the pattern of distribution of the element on the landscape, fragmentation of the population/stands, and historical extent as compared to its modern range. It is important to take an aerial view when ranking sensitive elements rather than simply counting element occurrences.	
2. Uncertainty about the rank of an element is expressed in two major ways: by expressing the rank as a range of values (e.g. S2S3 means the rank is somewhere between S2 and S3), and by adding a ? to the rank (e.g. S2?). This represents more certainty than S2S3, but less than S2.	

Assessment of the Camarillo Regional Park Wetlands (DMEC 2004), and wetland and habitat assessments conducted by Rincon Consultants (2008).

CNDDB tracks 41 elements within 5 miles of CSUCI, including 22 animals, 13 plants, and 6 habitats, which are presented as Figure 4.3-2. Suitable habitat does not exist onsite for 16 of those tracked species as no brackish, marine, coastal lagoon, sandy beach, salt ponds/marsh,

tidal/coastal marsh habitats exist onsite. Those 16 species were eliminated from the following discussion. A total of 54 special-status elements are either observed by Rincon (2008), reported (DMEC 2004), or have a potential to occur onsite (CDFG 2008a), including 9 plant species, 36 wildlife species, and 9 habitats.

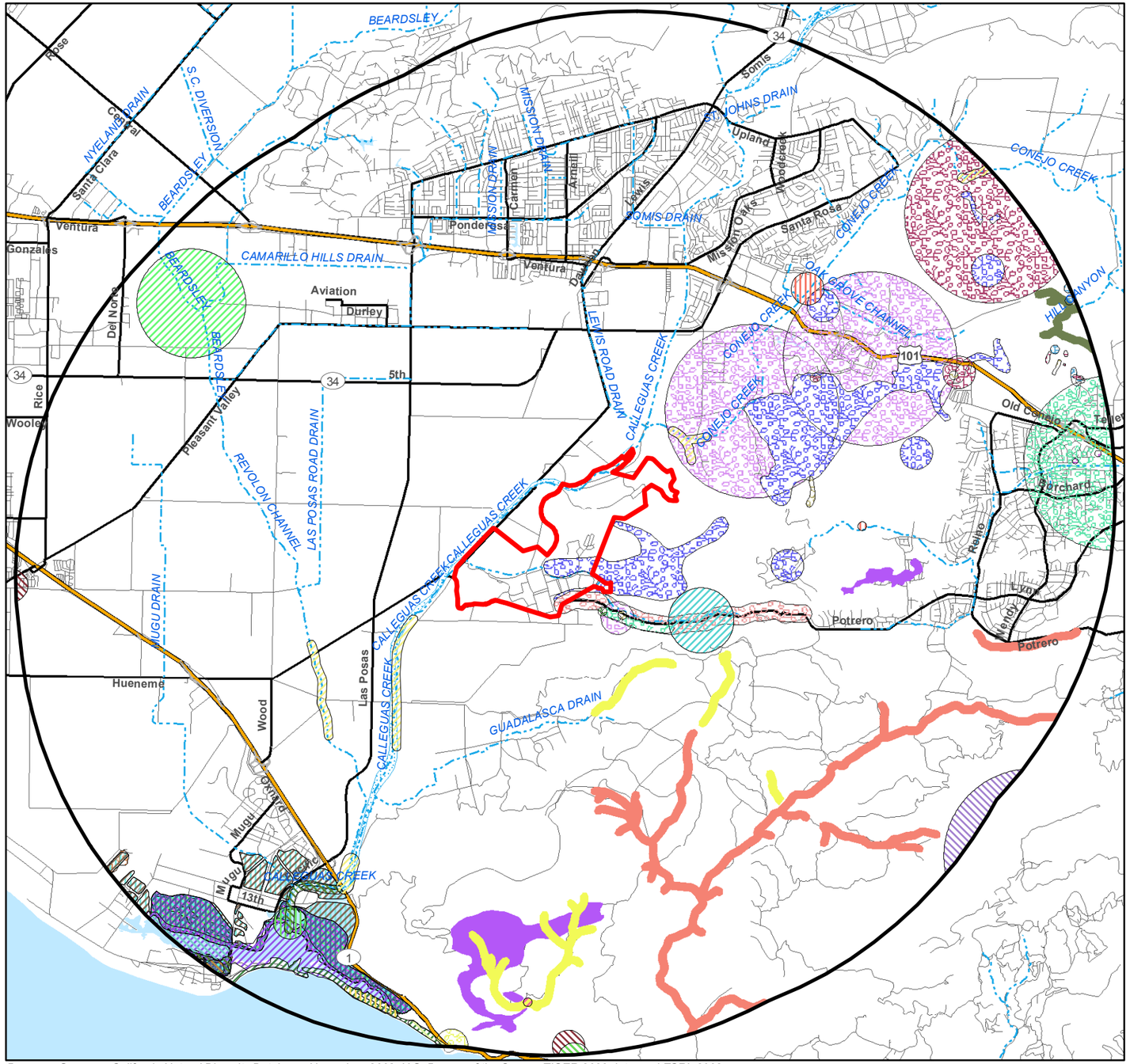
Special-Status Wildlife Species. A total of 36 special-status wildlife species are known to exist or have the potential to occur onsite, including 4 invertebrates, 1 fish, 2 amphibians, 4 reptiles, 17 birds, and 8 mammals. Of the 36 species, 3 special-status wildlife species were observed (tricolored blackbird, yellow warbler, and least bell's vireo) and 7 are reported onsite (arroyo chub, coastal western whiptail, Cooper's hawk, southern California rufous-crowned sparrow, white-tailed kite, yellow-breasted chat, and loggerhead shrike). The 36 special-status wildlife species are listed below in Table 4.3-4, and their habitat requirements and likelihood of occurrence are included and discussed in the table.

The California gnatcatcher is listed as threatened under the federal ESA, but has been turned down for listing under the state ESA. The nearest population of the California gnatcatcher is located in the sage scrub habitats adjacent to the city of Moorpark and the Tierra Rejada Valley, about nine miles north of the project site. Past discussions with the U.S. Fish and Wildlife Service (Rick Ferris, December 1999) indicate that per the Los Angeles County Natural History Museum (Kimball Garrett), no California gnatcatchers have been historically located within the Santa Monica Mountains and protocol surveys are typically not required for this area. Recent observations of California gnatcatchers at the Botanical Gardens in the City of Thousand Oaks has indicated some southern movement of gnatcatchers, but none have been reported south of US Highway 101 in this area.

Most of the listed bat species would be expected to forage over the open grasslands of the campus and potential future open space conveyance area only on a transient basis. Roost sites for the long-eared myotis bat is present in the larger oak trees in the oak grove, but most bats seen in the project area are likely to be more common species such as the western pipistrelle. Evening visual observations of the rock hollows within the campus has not determined any particular roost locations.

The southern steelhead trout (*Oncorhynchus mykiss irideus*) (Southern California ESU) is federally endangered and a California species of special concern. It occurs in coastal streams from San Luis Obispo County south to San Diego County, but has been extirpated from most of the streams in which it historically occurred. The species has been recorded within Arroyo Sequit in the Santa Monica Mountains, approximately 10 miles southeast of the site, as well as in the Santa Clara River, approximately 10 miles to the northwest. Southern steelhead trout is not known to occur within the Calleguas Creek watershed and no Critical Habitat for the species has been designated within this watershed. Water and habitat quality within the Creek is relatively poor due to agricultural runoff and prevalence of ruderal species. Therefore, this species is not expected to occur within the site.

Common Raptors and Nesting Birds. A variety of raptors (birds of prey) that could utilize the habitats present at the site are considered sensitive due to declines in population levels. Cooper's hawk has been observed foraging over the Camarillo Regional Park and probably also forage within the main campus. They could potentially nest in the denser tree rows present in this area. Sharp-shinned hawk and northern harrier would be winter visitors only to the project site and would not breed here, which is the time period during which they



Basemap Sources: California Natural Diversity Database, November, 2008, U.S. Bureau of the Census TIGER 2000 data, and ESRI, 2002.

5-Mile Radius
Project Location

Animals
- Belding's savannah sparrow
- California brown pelican
- California horned lark
- Santa Monica grasshopper
- Trask shoulderband
- arroyo chub
- ferruginous hawk
- globose dune beetle
- golden eagle
- least Bell's vireo
- light-footed clapper rail
- mimic tryonia (=California brackishwater snail)
- monarch butterfly
- sandy beach tiger beetle
- senile tiger beetle
- south coast marsh vole
- southern California saltmarsh shrew
- tidewater goby
- two-striped garter snake
- wandering (=saltmarsh) skipper
- western snowy plover

Plants
- Blochman's dudleya
- Conejo buckwheat
- Conejo dudleya
- Coulter's goldfields
- Lyon's pentachaeta
- Plummer's mariposa-lily
- Verity's dudleya
- chaparral ragwort
- dune larkspur
- estuary seablite
- salt marsh bird's-beak
- southern tarplant
- woven-spored lichen

Natural Communities
- Southern Coast Live Oak Riparian Forest
- Southern Coastal Salt Marsh
- Southern Riparian Forest
- Southern Sycamore Alder Riparian Woodland
- Valley Needlegrass Grassland
- Valley Oak Woodland

N

0 0.5 1 2 3 4 Miles

Special-Status Elements Tracked by CNDDB in the Vicinity of CSUCI

Figure 4.3-2

Table 4.3-4 Special-Status Wildlife Species Tracked in the Vicinity of CSUCI

Scientific Name	Common Name	Fed/State[1]	CDFG[2]	G-Rank/ S-Rank[3]	Required Habitat	Likelihood of Occurrence[4]
Invertebrates						
Danaus plexippus	Monarch butterfly	-/-	-	G5/S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Unlikely: ornamental trees located along E portion of Long Grade Canyon Creek could support monarch roost site, but no record of any roosts within the CSUCI campus. The closest roost exists ~4 mi SW of project site.
Helminthoglypta traskii traskii	Trask shoulderband	-/-	-	G1G2T1/S1	Known from Ventura, Los Angeles, Orange, and San Diego Counties. Reported from NW Baja California.	Possible
Panoquina errans	Wandering (=saltmarsh) skipper	-/-	-	G4G5/S1	Southern California coastal salt marshes. Requires moist saltgrass for larval development.	Unlikely: no coastal saltmarsh habitat onsite; however, saltgrass present in the potential future open space conveyance area.
Trimerotropis occidentiloides	Santa Monica grasshopper	-/-		G1G2/S1S2	Known only from the Santa Monica Mountains. Found on bare hillsides and along dirt trails in chaparral.	Possible: campus exists in the western portion of the Santa Monicas ~1 mi from site
Fish						
Gila orcuttii	Arroyo chub	-/-	CSC	G2/S2	Los Angeles basin south coastal streams. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic veg & associated invertebrates.	**Reported** (DMEC 2004): in Calleguas Creek at Cam. Reg. Park and tracked <1 mi away
Amphibians						
Spea hammondii	Western spadefoot	-/-	CSC	G3/S3	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Unlikely: grassland habitats onsite, but no vernal pools exist for breeding since the upland soils at the site drain relatively quickly and not tracked near campus The 1998 Campus Master Plan EIR indicated a low potential for this species in enclosed basin adj. to power plant, but was not observed during wetland delineation.
Taricha torosa torosa	Coast range newt	-/-	CSC	G5T4/S4	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow moving streams.	Possible: natural upland habitats adjacent to Calleguas Creek and Long Grade Canyon Creek, but not tracked near campus
Reptiles						
Actinemys marmorata pallida	Southwestern pond turtle	-/-	CSC	G3G4T2T3Q/ S2	Inhabits permanent or nearly permanent bodies of water in many habitat types; below 6,000 ft. elev. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks. Need suitable nesting sites.	Unlikely: known to occur within Calleguas Creek upstream of campus area but no suitable basking sites within campus or potential future open space conveyance area.
Aspidoscelis tigris stejnegeri	Coastal western whiptail	-/-	-	G5T3T4/S2S3	Found in semiarid areas with sparse vegetation and in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	Western whiptails are **reported** (DMEC 2004) at Cam. Reg. Park, and are also known within the more open coastal sage scrub habitat on campus; however, site is within the overlap zone for western whiptail subspecies

[1] FE = Federally Endangered; FT = Federally Threatened; SE = State Endangered; ST = State Threatened.
[2] CSC = California Species of Concern.
[3] For Global-Rank and State-Rank definitions, refer to Table 4.3-3 above.
[4] Likelihood of occurrence based on the nearest known/tracked location with respect to the CSUCI Campus, species' habitat requirements, and the presence of required habitat in the project site.
Observed = Species was either directly observed by Rincon Consultants;
Reported/Known = Species is known onsite or reported onsite from independent studies;
Likely = Suitable habitat exists onsite and the species is tracked or documented nearby;
Possible = Marginal habitat exists onsite, or the species is tracked or documented nearby;
Unlikely = No suitable habitat exists onsite, and the species is not known or tracked nearby.

Scientific Name	Common Name	Fed/State[1]	CDFG[2]	G-Rank/ S-Rank[3]	Required Habitat	Likelihood of Occurrence[4]
						and actual subspecies present is unknown.
Phrynosoma coronatum (*blainvillii* population)	Coast (San Diego) horned lizard	-/-	CSC	G4G5/S3S4	Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions. Prefers friable, rocky, or shallow sandy soils.	Possible: marginal coastal sage scrub habitat exists on campus and the potential future open space conveyance area, but few harvester ant colonies seen and dense grass cover provides little open sandy areas. May occur within more open portions of coastal sage scrub in the open space portions of the campus.
Thamnophis hammondii	Two-striped garter snake	-/-	CSC	G3/S2	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft. elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Possible: recorded SE of Conejo Mountain, ~4 mi E of project site. Marginal habitat located within the W portion of Long Grade Canyon Cr & Calleguas Creek
Birds						
Accipiter cooperii	Cooper's hawk	-/-	-	G5/S3	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	**Reported** (DMEC 2004) at Cam. Reg. Park and foraging and hunting habitats onsite
Accipiter striatus	Sharp-shinned hawk	-/-	-	G5/S3	Ponderosa pine, black oak, riparian deciduous, mixed conifer & Jeffrey pine habitats. Prefers riparian areas. North-facing slopes, with plucking perches are critical requirements. Nests usually within 275 ft of water.	Possible: marginal habitat onsite, not tracked by CNDDB nearby.
Agelaius tricolor	Tricolored blackbird	-/-	CSC	G2G3/S2	Highly colonial species, most numerous in central valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.	**Observed** (Rincon 2008): in freshwater marsh in western portion of Long Grade Canyon Creek (May 12, 2008). The freshwater marsh could support a small nesting colony although habitat is limited in size.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	-/-	-	G5T2T4/S2S3	Resident in southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass & forb patches.	**Reported** (DMEC 2004) in coastal sage scrub habitat at Cam. Reg. Park and likely on other hillsides within campus.
Amphispiza belli belli	Bell's sage sparrow	-/-	-	G5T2T4/S2?	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yards apart.	Possible in coastal sage scrub habitat onsite
Buteo regalis	Ferruginous hawk	-/-	-	G4/S3S4	Open grasslands, sagebrush flats, desert scrub, low foothills & fringes of pinyon-juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	Unlikely: tracked wintering within Mugu Lagoon ~5 mi S of project site. The site contains low quality foraging habitat due to disturbance & ag use.
Circus cyaneus	Northern harrier	-/-	-	G5/S3	Coastal salt & fresh-water marsh. Nest & forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of large mound of sticks in wet areas.	Likely: foraging habitats present onsite
Dendroica petechia	Yellow warbler	-/-	CSC	G5T3?/S2	Riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores, & alders for nesting & foraging. Also nests in montane shrubbery in open conifer forests.	**Observed** (Rincon 2008): within southern willow scrub in E portion of Long Grade Canyon Creek (May 7, 2008). The southern willow scrub is suitable for foraging but would not likely be used for nesting since it lacks density & limited in size.
Elanus leucurus	White-tailed	-/-	-	G5/S3	Rolling foothills and valley margins	**Reported** (DMEC 2004) at

Scientific Name	Common Name	Fed/State[1]	CDFG[2]	G-Rank/ S-Rank[3]	Required Habitat	Likelihood of Occurrence[4]
	kite				with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense trees for nesting and perching.	Cam. Reg. Park, and foraging and hunting habitats present onsite
Eremophila alpestris actia	California horned lark	-/-	-	G5T3Q/S3	Coastal regions, chiefly from Sonoma Co. To San Diego Co. Also main part of San Joaquin Valley & east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Unlikely: tracked in ag fields ~5 miles NE of site. Since the ag field onsite contains tall, dense remnant crops & weeds, and it prefers low-growing veg w/ bare ground, the habitat onsite is low in quality for this species.
Falco columbarius	Merlin	-/-	-	G5/S3	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands & deserts, farms & ranches. Clumps of trees or windbreaks are required for roosting in open country.	Likely: foraging habitats present onsite
Falco mexicanus	Prairie falcon	-/-	-	G5/S3	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Likely: foraging habitats present onsite
Falco peregrinus anatum	American peregrine falcon	Delisted/SE	-	G4T3/S2	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape on a depression or ledge in an open site.	Likely: foraging habitats present onsite
Icteria virens	Yellow-breasted chat	-/-	CSC	G5/S3	Summer resident; inhabits riparian thickets of willow & other brushy tangles near water courses. Nests in low, dense riparian of willow, blackberry, wild grape; forages & nests within 10 ft of ground.	**Reported** (DMEC 2004) at Cam. Reg. Park
Lanius ludovicianus	Loggerhead shrike	-/-	CSC	G4/S4	Broken woodlands, savannah, pinyon-juniper, Joshua tree, & riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	**Reported** (DMEC 2004) at Cam. Reg. Park, and foraging habitats present on campus
Polioptila californica californica	Coastal California gnatcatcher	FT/-	CSC	G3T2/S2	Obligate, permanent resident of coastal sage scrub below 2,500 ft. in southern California. Low, coastal sage scrub in arid washes, on mesas & slopes. Not all areas classified as coastal sage scrub are occupied.	Unlikely; while coastal sage scrub present onsite, species not reported from this portion of Santa Monica Mountains
Vireo bellii pusillus	Least Bell's vireo	FE/SE	-	G5T2/S2	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, *Baccharis*, mesquite.	**Observed** (Rincon 2008): one individual detected singing in small willow stand in E portion of Long Grade Canyon Creek, near the University Drive bridge. The riparian stand lacks density and structure preferred by the species for nesting. The Creek is not expected to support breeding. Nesting known within Conejo Creek ~3 mi NE of the site. A historic breeding site was documented in La Jolla Canyon, ~5 mi SE of the site, and it is known to breed in Santa Clara River, 10 mi to the northwest.
Mammals						
Antrozous pallidus	Pallid bat	-/-	CSC	G5/S3	Deserts, grasslands, shrublands, woodlands & forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Possible: suitable foraging habitat present onsite
Corynorhinus townsendii	Pale big-eared bat	-/-	-	G4T4/S2S3	Lives in a wide variety of habitats but most common in mesic sites.	Possible: suitable foraging habitat present onsite

Scientific Name	Common Name	Fed/State[1]	CDFG[2]	G-Rank/ S-Rank[3]	Required Habitat	Likelihood of Occurrence[4]
pallescens					Need appropriate roosting, maternity, and hibernacula sites free from human disturbance.	
Myotis ciliolabrum	Western small-footed myotis	-/-	-	G5/S2S3	Wide range of habitats mostly arid wooded & brushy uplands near water. Seeks cover in caves, buildings, mines & crevices. Prefers open stands in forests and woodlands. Requires drinking water. Feeds on a wide variety of small flying insects.	Possible: suitable foraging habitat present onsite
Myotis evotis	Long-eared myotis	-/-	-	G5/S4?	Found in all brush, woodland & forest habitats from sea level to about 9,000 ft. Prefers coniferous woodlands & forests. Nursery colonies in buildings, crevices, spaces under bark, & snags. Caves used primarily as night roosts.	Possible: suitable foraging habitat present onsite
Myotis thysanodes	Fringed myotis	-/-	-	G4G5/S4	In a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood & hardwood-conifer. Uses caves, mines, buildings or crevices for maternity colonies and roosts.	Possible: suitable foraging habitat present onsite
Myotis volans	Long-legged myotis	-/-	-	G5/S4?	Most common in woodland & forest habitats above 4,000 ft. Trees are important day roosts; caves & mines are night roosts. Nursery colonies usually under bark or in hollow trees, but occasionally in crevices or buildings.	Possible: suitable foraging habitat present onsite
Myotis yumanensis	Yuma myotis	-/-	-	G5/S4?	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	Possible: suitable foraging habitat present onsite
Neotoma lepida intermedia	San Diego desert woodrat	-/-	CSC	G5T3?/S3?	Coastal scrub of southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops & rocky cliffs & slopes.	**Reported**: was trapped at Camarillo Reg Park (Impact Sciences, Sep. 1997). Nests observed along N property line with park are probably this species.

are considered sensitive. Prairie falcon and peregrine falcon possibly forage over the open grasslands of the site, but the rock formations within the campus and the potential future open space conveyance area do not appear suitable for breeding. No reports of breeding by these species in this vicinity are known. The endangered peregrine falcon is known to forage in the general area since it has been observed at Point Mugu Rock and Mugu Lagoon. The grasslands are foraging habitat for white-tailed kites, and provide winter foraging habitat for migratory merlin and ferruginous hawk.

The potential future open space conveyance area contains tall, ornamental trees that could be utilized by common raptors, such as the red-tailed hawk (*Buteo jamaicensis*), for nesting. The main campus and adjacent areas also contain suitable nesting habitat for many common avian species, such as Anna's hummingbird (*Calypte anna*), common yellowthroat, California towhee (*Pipilo crissalis*), song sparrow, and house finch. Most native species and their nests are protected from take by California Fish and Game (CFG) Code 3503 and the Migratory Bird Treaty Act (MBTA).

Special-Status Plant Species. Nine special-status plant species are known to exist or have the potential to occur within the main campus and the potential future open space conveyance area, and those species are listed in Table 4.3-5 (next page). No special status plant species are expected or known to occur within the New Access Road Area. Of the nine species, three special-status plant species exist onsite, including Blochman's dudleya (*Dudleya blochmaniae* ssp.

blochmaniae), Verity's dudleya (*Dudleya verityi*), and Conejo buckwheat (*Eriogonum crocatum*). These known species are discussed below.

Table 4.3-5 Special-Status Plants Species Tracked in the Vicinity of CSUCI

Scientific Name	Common Name	G-Rank/ S-Rank[5]	Fed/State	CNPS[6]	Required Habitat	Likelihood of Occurrence[7]
Calochortus plummerae	Plummer's mariposa-lily	G3/S3.2	-/-	1B.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Common after fire. 90-1,610 m.	Likely: suitable coastal sage scrub habitat present on the campus hillsides; known 1 mi E of site in Long Grade Canyon in coastal sage scrub on N- facing slopes
Delphinium parryi ssp. *blochmaniae*	Dune larkspur	G4T2/S2.2	-/-	1B.2	Chaparral, coastal dunes (maritime). On rocky areas & dunes. 30-375 m.	Possible: known ~1 mile SE of site in thin volcanic soils and rocky slopes
Dudleya blochmaniae ssp. *blochmaniae*	Blochman's dudleya	G2T2/S2.1	-/-	1B.1	Coastal scrub, coastal bluff scrub, valley and foothill grassland. Open, rocky slopes; in shallow clays over serpentine or in rocky areas. 5-450 m.	**Observed** by Rincon (1999) in rock outcrops onsite
Dudleya parva	Conejo dudleya	G2/S2.1	FT/-	1B.2	Coastal scrub, valley and foothill grassland. In clayey or volcanic soils on rocky slopes and grassy hillsides. 60-450 m.	Likely: suitable coastal sage scrub habitat present onsite and tracked ~1 mi NE of potential future conveyance area
Dudleya verityi	Verity's dudleya	G1/S1.1	FT/-	1B.2	Chaparral, cismontane woodland, coastal scrub. On volcanic rock outcrops in the Santa Monica Mountains. 60-120 m.	**Observed** by Rincon (1999) south of children's unit & outside property line W of debris basin damn, both on volcanic outcrops
Eriogonum crocatum	Conejo buckwheat	G2/S2.1	-/SR	1B.2	Chaparral, coastal scrub, valley and foothill grassland. Conejo volcanic outcrops; rocky sites. 50-580 m.	**Observed** by Rincon (1999) along southern property boundary ridge and scattered on volcanic slopes of hill NE of the S&T building
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	G4T3/S2.1	-/-	1B.1	Coastal salt marshes, playas, valley and foothill grassland, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-1,400 m.	Possible: only marginal grassland habitat exists onsite
Pentachaeta lyonii	Lyon's pentachaeta	G1/S1.1	FE/FE	1B.1	Chaparral, valley and foothill grassland. Edges of clearings in chap., usually at the ecotone between grassland and chaparral or edges of	Unlikely: marginal habitat onsite. Focused plant surveys in potential fuel mod. zones and areas adjacent to proposed development failed to

[5] For Global-Rank and State-Rank, refer to Table 4.3-3 above.
[6] For CNPS List Definitions, refer to Tables 4.3-1 and 4.3-2 above.
[7] Likelihood of occurrence based on the nearest known/tracked location with respect to the CSUCI Campus, species' habitat requirements, and the presence of required habitat in the project site.
Observed = Species was either directly observed by Rincon Consultants;
Reported/Known = Species is known onsite or reported onsite from independent studies;
Likely = Suitable habitat exists onsite, and the species is tracked or documented nearby;
Possible = Marginal habitat exists onsite, or the species is tracked or documented nearby;
Unlikely = No suitable habitat exists onsite, and the species is not known or tracked nearby.

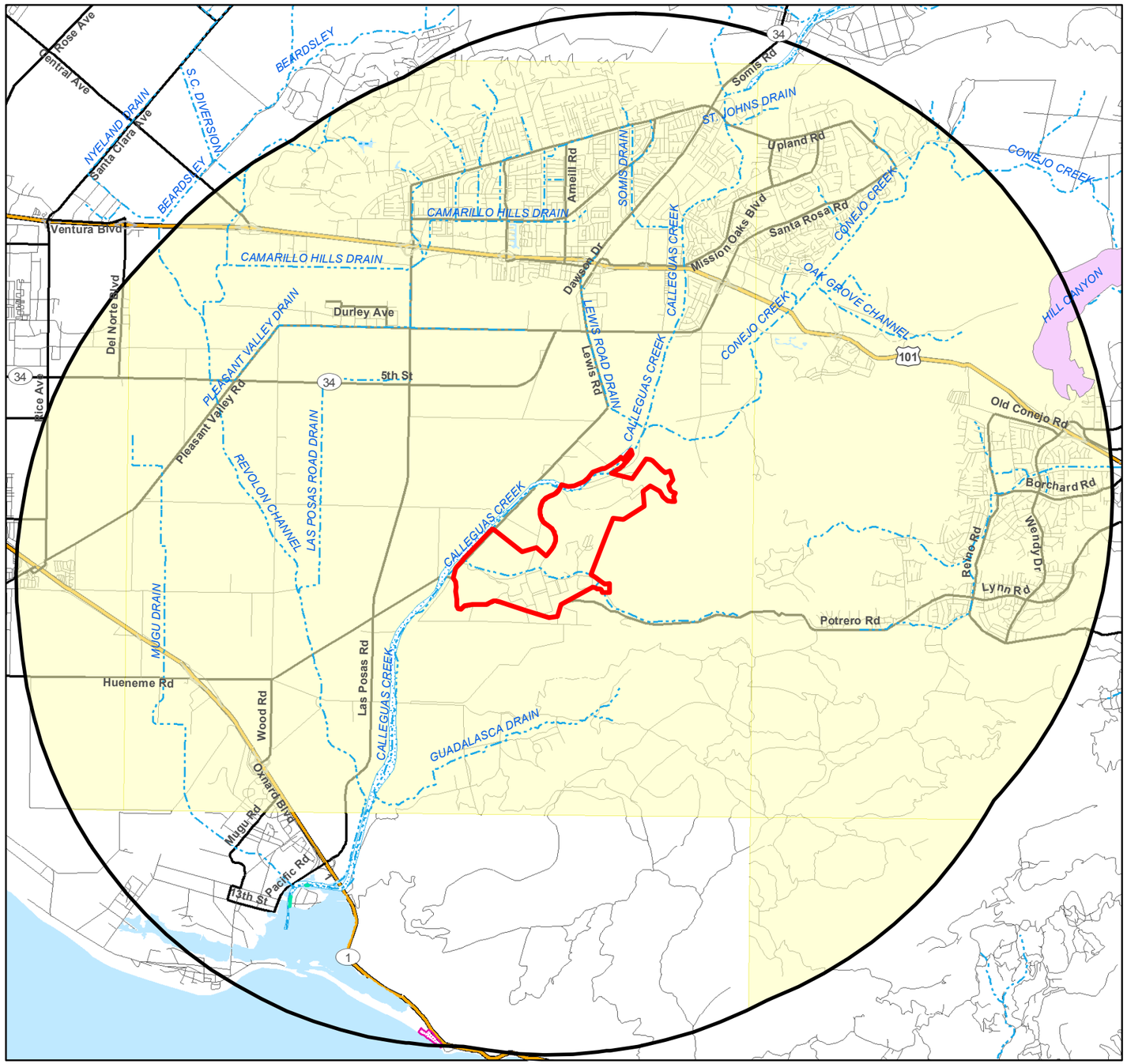
Scientific Name	Common Name	G-Rank/ S-Rank[5]	Fed/State	CNPS[6]	Required Habitat	Likelihood of Occurrence[7]
					firebreaks. 30-630 m.	discover this plant.
Senecio aphanactis	Chaparral ragwort	G3?/S1.2	-/-	2.2	Cismontane woodland, coastal scrub. Drying alkaline flats. 20-575 m.	Possible: marginal habitat present onsite
Astragalus brauntonii	Braunton's milk-vetch	G2/S2.1	FE/-	1B.1	Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland. Recent burns or disturbed areas in stiff gravelly clay soils overlying granite or limestone. 4-640 m.	Possible: suitable coastal sage scrub habitat onsite
Dudleya cymosa ssp. *ovatifolia*	Santa Monica dudleya	G5T2/S2.2	FT/-	1B.2	Chaparral, coastal scrub in canyons on sedimentary conglomerates; primarily N-facing slopes. 210-500 m.	Possible: suitable coastal sage scrub habitat onsite
Dudleya cymosa ssp. *marcescens*	Marcescent dudleya	G5T2/S2.2	FT/SR	1B.2	Chaparral on sheer rock surfaces and rocky volcanic cliffs. 180-520 m.	Unlikely: marginal habitat onsite

Blochman's dudleya. This small succulent perennial occurs on coastal bluffs and rock outcrops usually on clay soils. This plant ranges from central California to northern Baja California. It is found in large numbers within the potential future Open Space Conveyance Area (Camarillo Regional Park) in the immediate vicinity of volcanic rock outcrops. It is also known to occur southeast of the campus in Long Grade Canyon south of Potrero Road. This species exists within the CSU campus in the rock outcrops south of the residential area and within the rock outcrops on the upper ridge along the northern property line with Camarillo Regional Park. Other populations are also likely to occur within the CSU property on Round Mountain and the central hillside.

Verity's dudleya. This small succulent is extremely limited in distribution, occurring only along the western flank of the Santa Monica Mountains, mostly on the lower slopes of Conejo Mountain. A population of this plant is located within CSU property south of the residential area, while a second population is located immediately outside the property line southerly of the debris basin dam in the eastern portion of the CSU property. Both of these populations are on massive volcanic boulder outcrops that are nearly inaccessible.

Conejo buckwheat. This plant is found along the ridge that marks the southern property boundary of the main campus and scattered on the volcanic slopes of the hill northeast of the central campus. It is a perennial subshrub that occurs on the western flank of the Santa Monica Mountains from the Conejo Grade to Thousand Oaks, typically within volcanic-derived soils. The onsite populations are fairly extensive.

Besides these state and federally recognized species, two plant species at the site may be considered of local concern. Catalina mariposa lily (*Calochortus catalinae*) is found in reasonable numbers in the laurel sumac grassland and non-native grassland north of the residential area. The California Native Plant Society has placed this plant on their List 4, a "watch list" for plants of limited distribution that are uncommon enough that their status should be monitored regularly.



5-Mile Radius

Project Location

Critical Habitat

S Calif Steelhead FCH

Western Snowy Plover FCH

Lyon's Pentachaeta FCH

CNDDB Suppressed Records in these quads-Southwestern Pond Turtle and Monarch Butterfly call DFG to get the specific location of these sensitive species

N

0 0.5 1 2 3 4 Miles

Sources: California Natural Diversity Database, November, 2008, U.S.Fish and Wildlife Service, December, 2007, U.S. Bureau of the Census TIGER 2000 data, and ESRI, 2002.

Critical Habitat

Figure 4.3-3

California State University Channel Islands

Protected Trees. While native trees such as coast live oak (*Quercus agrifolia*), southern California black walnut (*Juglans californica* var. *californica*), and California sycamore (*Platanus racemosa*) are protected under the Ventura County Tree Protection Ordinance (Non-Coastal Zoning Ordinance Sec. 8107-25), the campus as a part of the California State University system is outside of County jurisdiction with respect to such trees.

Sensitive and Critical Habitats. In addition to sensitive plants and animals, vegetation in California is accorded sensitivity rankings by CNPS and CDFG within the community classification of Holland (1986). Table 4.3-6 (nest page) lists the nine sensitive habitats tracked and observed in the vicinity of the CSUCI campus. CSUCI contains four sensitive plant communities, including coastal and valley freshwater marsh, southern riparian forest, southern willow scrub, and Venturan coastal sage scrub. Venturan coastal sage scrub is considered a special-status habitat type by regulatory agencies due to its declining status in southern California and its known function as preferred habitat for the California gnatcatcher and several other sensitive animal species. Riparian habitats are also considered a sensitive by regulatory agencies due to extensive loss resulting from development in southern California. Figure 4.3-3 maps the sensitive and critical habitats that are located within a 5-mile search area conducted of the CNDDB.

Table 4.3-6 Sensitive Habitats Tracked in the Vicinity of CSUCI

Scientific Name	G-Rank/S-Rank[8]	Observed Onsite?
Southern Coast Live Oak Riparian Forest	G4/S4	No
Southern Coastal Salt Marsh	G2/S2.1	No
Southern Riparian Forest	G4/S4	Yes
Coastal and Valley Freshwater Marsh	G2/S2.2	Yes
Southern Willow Scrub	G3/S2.1	Yes
Southern Sycamore Alder Riparian Woodland	G4/S4	No
Valley Needlegrass Grassland	G1/S3.1	No
Valley Oak Woodland	G3/S2.1	No
Venturan Coastal Sage Scrub	G3/S3.1	Yes

Freshwater marsh is located in a detention pond in the western portion of Long Grade Canyon Creek. Freshwater marsh habitat is also present within Calleguas Creek; however, this habitat is low in quality due to disturbance and a prevalence of non-native, ruderal species, especially stands of giant reed (*Arundo donax*; see Figure 4.3-1). Small, narrow stands of southern willow scrub occur throughout the length of Long Grade Canyon Creek. The stands lack density and thus provide only marginal quality habitat for species that are restricted to riparian scrub communities. Southern riparian scrub and southern riparian forest exist within the riparian zone of much of the portion of Calleguas Creek that flows along the northern boundary of the potential future Open Space Conveyance Area. A variety of Venturan coastal sage scrub plant series exists in small to large stands throughout the remaining undeveloped portions of the campus as well as extensively on the steeper slopes throughout the potential future Open Space Conveyance Area.

[8] For Global-Rank and State-Rank, refer to Table 4.3-3.

Jurisdictional Areas and Wetlands. Wetlands and streams such as Long Canyon Grade channel are also protected by regulations promulgated from the state and federal Clean Water Acts, California Fish and Game Code, and by local and RWQCB.

The main portion of the New Access Road Area contains a fallow agricultural field that was used for row crop farming until 2007. The property boundary for this area also includes Long Grade Canyon Creek and half of the width of Calleguas Creek. Both creeks are confined to soft-bottom channels between levees. In addition an east-west oriented drainage ditch is located at the southern end of the agricultural field along the base of the northern Long Grade Canyon Creek levee, and an irrigation pond is located at the terminus of Long Grade Canyon Creek.

Rincon conducted a detailed jurisdictional delineation of the New Access Road Area per USACE approved methodologies in October 2008, and determined that Calleguas Creek and Long Grade Canyon Creek are subject to USACE, RWQCB, and CDFG jurisdiction, but the agricultural ditch in the adjacent agricultural field is isolated and only subject to RWQCB and CDFG jurisdiction. (It should be noted that the regulatory agencies make the final jurisdictional determination.) Tables 4.3-7 and 4.3-8 (following page) summarize the total acreage of jurisdictional waters in the study area per regulatory agency, separated between Calleguas Creek, Long Grade Canyon Creek, and the agricultural ditch. Figure 4.3-4 depicts the current location and extent of jurisdictional waters within the New Road Access Area.

Table 4.3-7 USACE and RWQCB Jurisdictional Acreage within the New Road Access Area

Drainage	USACE and RWQCB Jurisdiction		RWQCB Isolated Wetlands/Waters Acres (LF)
	Non-Wetland Waters Acres (LF*)	Wetland Waters Acres (LF)	
Calleguas Creek	0.31 (1,806)	2.86 (1,806)	---
Long Grade Canyon Creek	0.35 (1,083)	5.32 (2,347)	---
Agricultural Ditch	---	---	1.43 (4,673)
Total	0.66 (2,889)	8.18 (4,153)	1.43 (4,673)

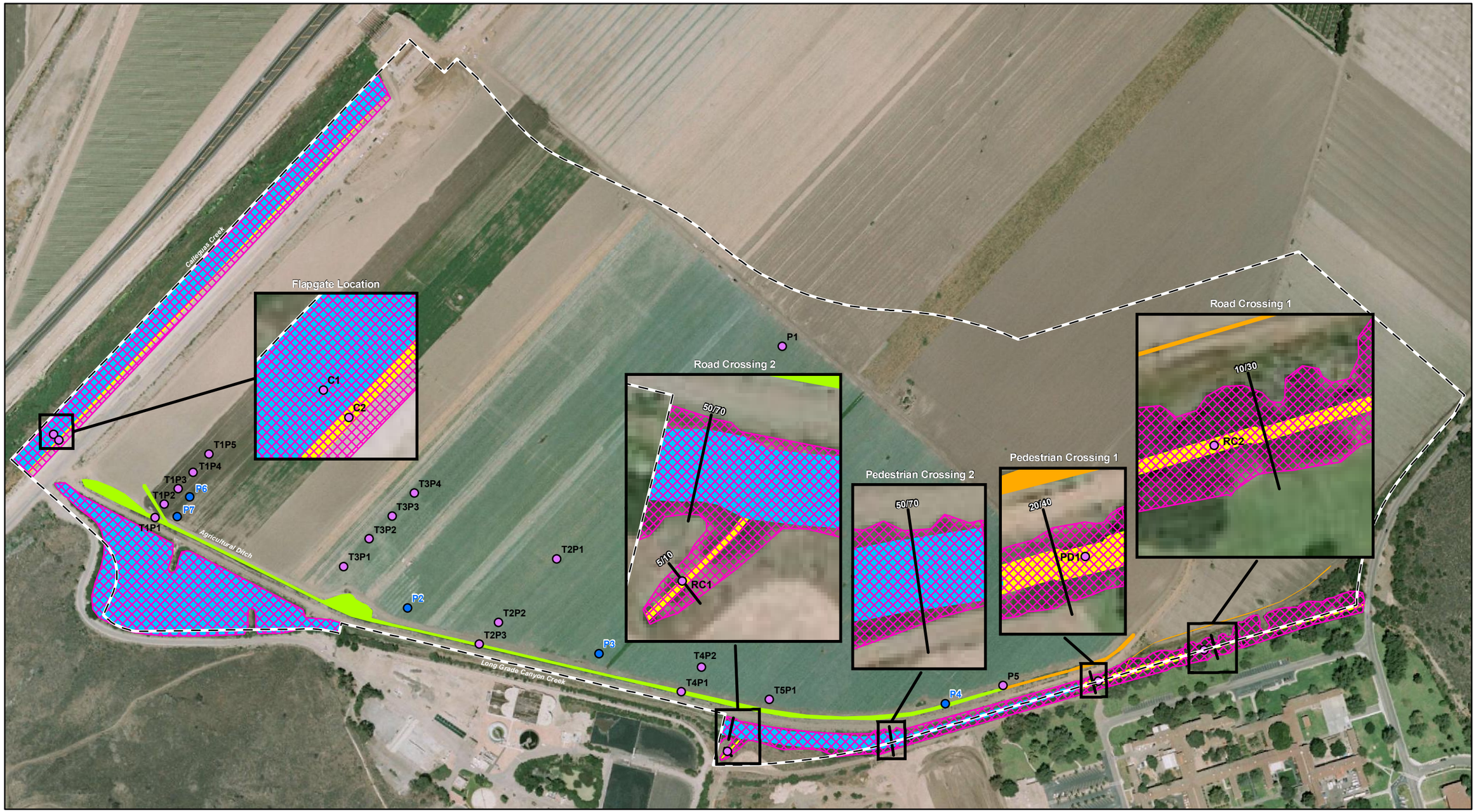
*LF = Linear feet

Table 4.3-8 CDFG Jurisdictional Acreage within the Study Area

Drainage	Streambed and Associated Riparian Habitat Acres (LF*)
Calleguas Creek	3.79 (1,806)
Long Grade Canyon Creek	7.64 (3,430)
Agricultural Ditch	1.43 (4,673)
Total	12.86 (9,909)

*LF = Linear feet

Please note that jurisdictional waters and wetlands (Table 4.3-7) refer to those areas that require a permit from the USACE and a water quality certification from the RWQCB if they were to be affected by fill associated with project development. RWQCB isolated waters are not subject to the federal Clean Water Act regulations, but are subject to state regulations regarding waste discharge under the Porter-Cologne Act. It should also be noted that Calleguas Creek is subject



Base Map Source: ASL Consulting Engineers, June 1999, and Boyle Engineering, 2008. Base Aerial Source: Terraserver, 2007.

Parcel Boundary
Soil Test Pit
Data Point

USACE/RWQCB Jurisdiction, Wetland (8.18 acres)
USACE/RWQCB Jurisdiction, Non-Wetland (0.66 acre)
RWQCB/CDFG Jurisdiction, Wetland (1.25 acres)
RWQCB/CDFG Jurisdiction, Non-Wetland (0.18 acre)

CDFG Jurisdiction (11.44 acres)
6/12 USACE & RWQCB/CDFG Width Measurement (Feet)

N
0 400 800 Feet

Jurisdictional Waters and Wetlands (2008) within Long Grade Canyon Creek at CSUCI

Figure 4.3-4

to intermittent vegetation removal both naturally and under permit by the VCWPD. Therefore, delineation of wetlands that are determined in part by vegetation coverage was based on current characteristics.

CDFG jurisdiction is determined based on riparian habitat and the location of bed, bank, and channel as compared to vegetation, soil, and hydrologic parameters. CDFG jurisdiction extends the width of the creek channels from the top edge of the levees.

Wildlife Movement. The CSUCI campus and potential future conveyance areas are not within any mapped regional wildlife movement corridor; however, Calleguas Creek does provide an important pathway for the movement of aquatic related organisms from the Pacific Ocean to the upper parts of its watershed. In addition, the undeveloped lands on campus and in the potential future Open Space Conveyance Area lie at the western edge of the Santa Monica Mountains and so are part of a primarily undisturbed core natural area containing native habitats and associated wildlife.

4.3.2 Impact Analysis

Previous biological analyses were prepared for the Master Plan Area as part of the 1998 Campus Master Plan EIR, which has been incorporated by reference. Further biological studies conducted at the project site and included herein include a sensitive plant survey within potential fuel modification zones adjacent to proposed development areas during June and July of 1999 and recent (October 2008) wetland delineation surveys.

a. Significance Thresholds

The California Environmental Quality Act (CEQA), Chapter 1, Section 21001 (c) states that it is the policy of the State of California to "prevent the elimination of fish and wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities." Environmental impacts relative to biological resources are assessed herein using impact significance criteria encompassing CEQA guidelines and federal, state and local plans, regulations, and ordinances. The *State CEQA Guidelines* Appendix G provides the following general statements to determine if significant impacts to biological resources could occur if a project action would:

a) Have a substantial adverse effect (i.e. significantly reduce species population, reduce species habitat, restrict reproductive capacity), either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, regulations, or by CDFG or USFWS;

b) Have a substantial adverse effect (i.e. direct/indirect reduction) on any riparian habitat or other sensitive natural community identified in local or regional plans, policies regulations, or by the CDFG or USFWS;

c) Have a substantial adverse effect (i.e. direct/indirect reduction) on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh vernal pool, coastal, etc.) through direct removal, filling, or hydrological interruption, or other means;

d) Interfere substantially (i.e. direct/indirect reduction) with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and

f) Conflict with the provisions of an adopted Habitat Preservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

To determine whether or not impacts can be sufficiently mitigated or whether the project would result in an unavoidable adverse significant impact to species listed under an ESA, the regulatory framework of the state and federal ESAs as outlined above (page 4.3-8) needs to be considered. The criteria established under these acts provide a basis for determining whether or not a significant impact is fully mitigated, and sufficient compliance with these laws to obtain an incidental take permit indicates that impacts have been reduced to a level of less than significant.

b. Project Impacts and Mitigation Measures

Significant biological effects were previously identified to occur as a result of the CSUCI Master Plan, as discussed in the 1998 Master Plan EIR. The following discussion is limited to changes and additional impacts that would result from the proposed Master Plan revisions.

09-Impact BIO-1 Potential impacts to endangered or threatened wildlife species or other special-status wildlife species due to the reduction of habitat. Impacts are Class II, *significant but mitigable*.

Three federally and/or state listed wildlife species may occur onsite; however, no designated critical habitat for these species exists within the boundaries of the campus or the potential future Open Space Conveyance Area. Specifically, American peregrine falcon (*Falco peregrinus anatum*) is a State Endangered species that may forage and hunt in habitats present within the New Access Road Area and in the potential future Open Space Conveyance Area habitats. However, the project sites do not contain suitable nesting habitat and the primary forage area for this species is the coastal resources further south of the site. No significant impacts to this species would be anticipated from the current proposed actions.

Coastal California gnatcatcher (*Polioptila californica californica*) is a federally threatened species that could potentially nest in the Venturan coastal sage scrub habitat present within the campus and the potential future Open Space Conveyance Area; however, its presence is considered unlikely as it has never been observed in this portion of the Santa Monica Mountains. Therefore, given its lack of presence, no impacts to this species is likely.

Least Bell's vireo (*Vireo bellii pusillus*) is a federally and state listed endangered species that was observed by Rincon during the 2008 wetland delineation within the eastern portion of Long Grade Canyon Creek. Although the riparian stands in this area lack the density and structure preferred by this species for nesting and the bird seen was likely a transient migrant, the construction of the road and pedestrian bridges would remove willow vegetation that is used

by this species for foraging and cover. If vegetation is removed while the least Bell's vireo is present and potentially nesting, this impact would be considered significant.

Additional special status species in the project area include the western whiptail, coast horned lizard, Cooper's hawk, tri-colored blackbird, southern California rufous-crowned sparrow, yellow warbler, white-tailed kite, merlin, prairie falcon, yellow-breasted chat, loggerhead shrike, San Diego desert woodrat, and several species of bats. Development of facilities in the New Access Road Area would not directly affect an appreciably amount of the habitat needed by these species, and impacts are considered less than significant in this area. Several of these animals are also likely to be present within the potential future Open Space Conveyance Area and could be affected by recreation development actions that may occur within that area. Since the full scope of recreational development is unknown at this time, the level of effects is also unknown. Current proposed actions would involve primarily maintenance activities (such as road repairs) and the construction of a small facility at the former dairy area, a location that was previously disturbed and contains no habitat for special status species. These near term actions are unlikely to have a significant effect on special status wildlife species. However, future use of the area may include the development of a new trailhead and construction of new trails throughout the open space area. The trailhead (parking area and possibly fencing and signage) is expected to be developed within the previously disturbed and ruderal areas in the central portion of the potential future Open Space Conveyance Area and would not affect native habitats on which special status wildlife are dependent. However, depending on whether or not any new trails are developed and located in such an area as to disturb critical habitat features for these animals, significant impacts could occur. In addition to these direct effects, indirect effects to special status wildlife could occur as follows:

- Construction-related noise and increased human presence may disrupt foraging, sleeping patterns, and breeding behavior and displacement of individuals;
- Disturbance of nests during breeding season by site users moving through native habitat;
- Provision of landscaping and alternative food sources that could attract nest predators such as crows to the project site and so to the sensitive bird nests; and
- Disturbance associated with onsite noise and light.

The loss of coastal sage scrub and riparian habitats would incrementally reduce the populations of those sensitive animals found within these habitat types. However, as discussed in the 1998 Master Plan EIR, the amount of habitat remaining for these species within the campus is substantial enough to maintain their local breeding populations. Nonetheless, the potential loss of individuals of, and indirect impacts to, endangered or threatened wildlife species or other special-status wildlife species is considered a potentially significant impact unless adequately mitigated.

Mitigation Measures. The potential for significant effects associated with the current actions is dependent on the location of future, unknown long term development relative to the location of special status wildlife habitat. Subsequent biological field studies are necessary once final plans have been developed such that an actual trail design or other recreational resource is available for assessment and avoidance measures can be implemented. The following mitigation measures are proposed to reduce impacts to endangered and threatened or otherwise special-status wildlife species.

09-BIO-1(a) Special-status wildlife species surveys shall be conducted within the Open Space Conveyance Area to determine the presence/absence of any endangered, threatened, or otherwise sensitive wildlife species at such time that specific facilities are proposed. Should the survey results conclude the presence of endangered or threatened species, consultation with USFWS or the CDFG will be required to determine whether or not an incidental take permit may be necessary. Also, prior to the commencement of any subsequent grading operations or other activities involving disturbance of natural habitat, a survey would be conducted to locate special-status wildlife species within 100 feet of the outer extent of projected soil disturbance activities, and any special status wildlife species encountered shall be relocated to suitable habitat outside of the fenced construction area by a qualified biologist in accordance with appropriate permits. A biological monitor will also be present at the initiation of vegetation clearing to provide an education program to the construction operators regarding the efforts needed to protect special-status wildlife species. Fencing or flagging would be installed around the limits of grading prior to the initiation of vegetation clearing.

09-BIO-1(b) The winter prior to construction activities within Long Grade Canyon Creek, a habitat assessment shall be performed within Long Grade Canyon Creek to determine the suitability of the habitat to support least Bell's vireo. If the habitat assessment indicates that suitable habitat exists onsite to support breeding and nesting by least Bell's vireo, USFWS protocol surveys shall be conducted for least Bell's vireo prior to any construction activity within the creek, including vegetation clearing. If federal listed endangered or threatened wildlife species are found within any proposed development areas, CSUCI shall obtain the necessary signed copies of an incidental take permit and associated enacting agreements prior to the initiation of alteration of natural habitats containing such species.

Incidental take for species would be via either the Section 7 consultation process or through the preparation of a Section 10(a) Habitat Conservation Plan (HCP). To determine whether or not impacts can be sufficiently mitigated or whether the project would result in an unavoidable adverse significant impact to species listed under the Endangered Species Act (ESA), the regulatory framework of the ESA needs to be considered. Acquisition of a take permit requires that the impact be avoided to the extent practicable, that the impact be minimized, or that compensatory mitigation (typically in the form of habitat acquisition and/or restoration) be performed. This establishes performance criteria whereby in the regulatory opinion of the authorizing agency, the impacts to the listed species is reduced such that a finding of "no jeopardy" can be made. The criteria established under this act provides a basis for determining whether or not a significant impact is fully mitigated, and compliance with this regulatory process sufficiently to obtain an incidental take permit indicates that impacts have been reduced to a level of less than significant.

09-BIO-1(c) Lighting near habitat occupied by special-status wildlife species shall be shielded and directed away from that habitat. Lighting of parking lot areas would be limited to an intensity only sufficient to provide safe passage. Any fixed in place sound amplification equipment shall be shielded from occupied habitat to reduce effects on breeding special-status wildlife species. A qualified biologist will review lighting and sound plans prior to construction to ensure that the proposed plans minimize potential impacts on special-status wildlife species.

Significance After Mitigation. Please note that additional mitigation measures for nighttime lighting are applied under 09-Impact-AES-2 in Section 4.1 *Aesthetics*. After successful implementation of the proposed mitigation measures, the level of significance for impacts to special-status wildlife species potentially onsite, would be reduced to less than significant.

09-Impact BIO-2. Implementation of the proposed project could result in the disturbance or loss of nesting birds. Impacts are Class II, *significant but mitigable*.

Multiple bird species are expected to nest (breed) within the trees around the campus, within the natural habitats within the potential future Open Space Conveyance Area, and in the riparian areas associated with Long Grade Canyon Creek and Calleguas Creek. Construction activity during the bird nesting period can result in the unnecessary loss of bird nests, which is regulated by the California Fish and Game Code (Sections 3503 and 3503.5). Therefore, impacts to native nesting birds or raptor nests as a result of the project development and construction activities is considered a potentially significant impact unless adequately mitigated.

Mitigation Measures. The following mitigation measure revises and updates Mitigation Measure S-BIO-4 from the 2000 SEIR and is proposed to reduce impacts to nesting birds.

09-BIO-2 If vegetation clearing (including tree pruning and removal) or other project construction is to be initiated during the bird breeding season (February 1 through August 31), pre-construction/grading surveys shall be conducted by a qualified ornithologist. Surveys would begin 30 days prior to initial disturbance activities and would continue once per week, with the last survey being conducted no more than three days prior to the initiation of clearance/construction work. If a nesting bird or special-status species is located, consultation with the local CDFG representative would occur to determine what avoidance actions may be taken. If any active *non-raptor* bird nests are found, a suitable buffer area (varying from 25-300 feet) depending on the particular species found is established from the nest, and that area is avoided until the nest becomes inactive (vacated). If any active *raptor* bird nests are found, a suitable buffer area of typically 250-500 feet from the nest is established, and that area is avoided until the nest becomes inactive (vacated). Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing. Construction personnel should be instructed on the

sensitivity of the area. The applicant should record the results of the recommended protective measures described above to document compliance with applicable State and federal laws pertaining to the protection of nesting birds.

Significance After Mitigation. After successful implementation of Mitigation Measure 09-BIO-2(a), the level of significance for potential impacts to nesting birds would be reduced to less than significant.

09-Impact BIO-3. Potential impacts to endangered, threatened, or rare plant species or other special-status plant species. Impacts are Class II, *significant but mitigable*.

Three special-status plant species were observed by Rincon Consultants during the 1999 study within the Master Plan area, including Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae* [CNPS List 1B.1]), Verity's dudleya (*Dudleya verityi* [federally threatened]), and Conejo buckwheat (*Eriogonum crocatum* [state rare]). Several extensive stands of Blochman's dudleya are located on steep slopes in generally inaccessible areas within the potential future Open Space Conveyance Area. In addition Plummer's mariposa-lily (*Calochortus plummerae* [CNPS List 1B.2]) and Conejo dudleya (*Dudleya parva* [federally threatened]) are also expected within the project area due to suitable habitat and because they are tracked nearby. While no specific actions are proposed that would affect the known locations of these special-status plant species, there is potential to impact special-status plant species within the potential future Open Space Conveyance Area due to alterations to the natural vegetation if new trails were to be developed within natural areas. The loss of endangered, threatened, or rare plant species or other special-status plant species and their habitat as a result would be considered a potentially significant impact unless adequately mitigated.

Mitigation Measures. The following mitigation measures are proposed to reduce impacts to special-status plant species. These mitigation measures provide for the development of conservation and restoration measures that would result in full mitigation for any loss of listed species. It is at the CDFG's discretion as to whether or not the actions that an applicant may propose meet the criteria listed above such that a finding of "no jeopardy" can be made.

09-BIO-3(a) Prior to any future construction activities within native scrub and grassland habitats, floristic spring surveys for sensitive plant species shall be performed during the blooming period, when species known and potentially onsite are observable and can be identified to species. The supplemental focused rare plant surveys shall follow survey guidelines as developed by CDFG and CNPS, including: 1) the site shall be traversed on foot by walking meandering transects to ensure thorough coverage of the area; 2) surveys shall be spaced throughout the spring and summer growing season to document the site's flora; and 3) surveys shall be floristic in nature, and all plant species observed shall be recorded and identified to a sufficient level to determine rarity. Voucher specimens of unknown taxa shall be collected and brought back to the laboratory for identification, and questionable specimens shall be reviewed by local experts. Any locations of newly observed

special-status plant species shall be marked and mapped using a Trimble® GeoXTTM GPS unit capable of sub-meter accuracy.

09-BIO-3(b) If a listed endangered, threatened, or rare species occurs within any proposed trail right of way or within the bounds of any subsequent development in the Open Space Conveyance Area, the proposed trail or structure shall be moved or redesigned such that the grading/construction zone shall not be within 200 feet of the identified population.

Construction monitors shall be present during grading or other construction activity within 300 feet of known sensitive plant locations. Construction operators shall be educated as to the species identification and sensitivity, and shall be directed to avoid impacts to such plants.

Significance After Mitigation. After successful implementation of the proposed mitigation measures, the level of significance for impacts to endangered, threatened, or rare plant species and other special-status plant species potentially onsite would be reduced to less than significant**.**

09-Impact BIO-4 Future unknown recreational development could result in the disturbance or reduction in extent of sensitive Venturan coastal sage scrub habitat. Current near term impacts are Class III, less than significant, but future cumulative impacts may be significant and would require subsequent environmental documentation.

Venturan coastal sage scrub is considered a sensitive habitat by regulatory agencies due to its declining status in southern California and its known function as preferred habitat for special-status wildlife species such as coastal California gnatcatcher. The full extent of potential impacts to this habitat type is currently unknown since no specific actions beyond attending to deferred maintenance and operating educational field walks have been finalized for the potential future Open Space Conveyance Area. However, most near term proposed alterations to this potential future conveyance area, including the new greenhouse, will occur in already disturbed areas. In addition, it is anticipated that the trailhead facility would be developed within the ruderal and previously disturbed habitats in the central portion of this area. Nonetheless, it is possible that facilities may be located near to coastal scrub habitat and so require fuel modification in this habitat, or that new trails may be developed within this habitat. While the amount that would be removed as a consequence of such minimal development is not likely to be substantial, the cumulative loss of coastal sage scrub is considered significant.

Mitigation Measures. The current near term actions anticipated for the potential future Open Space Conveyance Area would not have a significant effect on sensitive communities. However, in the event that new trails are designed and proposed for construction, or that structures are located adjacent to sensitive habitats such that they would be removed by fuel modification requirements, significant cumulative impacts could occur. In the event that such future projects are proposed, subsequent environmental documentation will be required to determine appropriate mitigation measures for such actions.

Significance After Mitigation. Less than significant without mitigation for the potential future conveyance. Future plans would need to be evaluated separately.

09-Impact BIO-5 Implementation of the proposed project would result in the fill of wetland/riparian habitat and jurisdictional areas, but such fill is planned for and new wetland areas will be developed as a result of the new levee construction. Impacts are Class IV, *beneficial.*

Long term growth of the CSUCI campus as envisioned by the Campus Master Plan would result in the loss of jurisdictional waters and wetlands and riparian habitat as previously documented in the 1998 EIR and the 2000 SEIR. As a consequence, a Habitat Mitigation and Monitoring Plan (HMMP) was developed in 2002 to offset impacts to USACE, RWQCB, and CDFG jurisdictional waters and wetlands resulting from implementation of the Campus Master Plan. The HMMP was approved by these regulatory agencies resulted in the creation and/or restoration of approximately 10.33 acres of native habitat, including wetlands, channel plantings, and buffers. Of this acreage, approximately 6.11 acres is applicable to USACE habitat mitigation, approximately 5.76 acres is applicable to RWQCB mitigation (2.57 acres of waters and 3.19 acres of wetlands), and 10.33 acres is applicable to CDFG mitigation (*Final (Year 5) Mitigation Monitoring Report: Areas A and C, for the CSUCI Campus Master Plan*, October 2007). In compliance with this HMMP and associated ACOE Permit No. 200000422-SDM, RWQCB Certification File No. 01-002, and CDFG SAA No. 5-2001-0019, alterations were made to jurisdictional waters during the course of campus improvements. After application of the above developed credits, CSUCI retains credits of 5.11 acres of USACE mitigation, 1.57 acres of RWQCB non-wetland waters, 3.19 acres of RWQCB wetlands, and 8.33 acres of CDFG mitigation habitat.

At the time of the permit issuance, further growth of the campus into the New Access Road Area was anticipated, but the specific effects of that action were unknown. Therefore, Condition 8 of Permit No. 200000422-SDM stipulated that a wetland delineation be completed and submitted to the USACE once the adjacent site was acquired and accessible. This wetland delineation has been prepared as previously described and the impacts on jurisdictional waters determined. The proposed project will impact Long Grade Canyon Creek at two road crossings and two pedestrian crossings, the Calleguas Creek levee at a new flapgate location, and an agricultural ditch north of the Long Grade Canyon Creek levee. Fill that would occur as a result of this construction would cause 500 square feet, or 0.01 acre (100 linear feet), of permanent impacts to USACE jurisdictional waters, 1,600 square feet, or 0.037 acre (190 linear feet), of temporary impacts to waters, and 5,800 square feet, or 0.133 acre (150 linear feet), of temporary impacts to wetlands. These impacts to USACE jurisdictional waters, including wetlands, would decrease the amount of mitigation credit noted above. A modification/amendment of the current USACE permit is needed to document these alterations.

In addition, the current activities propose to develop an additional 13.1 acres of riparian and wetland habitat as a result of the new levee construction. This wetland habitat is being developed as pre-mitigation in anticipation of further long term growth on the campus that will remove isolated wetlands adjacent to the campus power plant and the creation of a recreational facility within the upstream Long Grade Canyon Creek debris basin as described in previous environmental documentation for the Campus Master Plan. Therefore, the net effect of the

current action will be to increase the amount of wetland and riparian habitat within the New Access Road Area, which is considered a beneficial effect of the proposed project.

Total RWQCB jurisdictional impacts within Long Grade Canyon Creek, Calleguas Creek, and the agricultural ditch include 500 square feet, or 0.012 acre (100 linear feet), of permanent impacts to waters, 9,440 square feet, or 0.217 acre (190 linear feet), of temporary impacts to waters, and 60,250 square feet, or 1.383 acres (150 linear feet), of temporary impacts to wetlands. These impacts to RWQCB jurisdictional areas are a regulated effect that will require a modification of the existing Section 401 certification for the CSUCI campus. As previously stated, the net effect of the currently proposed actions would be to increase wetland and riparian habitat.

Within Long Grade Canyon Creek, Calleguas Creek, and the agricultural ditch, the currently proposed actions will permanently impact 3,400 square feet, or 0.079 acre (260 linear feet), and temporarily impact 72,891 square feet, or approximately 1.68 acres (4,953 linear feet), of CDFG jurisdiction. These impacts to CDFG jurisdictional areas will require a modification of the existing Streambed Alteration Agreement or re-issuance of a new agreement.

Mitigation Measures. Permits regarding the fill of jurisdictional areas as a consequence of long term growth of CSUCI have previously been obtained and existing mitigation credits are available to meet the needs of the current project. In addition, the proposed new levee will enclose an area to be developed as wetland and riparian habitat that will pre-mitigate for future growth on the CSUCI campus. Mitigation measures contained in the 2000 SEIR required the replacement of filled wetlands through the creation of new wetlands, as indicated below:

S-BIO-3(a) A minimum of 8.1 acres of wetland vegetation and open water resources shall be created as part of the re-aligned Long Grade Canyon channel and wetland restoration area in the 75-acre parcel. This acreage shall be in addition to the 7.1 acres of existing wetland areas, the 2.25 acres of reclaimed water storage, and the 4.4 acres of detention/debris basin.

S-BIO-3(b) The wetland area shall be designed to contain a mix of wetland types, including willow scrub, mulefat scrub, and freshwater marsh elements. The wetland restoration plan shall be implemented prior to development of the existing debris basin or the retention basin.

Significance After Mitigation. Based on the current design and foreseeable growth of the Campus Master Plan, the existing wetland and riparian habitat credits and the proposed development of approximately 13.1 additional acres of riparian and wetland habitat will fully mitigate for current and long term growth within the CSUCI campus and result in a greater amount of wetland and riparian habitat than is present currently. Therefore, project effects are considered beneficial with respect to these biological resources.

09-Impact BIO-6. Implementation of the proposed project could potentially impede local wildlife movement. Impacts are Class III, *less than significant.*

While the CSUCI campus and potential future Open Space Conveyance Area are not within any mapped regional wildlife movement corridor, Calleguas Creek does serve as a migration corridor for aquatic-based organisms and the campus and Camarillo Regional Park still contain substantial natural habitats used by a variety of local wildlife species. Local movement patterns occur through these open space areas within and in the vicinity of the project site, and these could potentially be affected by the increased development activity in the western portion of the CSUCI campus. In addition lighting proposed for the Portrero Soccer Fields creates the potential for impacts to local wildlife activities and movement near Round Mountain. Near term activities and maintenance actions within the potential future Open Space Conveyance Area are not expected to substantially affect wildlife movement patterns because of the limited nature of such activities and because most movement occurs at night and this area is anticipated to be closed to nighttime activities, as the park is currently closed at night.

The potential effect to wildlife movement is mitigated by the development of an approximate 13.1 acre riparian and wetland habitat along the southern boundary of the New Access Road Area. Once developed, this habitat area in conjunction with past revegetation of Long Grade Canyon Creek within the campus would allow for increased wildlife movement along the Long Grade Canyon Creek corridor by wildlife that were not able to use this area because of past development encroachment and agricultural use. This mitigation area would provide for a better connection between the scrub habitats on Round Mountain, which currently is relatively isolated, to the scrub habitats of the hillsides to the east of University Drive and the potential future Open Space Conveyance Area. Such movement could be limited by the night-lighting associated with the proposed athletic fields and the parking lots, but mitigation measures associated with lighting as discussed above would serve to decrease such effects and allow wildlife passage.

Mitigation Measures. None Necessary

Significance After Mitigation. Less than significant.

c. Cumulative Impacts. Urban and agricultural development of the Oxnard Plain has essentially eliminated the natural communities that once existed within the lowland areas. The western portion of the Santa Monica Mountains, however, has not been developed and large land holdings in this area are within permanent open space conservation easements. CSCUI growth has been limited to areas that were previously developed, while the natural hillsides have been retained and continue to be planned to be maintained as open space for the campus. Nonetheless, development of other areas within the Calleguas Creek watershed would result in further significant native habitat losses. The proposed conveyance of natural habitats associated with the potential future Open Space Conveyance Area into the Campus Master Plan and its future primary continued use as a recreation and open space area would further limit potential cumulative growth adjacent to the CSUCI campus, thereby reducing potential cumulative impacts.