# CHAPTER 5.7 BIOLOGY

The initial study did not identify any significant impacts that may be associated with biological resources. The following section is a compilation of biological information from several sources including, the Final EIR for the Lucia Mar Unified School District High School Number Two, the EIR for the South County Area Plan, the Woodlands Final EIR, and Willow Road Final EIR. Also, a site visit to each study area was conducted with the purpose of identifying and listing the habitat and wildlife within each of the Study Areas. This information is found in Appendix B.

# A. Existing Conditions

# **Regional Location**

Nipomo, California is within the California Floristic Province<sup>1</sup>, Central Western California Region. The San Luis Obispo coastal region has a Mediterranean climate with habitats including mosaics of upland oak and mixed evergreen forests, dune and strand communities, native and non-native grasslands, upland scrubs, marsh and wetland communities, and riparian scrubs and forests. Nipomo is within a coastal zone landscape which is defined by two mountain ranges that are located northwest and southeast. These ranges are the Santa Lucia and San Luis Mountains. Even though the aforementioned two mountain ranges are not significantly high in elevation, they are effective climatic barriers between the coastal zone and the inland portion of San Luis Obispo County.

In the vicinity of the eight areas examined, native vegetation consists of coast live oak woodland, chaparral and grassland communities. Agricultural, residential development, and alteration of the natural landscape (plantations) are the primary factors limiting open space and natural communities in this area. The area's location among rolling hills at the southern end of the Salinas Valley provides a suitable environment for many plants and animals. A plant survey prepared for San Luis Obispo County (Hoover, 1970) identifies the area in a middle- Sonoran vegetation zone with significant wooded hillsides. The following community types appear to be the most plentiful in the planning area:

## **Riparian Scrub/Riparian Woodland**

Riparian scrub and riparian woodland communities are characterized as sparse to dense corridors of vegetation occurring adjacent to stream and rivers or in areas with a high ground water table. The communities extend throughout the planning area. The structure of riparian communities within the planning area is variable and alternates between dense tree thickets (riparian woodland) and open, shrub dominated areas (riparian scrub).

Riparian scrub communities within the planning area are highly dependent upon factors such as seasonal changes in flow rate, the size and nature of the streambank and historical patterns of land use. Riparian scrub communities generally occur along perennial and intermittent streams. They are typically dominated by willows (Salix spp) and other various shrubs. Species such as poison hemlock (*Conium maculatum*), wild blackberry (*Rubus ursinus*), twinberry (*Lonicera involucrate*), and sting nettle (*Urtica holosericea*) often comprise riparian scrub understory.

#### **Oak Woodland**

Oak woodland communities extend throughout the planning area. In the planning area, oak woodlands do not form a continuous belt, but occur as a mosaic closely associated with communities such as non-native grassland. The oaks are primarily represented by the live oak (*Quercus agrifolia*), the valley or white oak (*Quercus lobata*), and the blue oak (*Quercus douglasii*). Since oaks are scattered, other plant communities such as chaparral and grassland integrate, and the understory becomes highly variable.

#### Chaparral

Scrub oaks and foothill pines (*Pinus sabiniana*) form the major part of the chaparral community found on the more exposed, southern-facing slopes. These communities tend to have significant litter with little understory growth, and are adapted to fire. Typical species that occur in association with chaparral include manzanita (*Arctostaphylos* spp.) and poison oak.

#### Annual Grassland

Annual grassland communities occur in the interior valleys of the Coast Ranges of California and along the central and southern California coast. The majority of grasslands throughout California, as in the planning area, are dominated by non-native grasses that were introduced from the Mediterranean region during the Spanish Colonization period. Grassland communities extend through the planning area, but vary in terms of structure and species, depending on land use. Non-native grasses, native wildflowers, and weedy annual forbs dominate grassland of the planning area. In addition, a few native species of grass may occur as part of the non-native grassland association. Typical non-native grass species include wild oat (*Avena spp.*) and fescues (*Vulpia spp.*) Typical forbs include California poppy (*Eschscholzia californica*) and clarkia (*Clarkia* spp.). Native species of grass include purple needlegrass (*Stipa pulchra*) and slender needlegrass (*Stipa lepida*).

# Central Coast Scrub - Mixed Sage Series

Central coast scrub – mixed sage series occurs as scattered patches in several of the study areas. The areas are composed of an almost equal mixture of California sagebrush (*Artemesia californica*), coyote brush (*Baccharis pilularis*), silver bush lupine (*Lupinus chamissonis*), tree lupine (*Lupinus arboreus*), mock heather (*Ericameria ericoides*), coffee berry (*Rhamnus californica*), coast buckwheat (*Eriogonum parvifolium*), croton (*Croton californica*), and deerweed (*Lotus scoparius*).

Most growth of characteristic species in this series occurs in late winter and spring, with flowering concentrated in late spring and early summer.

## **California Grassland Series**

This series comprises a dense to sparse cover of introduced, naturalized grasses associated with numerous species of annual and perennial forbs. The presence of this assemblage of non-native grasses (of Mediterranean and South African origin) is a consequence of permanent alterations to the once widely distributed, pristine perennial grasslands of California. The conversion of native perennial grassland into non-native, predominately annual species has resulted from a combination of (1) invasion by alien plant species, (2) changes in the kinds of animals and their grazing patterns, (3) cultivation, and (4) fire regime (Heady, 1988).

#### Eucalyptus

Some of the areas are dominated by pure, dense stands of eucalyptus (*Eucalyptus sp.).* Some of the stands are about a hundred years old, and most of the site has been logged and/or burned and trees now on the site have sprouted from stumps or root systems. Most of the trees range between one and five feet in diameter at breast height (dbh) and attain heights between 70-120 feet. Portions of the forest have evenly spaced trees, while other areas are dense with immature trees, second and third growth, snags and deadfalls.

Under story vegetation is inhibited by the low light conditions at the soil surface and thick tree litter (i.e. fallen branches, leaves, fruits, and bark) with allelopathic<sup>1</sup> properties which prevent the establishment of shrubs (McArthur, 1962). Consequently, the understory is sparse and relatively low in species diversity. Understory species include a mix of non-native grasses including veldt grass (*Ehrharta calycina*), ripgut brome (*Brome diandrus*), slender wild oats (*Avena barbata*), foxtail fescue (*Vulpia myuros var. myuros*) and various forbs such as pimpernel (*Anagallis arvensis*), *Italian thistle* (Cardus pycnocephalus), bedstraw (*Gallium aparine*), chickweed (*Stellaria media*), nightshade (*Solanum xanti*), Bermuda buttercup (*Oxalis pescaprae*), and telegraph weed (*Heterotheca grandiflora*).

## Ruderal (Disturbed habitat)

Ruderal vegetation has been significantly disturbed by agriculture, construction, or other land clearing activities. Disturbed habitat occurs throughout the planning area in vacant lots, abandoned fields, roadsides, agricultural fields, parks, and development. Characteristic uncultivated species recorded in disturbed habitats include non-native species such as wild mustard (*Brassica* spp.), wild radish (*Raphanus sativus*), and sweet fennel (*Foeniculum vulgare*).

Varieties of wildlife occur in the vegetative communities in the planning area.

#### Fish

The creeks in the planning area have highly variable surface water levels; fish are expected to occur only seasonally in area creeks.

#### Amphibians

Amphibians occur in streams and associated riparian areas within the planning area. Common species include the western toad (*Bufo boreas*) and the Pacific tree frog (*Hyla regina*). Non-native species that may occur in the planning area include the bullfrog (*Rana catesbiana*).

#### Reptiles

Reptiles occur in nearly all the habitats of the planning area. Common species found in the planning area include the western skink (*Eumeces skiltonianus*), western fence lizard (*Sceloporus occidentalis*), and western rattlesnake (*Crotalus viridus*).

#### Mammals

Common mammals occurring the planning area include deer, western grey squirrel (*Sciurus griseus*), bobcat (*Lynx rufus*), and Botta's pocket gopher

(Thomomys bottae). There have also been sightings of American badger (*Taxidea taxus*). Mammals occupy all of the different habitats of the planning area.

#### **Regulatory Setting**

## Clean Water Act of 1977 (CWA)

Regulatory protection for water resources throughout the United States is under the jurisdiction of the Army Corps of Engineers (ACE). Section 404 of the CW A prohibits the discharge of dredged or fill material into waters of the United States without formal consent from the ACE. Delineation of wetlands and other waters of the United States is required to determine acreage affected by dredge spoil or fill disposal. Impacts to biological resources are assessed as part of the permit process by the U.S. Fish and Wildlife Service (FWS). Policies relating to the loss of wetlands generally stress the need to compensate for wetland acreage losses by creating wetlands from non-wetland habitat on at least an acre-for-acre basis.

#### Section 7 or Section 10 of the United States Endangered Species Act

The United States Endangered Species act provides legislation to protect federally listed plant and animal species. Impacts to listed species resulting from the implementation of a project would require the responsible agency to consult the FWS. Formal consultations must take place with the FWS pursuant to section 10 of the Endangered Species Act! with the FWS then making a determination as to the extent of impact to a particular species. If the FWS determines that impacts to a species would likely occur, alternatives and measures to avoid or reduce impacts must be identified. Section 7 also requires determination of environmental impacts, and thorough biological assessment. Section 7 applies to projects in which a federal agency may be involved, either through financial support or project leadership.

#### State of California Endangered Species Act

The State of California Endangered Species Act mandates that in instances where impacts to a state-listed endangered species would occur, the lead or responsible agency must contact the California Department of Fish and Game (DFG) and enter into formal consultation. Impacts to the state-listed species would be evaluated and identification of mitigation measures would likely be required.

#### California Department of Fish and Game Code, Chapter 6

This code governs state-designated wetlands, including riparian and stream habitat, and mandates that mitigation be implemented to replace wetland extent and value lost to development. A Section 1603 Agreement is required for any alteration to a stream or lake, as well as to their associated habitats.

The following is a listing of the various species found in the Nipomo area.

Common Name	Scientific Name
Crustaceans	
Long horn fairy shrimp	Branchinecta longiantenna
Vernal pool fairy shrimp	Branchinecta lynchi
Invertebrates	
Atascadero June Beetle	Polyphylla nubila
Reptiles and Amphibians	
Arroyo toad	Bufo microscaphus californicus
Hammond's western spadefoot toad	Scaphiopus hammondi hammondi
California red-legged frog	Rana aurora draytonii
Foothill yellow-legged frog	Rana boylei
Coast horned lizard	Phrynosoma coronatum frontale
Southwestern-pond turtle	Clemmys marmorata pallida

Birds	
American white pelican	Pelicanus erythrorkynchos
Double crested cormorant	Phalacrocorax auritas
California gull	Larus califomicus
California condor	Gymnogyps californianus
Northern harrier	Circus cyaneus
Swainson's hawk	Asio flammeus
Ferruginous hawk	Buteo regalis
Merlin	Falco columbarius
Bald Eagle	Haliaeetus leucocephalus
Golden eagle	Aquila chrysaetos
Prairie falcon	Falco mexicanus
Least bittern	Ixobryckus exilus
Burrowing Owl	Athene cunicularia
Spotted owl	Strix occidentalis
Long-eared owl	Asio otus
Cooper's hawk	Accipiter cooperi

Sharp-shinned hawk	Accipiter striatus
Mountain plover	Charadrius montanus
Least Bell's vireo	Vireo bellii pusillus
Willow flycatcher	Empidomax traillii
Purple martin	Progne subis
Yellow-breasted chat	lcteria virens
Yellow warbler	Dendroica Reteckia
Mammals	
San Joaquin kit fox	Vulpes macrotis mutica
Townsend s western big-eared bat	Plecotus townsendii townsendii
California mastiff bat	Eumops perotis californicus
Fish	
Steelhead trout-Central Ca	Oncorhynchus mykiss
Plants	
San Joaquin woolly threads	Monolopia congdonii

Straight-awned spineflower	Chorizanthe rectispina
Well's manazinita	Arctostaphylos wellsii
Brewer's spineflower	Chorizanthe breweri
San Benito fritillary	Fritillaria viridea
San Luis Obispo sedge	Carex obispoensis
Camel Valley bush mallow	Malacohamnus palmeri var. involucratus
Chorro Creek bog thistle	Cirsium fontinale var. obispoense

## B. Thresholds of Significance

The proposed project would represent a significant land use impact if it was to conflict with an adopted general plan land use designations, environmental plans or adjacent land uses. The proposed project would have a significant impact if it affects agriculture resources or operations.

# C. Project Impacts

Expanding the District's Sphere of Influence would not have a direct impact on biological resources in the area. Although the proposed Sphere of Influence Update and Municipal Service Review does not significantly impact biological resources, the proposed project could represent the first step in the development of the areas within the SOI. Future development of this property could adversely impact biological resources in these areas.

It should be noted that the SOI would not cause a change in zoning or an increase in density. An increase in density in the SOI Study Areas would first require review and evaluation through one, or more of the following processes:

• A zoning change in the form of a General Plan Amendment;

- Approval of a Specific Plan;
- Conditional Use Permit (Minor Use Permit/Development Plan approvals;
- Tract/Parcel Map approvals; or
- an Annexation into the District.

The above-listed processes are subject to the California Environmental Quality Act. Inclusion in the SOI does not guarantee service or development of an area, but allows for the jurisdiction to plan serving that area. A General Plan Amendment, Specific Plan, Tract/Parcel Map or Conditional Use Permit would study a variety of land use and environmental issues before being approved or denied including community character and compatibility, existing Land Use policies, traffic and circulation impacts, the provision of public services, etc.

The proposed project would not directly result in any changes in land use for the involved properties. The proposed project could, however, represent the first step in development of undeveloped property in the SOI. The precise nature and extent of future development within the proposed SOI is subject to speculation and cannot be determined at this time. Any future development of the areas within the SOI would require a number of land use planning steps as listed above.

The Program EIR represents the first-tier environmental document for these related actions. Once the Program EIR is prepared, subsequent activities within this program must be evaluated in order to determine the extent of the required additional CEQA documentation.

Expanding the District's Sphere of Influence could have the indirect impact of encouraging a change in land uses in some Study Areas by providing public services (water and sewer). While in this case the NCSD does not control land use decisions (the County does), the provision of public services can affect the intensity and type of land development in a particular area. The Initial Study did not identify any potentially significant impacts to biological resources because the Sphere of Influence does not cause a loss of habitat or rare and endangered species.

The proposed Sphere of Influence Update and Municipal Service Review will not directly result in impacts to any endangered, threatened or rare species or their habitats. Unknown, indirect impacts may be caused by the expansion of the SOI because of the potential growth inducing impacts of providing public services such as water and sewer. The SOI can increase the likelihood of development in an area by enabling a property or properties to receive public services upon annexation to the NCSD. Future development of these areas could result in impacts to habitats of endangered, rare or threatened species. However, the precise nature, density and extent of future development and the associated impacts in those areas within the SOI cannot be determined at this time.

## D. Cumulative Impacts

The CEQA Deskbook defines Cumulative impacts as "two or more individual impacts that, when considered together are considerable or that compound or increase other environmental impacts." The District's SOI is a contributing factor to continued growth and development in the Nipomo area. However, it should be noted that Nipomo has grown significantly over the last two decades without the prior expansion of the District's Sphere of Influence. Typically, development projects were approved by the County for development and then approved by LAFCO and the District for inclusion into the District's SOI and service area. The growth in the area has been driven by approvals at the County level. The approvals usually anticipate the project itself providing public services such as water and sewer. Major development approvals such as this include:

- Black Lake Development-Within the District's SOI/Service Area
- The Woodlands-Outside the District's SOI/Service Area

- Maria Vista-Within the District's SOI/Service Area
- Knollwood-Within the District's SOI/Service Area

The Land Use section of this EIR contains a listing of the General Plan Amendments being reviewed by the County and proposed annexations.

#### E. Mitigation measures

No mitigation measures are necessary because implementation of the Sphere of Influence will not significantly impact the biological resources in the area.

#### F. Residual Impacts

Since the impacts to biological resources are less than significant, there are no residual impacts. Impacts related to biological resources are not considered to be significant (Class III Impact). Implementation of the mitigation measures noted in other sections of the EIR will further reduce impacts to biological resources.