4.3 BIOLOGICAL RESOURCES

This section of the Program EIR evaluates potential impacts to biological resources within the NCP, which would result in the phased construction of recreation facilities and related infrastructure over a 20-year timeframe. This analysis has taken into consideration sensitive habitats, plant, and animal species that are either known to occur, or have the potential to occur, within the proposed project area. This analysis evaluates potential short- and long-term impacts to biological resources, based on the proposed recreational opportunities, including the expansion of existing facilities, the addition of new facilities to the park, active recreational uses including multi-use sports fields, passive recreational uses and open space, and improvements to infrastructure. For those instances where potential impacts to sensitive biological resources may occur, mitigation measures and best management practices (BMPs) have been proposed with the objective of avoiding or minimizing impacts.

The information presented within this section is based on a compilation of several previous biological studies conducted within the project area by SWCA biologists in 2004, and field verification surveys conducted in 2010. The primary documents used in preparation of this section include the following:

- *Constraints Analyses for the Nipomo Regional Park*; Morro Group, Inc., 2004.
- *California Red-Legged Frog Habitat Assessment for the Nipomo Regional Park;* Morro Group, Inc., 2004.

4.3.1 Existing Conditions

The approximately 140-acre NCP consists of recreationally developed areas located primarily within the southern and eastern portion of the site, with undeveloped areas dominated by native plant communities occupying the remaining areas. The 12-acre Nipomo Native Garden includes trails and planted areas with paved trails/walkways and dirt/spur trails. The garden is in the final stages of being restored to a native botanical garden which will feature native plant communities endemic to the Nipomo Mesa and dunes complex. Public recreation within the 22-acre Mesa Meadows open space area includes a Class I bicycle path and contiguous equestrian trail. The trail system travels past non-native and native (planted) vegetation, and connects into the trail system of the NCP.

4.3.1.1 Soils

The NCP contains sandy soils, and elevations range from 337 to 425 feet. The soils map in the U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) Soil Survey of San Luis Obispo County, California, Coastal Part (1984) delineates two soil units as present within the project site: Oceano Sand, 0% to 9% slopes, and Oceano Sand, 9% to 30% slopes.

4.3.1.2 Plant Communities and Habitat Types

Plant communities and habitat types were classified according to the *Preliminary Description of Terrestrial Natural Communities of California* (Holland 1986) and the *California Department of Fish and Game (CDFG) List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base* (CDFG 2007). Plant species observed were identified based on *The Jepson Manual: Higher Plants of California* (Hickman 1993) and *Vascular Plants of San Luis Obispo County* (Hoover 1970).

Five natural plant communities and habitat types were identified within the NCP, including coastal scrub, oak woodland, maritime chaparral, annual grassland, and ruderal/disturbed areas. Ornamental/developed areas (i.e., windrows of pine and eucalyptus trees, turf areas, and ball fields) are also present in the recreationally developed eastern portion of the park and along the Mesa Meadows bike trail. Several drainage basins are present in the developed areas of the site. The location of plant communities within the park property is shown on Figure 4.3-1.

Maritime Chaparral

Maritime chaparral consists of variable, thick-leaved shrubs of moderate to high cover, dominated by chamise (*Adenostoma fasciculatum*) and manzanita (*Arctostaphylos* spp.) and found on well drained sandy soils in areas subject to summer fog (Holland, 1986). This plant community survives at scattered locations in southern San Luis Obispo and northern Santa Barbara Counties.

Maritime chaparral is located predominately along the margins of oak woodland (refer to Appendix D; Photo 1 and Figure 4.3-1) and coastal scrub plant communities in the NCP and; therefore, has plant associates from these two communities. Plants observed within this plant community include chamise, coast live oak *(Quercus agrifolia*), sand mesa manzanita (*Arctostaphylos rudis*), coffeeberry (*Rhamnus californica*), coyote brush (*Baccharis pilularis*), black sage (*Salvia mellifera*), California sage (*Artemisia californica*), poison oak (*Toxicodendron diversilobum*), and bush monkeyflower (*Mimulus aurantiacus*). Sand mesa manzanita (refer to Appendix D; Photo 2) is considered a California Native Plant Society (CNPS) List 1B.2 plant species. The locations of maritime chaparral and sand mesa manzanita specimens within the park are shown on Figure 4.3-1.

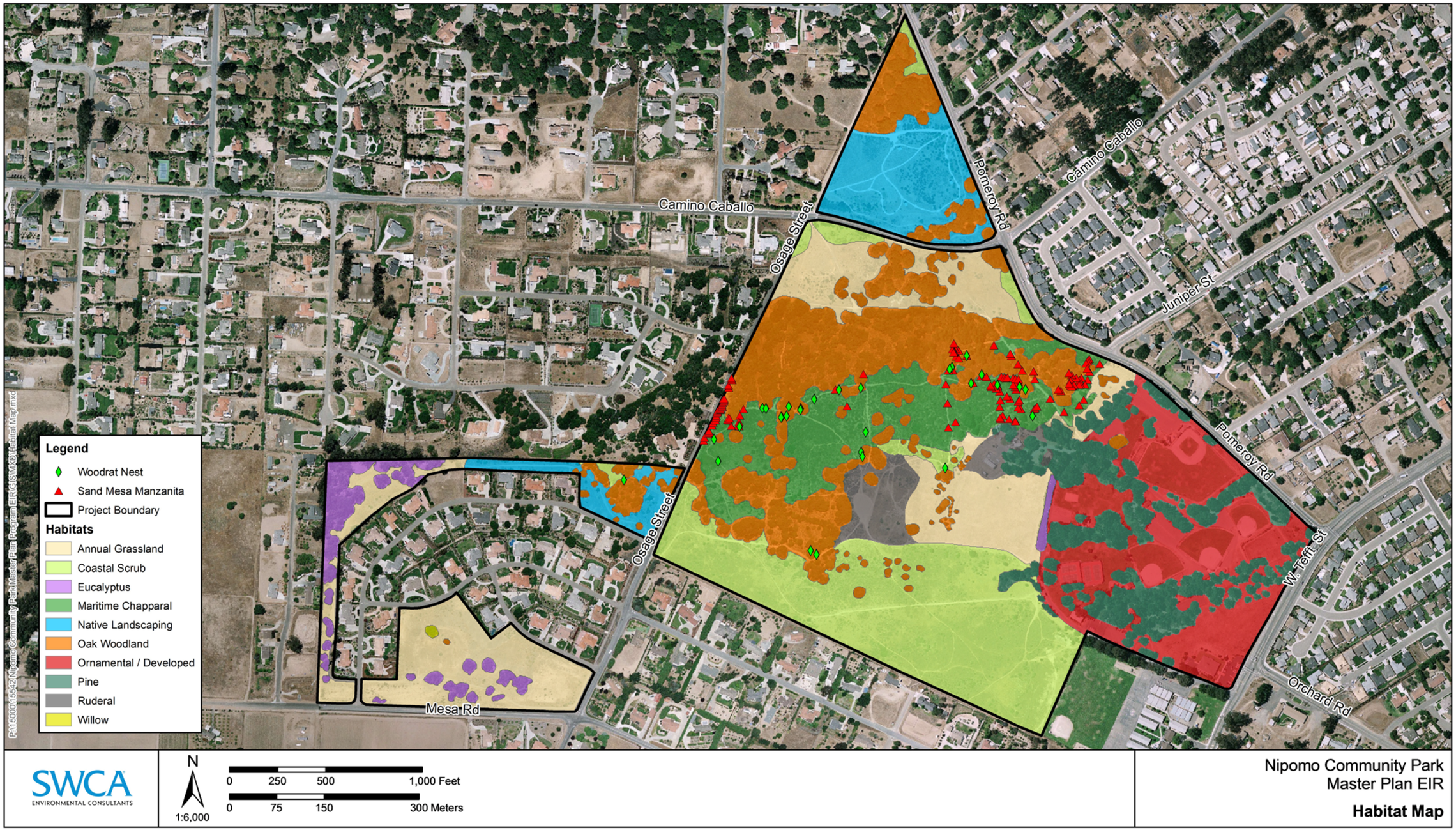
Avian and reptile species observed in central maritime chaparral include scrub jay (*Aphelocoma californica*), northern mockingbird (*Mimus polyglottos*), California thrasher (*Toxostoma redivivum*), bushtit (*Psaltriparus minimus*), California towhee (*Pipilo crissalis*), spotted towhee (*Pipilo maculatus*), white-crowned sparrow (*Zonotrichia leucophrys*), western whiptail (*Cnemidophorus tigris*), and western fence lizard (*Sceloporus occidentalis*).

Oak Woodland

Oak woodlands within the NCP and Nipomo Native Garden feature coast live oak as the dominant evergreen tree. This plant community can often be from 30 to 75 feet in height and establish dense canopies (Holland 1986; Holland and Keil 1995). The shrub layer is typically poorly developed, but may include species such as toyon (*Heteromeles arbutifolia*) and poison oak. The herbaceous layer is continuous and dominated by oak leaf litter and often introduced species such as veldt grass (*Ehrharta calycina*) and ripgut brome (*Bromus diandrus*). Oak woodlands typically grow on north-facing slopes and within shaded ravines, intergrading with coastal scrub and chaparral communities on xeric (dry) sites and coast live oak forest or mixed evergreen forest on mesic (moist) sites (Holland 1986).

Plants observed within oak woodland habitat in the NCP include coast live oak, poison oak, California blackberry (*Rubus ursinus*), hummingbird sage (*Salvia spathacea*), and poison oak. Numerous mature coast live oak trees (>5 inches diameter breast height [dbh]) occur in this plant community as well as within ornamental/developed portions of the park (refer to Appendix D; Photo 3 and Figure 4.3-1).

Figure 4.3-1. Habitat and Special-status Species Map



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Oak woodland and its understory offers excellent habitat for a variety of wildlife species, including foraging habitat for coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), mule deer (*Odocoileus hemionus*), bobcat (*Lynx rufus*), and nesting and foraging habitat for raptors and a variety of song birds. Wildlife observed in oak woodland habitat within the NCP includes scrub jay, Northern flicker (*Colaptes auratus*), acorn woodpecker (*Melanerpes formicivorus*), oak titmouse (*Baeolophus inornatus*), chestnut-backed chickadee (*Poecile rufescens*), Cooper's hawk (*Accipiter cooperi*), red-shouldered hawk (*Buteo lineatus*), western fence lizard, and bobcat. Several Monterey dusky-footed woodrat (*Neotoma fuscipes luciana)* middens were observed in oak woodland habitat within the park. Monterey dusky-footed woodrat and Cooper's hawk are both California Species of Special Concern (SSC).

Coastal Scrub

Coastal scrub communities consist of shrubs approximately 3 to 6 feet high, restricted to areas along the coast and extending inland for a few miles. Along the central coast of California, these communities may be sparsely vegetated to dense, and typically lack grassy openings that are more commonly associated with northern coastal scrub (Holland 1986). While coastal scrub typically grows on exposed, often south-facing slopes with rocky soils (Holland 1986), localized stands of coastal scrub tend to occupy xeric (dry) sites with shallow soils and may occur on a variety of substrates, including sandstone, diatomite, and serpentinite (Holland and Keil 1995). Most growth occurs in late winter and spring, and flowering is concentrated in spring and early summer but may continue throughout the year (Holland 1986). Characteristic species include coyote brush, California sagebrush, bush monkeyflower, and sage (*Salvia* spp.).

Plants observed within this community in the NCP include mock heather (*Ericameria ericoides*), deerweed (*Lotus scoparius*), silver lupine (*Lupinus chamissonis*), coyote brush, veldt grass, California sagebrush, and telegraph weed (*Heterotheca grandiflora*) (refer to Appendix D; Photo 4 and Figure 4.3-1).

Wildlife observed within this plant community includes western fence lizard, California towhee, California thrasher, white-crowned sparrow, black phoebe (*Sayornis nigricans*), and Anna's hummingbird (*Calypte anna*). One white-tailed kite was observed flying over the large coastal scrub area located west of the ball fields. White-tailed kite is a fully protected (FP) species.

Annual Grassland

Annual grasslands typically include a composition of both non-native and native grasses. Valley and southern coastal grasslands composed of mainly Mediterranean species are common in California and consist of a dense to sparse cover of annual grasses approximately 8 to 20 inches high (Holland 1986; Holland and Keil 1995). Annual grassland communities are often associated with numerous species of wildflowers, especially in years of favorable rainfall. Germination occurs with the onset of late fall rains and growth, flowering, and seed-set occurs from winter through spring. The plants typically die during the summer to fall dry season and persist as seeds until the growing season.

Plants observed within the community include veldt grass, brome (*Bromus* spp.), filaree (*Erodium* spp.), rattail fescue (*Vulpia myuros*), and short-pod mustard (*Hirschfeldia incana*) (refer to Appendix D, Photo 5 and Figure 4.3-1). Wildlife observed in this plant community includes California ground squirrel, pocket gopher, western meadowlark (*Sturnella neglecta*), and western fence lizard. Several red-tailed hawks were also observed flying over annual grassland habitat located west and south of the existing ball fields.

Annual grasslands provide foraging habitat for small mammals such as the vole (*Microtus* sp.), white-footed mouse (*Peromyscus* spp.), California mouse (*Peromyscus californicus*), Botta's pocket gopher (*Thomomys bottae*), and California ground squirrel (*Spermophilus beecheyi*), as well as predators that feed on them, such as coyote, and raptors, including sharp-shinned hawk (*Accipiter striatus*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), white-tailed kite (*Elanus leucurus*), American kestrel (*Falco sparverius*), and great horned owl (*Bubo virginianus*).

Ruderal/Disturbed Areas

Ruderal vegetation is usually found in disturbed areas that have been significantly altered by construction, landscaping, or other types of land-clearing activities. Ruderal habitats often occur along roadsides and fence-lines, near developments, and in other areas experiencing severe ground surface disturbance. Plants found within this habitat are typically introduced Mediterranean species that exhibit clinging seeds, adhesive stems, and rough leaves that assist their invasion and colonization of disturbed lands. Plants observed in the ruderal areas include veldt grass, brome, filaree, rattail fescue, and short-pod mustard (refer to Appendix D; Photo 6 and Figure 4.3-1).

Ruderal areas typically do not support sensitive species habitat, although if soil conditions allow, sensitive plant species can grow in such areas. Sensitive wildlife species may occasionally forage in ruderal habitats. Wildlife found in ruderal areas includes species tolerant of disturbance, such as western fence lizard, and California ground squirrel.

Ornamental/Developed Areas

As previously stated, ornamental/developed areas (i.e., windrows of pine and eucalyptus trees, turf areas, and ball fields) are present in the recreationally developed eastern portion of the park and along the Mesa Meadows bike trail. Windrows consist of trees planted for wind protection and are generally associated with agriculture and urban landscapes. Windrows of Monterey pine (*Pinus* spp.) and eucalyptus trees (*Eucalyptus* spp.) are present in the recreationally developed eastern portions of the park and along the Mesa Meadows bike path. Several ball fields with turf grass are also present in the eastern portions of the park. Several mature coast live oak trees are also present in the landscaped areas of the site.

Windrows and landscaped areas have limited wildlife habitat value other than roosting and nesting habitat for various bat, bird, and raptor species. Birds observed foraging in ornamental/developed areas within the park include killdeer (*Charadrius vociferus*), yellow-rumped warbler (*Dendroica coronata*), dark-eyed junco (*Junco hyemalis*), scrub jay, bushtit, American crow (*Corvus brachyrhynchos*), house sparrow (*Passer domesticus*), and red-tailed hawk.

4.3.2 Survey Methods and Results

The description and analysis of special-status biological resources within the project area is based on the results of a California Natural Diversity Database (CNDDB) query for records of special-status species that are known to occur within the region. The records search included the following nine 7.5-minute U.S. Geological Survey (USGS) quadrangle maps: Nipomo, Twitchell Dam, Santa Maria, Oceano, Arroyo Grande NE, Guadalupe, Huasna Peak, Caldwell Mesa, and Tar Springs Ridge. In addition to the CNDDB query, the CNPS *Online Inventory of Rare and Endangered Plants of California* (2010) was also reviewed to provide additional information on rare plants that are known to occur in the area. Following the literature review,

SWCA Biologist Barrett Holland conducted field verification surveys on March 4 and March 5, 2010. The verification survey focused on mapping the location of sand mesa manzanita specimens and dusky-footed woodrat nests within the NCP. All observed plant and animal species were documented during the survey.

This section addresses all special-status species known to occur in the nine surrounding USGS quadrangles queried in 2010 (CNDDB 2010). Special-status taxa that are known to occur, or have the potential to occur in the project area were also identified through a review of relevant literature (CNPS 2010; Zeiner et al. 1988; 1990a, 1990b), previous biological studies in the area, and surveys conducted by SWCA biologists.

4.3.2.1 Sensitive Communities

Sensitive communities include wetlands and other habitats listed by CDFG, the County, or other resource agencies as meriting protection or further study due to their rarity or value. Of the plant communities and habitat types identified within the NCP, only maritime chaparral is considered sensitive by CDFG (CNDDB 2010). Maritime chaparral survives at scattered locations in southern San Luis Obispo and northern Santa Barbara Counties.

Oak woodland within the NCP falls under standard County mitigation guidelines for tree removal and are protected under Senate Bill (SB) 1334 (Kuehl bill). The Kuehl bill mandates mitigation for impacted oak woodland and is administered by the county. Other sensitive habitats known to occur within the investigated USGS quadrangles include central foredunes, southern vernal pool, coastal and valley freshwater marsh, and central dune scrub. These communities are confined to specific coastal locations and are not present within the NCP.

4.3.2.2 Special-Status Species

Several species known to occur within, or in the vicinity of the project area, are accorded “special-status” designation because of their recognized rarity or vulnerability to various causes of habitat loss or population decline. Some of these receive specific protection defined in federal or State endangered species legislation. Others have been designated as “sensitive” on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as “special-status species” in this EIR, a collective term indicating some level of local, state or federal concern for populations or habitats.

<u>Special-status Plant Species</u>

The following section describes those special-status plant species which have been documented within an approximate 10-mile radius of the project area. For the purposes of this section, special-status plant species are defined as the following:

- Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (ESA) (50 Code of Federal Regulations [CFR] 17.12 for listed plants and various notices in the Federal Register for proposed species).

- Plants that are candidates for possible future listing as threatened or endangered under the ESA (Federal Register Vol. 73, No. 238, pp. 75175-75244, December 10, 2008).

- Plants that meet the definitions of rare or endangered species under CEQA (State CEQA Guidelines, §15380).
- Plants considered by the CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2 in California Native Plant Society, 2006).
- Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Lists 3 and 4 in California Native Plant Society, 2006).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (14 California Code of Regulations [CCR] 670.5).
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
- Plants considered sensitive by other Federal agencies (i.e., United States Forest Service, Bureau of Land Management), state and local agencies, or jurisdictions.

Based on the literature review for this project, a total of 35 sensitive plant species have been documented in a 10-mile radius of the project area (refer to Table 4.3-1). Because the plant species list presented in Table 4.3-1 is regional, an analysis of the range and habitat preferences of those species was conducted to identify which special-status plant species have the potential to occur within the project area. This analysis considered existing habitat, elevation, results of previous surveys conducted for other projects, and soils within the project area. The analysis determined that 17 sensitive plant species had potential to occur in NCP based on existing habitat. The remaining 18 plant species were eliminated from consideration based on lack of suitable habitat and/or soils on-site, and previous negative survey results (Morro Group 2004). Survey results determined that sand mesa manzanita was the only special-status plant species present within the NCP. These specimens occur at sporadic locations throughout the park (refer to Table 4.3-1 and Figure 4.3-1). For a complete listing of vascular flora observed within the NCP, Nipomo Native Garden, and Mesa Meadows, please refer to Appendix D.

Special-status Wildlife

For the purposes of this section, special-status animal species are defined as the following:

- Animals listed or proposed for listing as threatened or endangered under the ESA (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species).
- Animals that are candidates for possible future listing as threatened or endangered under the ESA (Federal Register Vol. 73, No. 238, pp. 75175-75244, December 10, 2008).
- Animals that meet the definitions of rare or endangered species under the CEQA (State CEQA Guidelines, §15380).
- Animals listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR 670.5).

- Animal species of special concern to the CDFG (Remsen, 1978 for birds; Williams, 1986 for mammals).

- Animal species that are fully protected in California (California Fish and Game Code, §3511 [birds], §4700 [mammals], and §5050 [reptiles and amphibians]).

Based on a CNDDB query, a review of existing literature and the local experience of SWCA biologists, a total of 32 special-status wildlife species have been documented or have the potential to occur within the reviewed USGS quadrangles (refer to Table 4.3-2). Because this list of species is regional, an analysis of the range and habitat preferences of those species was conducted to identify which sensitive wildlife species have the potential to occur within the project study area given the existing habitat. As a result of the analysis conducted by SWCA it was determined that seven sensitive wildlife species had potential to occur within, or directly adjacent to NCP. The remaining 24 species were eliminated from consideration based on lack of suitable habitat conditions on or adjacent to the site. Numerous woodrat nests are present in the oak woodland and maritime chaparral areas on the project site. Nests are likely those of the common dusky-footed woodrat (*Neotoma fuscipes macrotis*). The project area also has the potential to support migratory nesting birds. For a complete listing of wildlife observed within NCP, Nipomo Native Garden, and Mesa Meadows, please refer to Appendix D.

Table 4.3-1. Special-status Plant Species Evaluated for Occurrence on the Project Site

Species Name	Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Rationale for Expecting Presence or Absence
Hoover's bent grass *Agrostis hooveri*	-- / -- / 1B.2	Stoloniferous herb. Occurs in chaparral, cismontane woodland, valley and foothill grassland; usually sandy soils. Elevation 6 – 610 meters.	April – July	**Habitat Present / Occurrence not expected:** Suitable habitat and soils are present on the project site; however, this species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).
Santa Lucia manzanita *Arctostaphylos luciana*	-- / -- / 1B.2	Shrub. Occurs in chaparral and cismontane woodland; usually on shale soils. Elevation 35 – 850 meters.	February – March	**Habitat Absent / No Species Occurrence:** Chaparral and oak woodland habitat was observed on the project site; however, the appropriate soils are not present on the project site for this species.
Santa Margarita manzanita *Arctostaphylos pilosula*	-- / -- / 1B.2	Shrub. Occurs in closed coniferous forest, chaparral, and cismontane woodland; usually on shale soils. Elevation 170 – 1100 meters.	December – March	**Habitat Absent / No Species Occurrence:** Chaparral and oak woodland habitat was observed on the project site; however, the appropriate soils are not present on the project site for this species. This species occurs at higher elevations and was not observed on the project site.
Sand mesa manzanita ***Arctostaphylos rudis***	**-- / -- / 1B.2**	**Shrub. Occurs in chaparral and coastal scrub in Lompoc and Nipomo area; usually on sandy soils. Elevation 25 – 230 meters.**	**November – February**	**Present: Suitable habitat was observed on the project site. Several individuals were observed in the oak woodland and chaparral/coastal scrub areas on the site.**
Well's manzanita *Arctostaphylos wellsii*	-- / -- / 1B.1	Shrub. Occurs in closed cone coniferous forests and chaparral; usually on sandstone. Elevation 30 – 400 meters.	December – May	**Habitat Absent / No Species Occurrence:** Chaparral habitat was observed on the project site; however, the appropriate soils are not present on the project site for this species.

Table 4.3-1. Special-status Plant Species Evaluated for Occurrence on the Project Site

Species Name	Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Rationale for Expecting Presence or Absence
Marsh sandwort *Arenaria paludicola*	FE / SE / 1B.1	Perennial herb. Occurs in freshwater marshes; usually with saturated acidic bog soils. Elevation 3 – 170 meters.	May – August	**Habitat Absent / No Species Occurrence:** Suitable habitat and soils are not present on the project site. This species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).
Miles' milk vetch *Astragalus didymocarpus* var. *milesianus*	-- / -- / 1B.2	Annual herb. Occurs in coastal scrub habitat. Elevation 20 – 90 meters.	March – June	**Habitat Present / Species not observed:** Suitable habitat and soils are present on the project site; however, this species was not observed during surveys conducted during the appropriate blooming period in 2010 and in 2004 (Morro Group 2004).
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	-- / -- / 1B.2	Annual herb. Occurs in coastal bluff scrub and coastal scrub. Elevation 10-200 meters	April - October	**Habitat Present / Occurrence not expected:** Although coastal scrub habitat is present on the project site, this species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).
San Luis Obispo mariposa lily *Calochortus obispoensis*	-- / -- / 1B.2	Perennial herb. Occurs in chaparral, coastal scrub, and grassland communities on serpentine soils. Elevation 75 – 730 meters.	May – July	**Habitat Absent/ No Species Occurrence** Although chaparral, coastal scrub and grassland habitat was observed on the project site, the appropriate soils were not present. This species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).

Table 4.3-1. Special-status Plant Species Evaluated for Occurrence on the Project Site

Species Name	Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Rationale for Expecting Presence or Absence
Palmer's mariposa lily *Calochortus palmeri* var. *palmeri*	-- / -- / 1B.2	Bulbiferous herb. Occurs in broadleafed upland forest, chaparral, and meadows and seeps. Elevation 1,000 – 2,390 meters.	April - July	**Habitat Absent/ No Species Occurrence:** This species occurs at higher elevations than the project site and was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).
Cambria morning-glory *Calystegia subacaulis* ssp. *episcopalis*	-- / -- / 1B.2	Rhizomatous herb. Occurs in chaparral, cismontane woodland, coastal prairie. Elevation 60 – 500 meters.	April – June	**Habitat Present / Occurrence not expected:** Suitable habitat is present on the project site; however, this species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).
San Luis Obispo owl's clover *Castilleja densiflora* ssp. *obispoensis*	-- / -- / 1B.2	Annual herb. Occurs in valley and foothill grasslands. Elevation 10 – 400 meters.	March – May	**Habitat Present / Species not observed:** Grassland habitat is present on the project site; however, this species was not observed during surveys conducted during the appropriate blooming period in 2010 and in 2004 (Morro Group 2004).
Brewer's spineflower *Chorizanthe breweri*	-- / -- / 1B.3	Annual herb. Occurs in closed coniferous forest, chaparral, cismontane woodland, coastal scrub; usually on gravelly or rocky serpentinite soils. Elevation 45 – 800 meters.	April – August	**Habitat Absent / Occurrence not expected:** Habitat was observed on the project site; however the appropriate soils were not present. This species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).

Table 4.3-1. Special-status Plant Species Evaluated for Occurrence on the Project Site

Species Name	Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Rationale for Expecting Presence or Absence
Straight-awned spineflower *Chorizanthe rectispina*	-- / -- / 1B.3	Annual herb. Occurs in chaparral, cismontane woodland, and coastal scrub habitats. Elevation 85 – 1,035 meters.	May – July	**Habitat Present / Occurrence not expected:** Habitat was observed on the project site; however the appropriate soils were not present. This species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).
La Graciosa thistle *Cirsium loncholepis*	FE / ST / 1B.1	Perennial herb. Occurs in coastal wetlands with dunes. Elevation 4 – 220 meters.	May – August	**Habitat Absent / No Species Occurrence:** Suitable habitat was not observed on the project site. This species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).
Surf thistle *Cirsium rhothophilum*	-- / ST / 1B.2	Perennial herb. Occurs in coastal bluff scrub and coastal dune habitats. Elevation 3 – 60 meters.	April – June	**Habitat Absent / No Species Occurrence:** Suitable habitat was not observed on the project site. This species occurs at lower elevations than the project site.
California saw-grass *Cladium californicum*	-- / -- / 2.2	Rhizomatous herb. Occurs in meadows and seeps, and marshes and swamps; usually alkaline or freshwater. Elevation 60 – 600 meters.	June – September	**Habitat Absent / No Species Occurrence:** Suitable habitat and soils were not observed on the project site.
Pismo clarkia *Clarkia speciosa* ssp. *immaculata*	FE / SR / 1B.1	Annual herb. Occurs in sandy soils, openings in chaparral, cismontane woodland, and valley and foothill grassland. On ancient sand dunes not far from the coast. Elevation 25-185 meters.	May – July	**Habitat Present / Occurrence not expected:** Habitat was observed on the project site; however, this species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).

Table 4.3-1. Special-status Plant Species Evaluated for Occurrence on the Project Site

Species Name	Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Rationale for Expecting Presence or Absence
Leafy tarplant *Deinandra increscens* ssp. *foliosa*	-- / -- / 1B.2	Annual herb. Occurs in valley and foothill grasslands. Elevation 300 – 500 meters.	June – September	**Habitat Absent / No Species Occurrence:** Grassland habitat is present on the project site; however, this species occurs at higher elevations.
Gaviota tarplant *Deinandra increscens* ssp. *villosa*	FE/SE/1B.1	Annual herb that occurs in coastal scrub, valley and foothill grassland, and coastal bluff scrub. Elevation 35-430 meters.	May-October	**Habitat Present / Occurrence not expected:** Habitat was observed on the project site; however, this species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).
Dune larkspur *Delphinium parryi* ssp. *blochmaniae*	-- / -- / 1B.2	Perennial herb. Occurs in chaparral and coastal dune habitats (maritime). Elevation 0 – 200 meters.	April – May	**Habitat Present / Occurrence not expected:** Habitat was observed on the project site; however, this species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).
Umbrella larkspur *Delphinium umbraculorum*	-- / -- / 1B.3	Perennial herb. Occurs in cismontane woodland. Elevation 400 – 1600 meters.	April – June	**Habitat Absent / No Species Occurrence:** Oak woodland habitat was observed on the project site; however, this species occurs at higher elevations than the project site. This species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).
Beach spectaclepod *Dithyrea maritima*	-- / ST / 1B.1	Rhizomatous herb. Occurs in coastal dune and coastal scrub habitats with sandy substrate. Elevation 3 – 50 meters.	March – May	**Habitat Present / Species not observed:** Suitable habitat and soils were observed on the project site; however, this species occurs at lower elevations and was not observed during the appropriate blooming period in 2010 and 2004 (Morro Group 2004).

Table 4.3-1. Special-status Plant Species Evaluated for Occurrence on the Project Site

Species Name	Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Rationale for Expecting Presence or Absence
Mouse grey dudleya *Dudleya abramsii* ssp. *murina*	-- / -- / 1B.3	Perennial herb. Occurs in chaparral, cismontane woodland valley, and foothill grassland (serpentinite). Elevation 90 – 440 meters.	May – June	**Habitat Absent / No Species Occurrence:** Chaparral, grassland and oak woodland habitat was observed on the project site; however, serpentinite soils are not present. This species was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).
Blochman's leafy daisy *Erigeron blochmaniae*	-- / -- / 1B.2	Perennial rhizomatous herb. Occurs in coastal dune habitats with sandy substrate. Elevation 3 – 45 meters.	July – August	**Habitat Present / Occurrence not expected:** Suitable dune habitat was not observed on the project site. This species occurs at lower elevations than the project site. This species was not observed during the appropriate blooming period in 2004 (Morro Group 2004).
Mesa horkelia *Horkelia cuneata* ssp. *puberula*	-- / -- / 1B.1	Perennial herb. Occurs in chaparral, cismontane woodland, coastal scrub on sandy/gravelly soils. Elevation 70 – 810 meters.	February – July	**Habitat Present / Species not Observed:** Suitable habitat and sandy soils were observed on the project site; however, this species was not observed during the appropriate blooming period in 2010 and 2004 (Morro Group 2004).
Kellogg's horkelia *Horkelia cuneata* ssp. *sericea*	-- / -- / 1B.1	Perennial herb. Occurs in closed-cone coniferous forest, chaparral (maritime), and coastal scrub with sandy or gravelly openings. Elevation 10 – 200 meters.	April – September	**Habitat Present / Occurrence not expected:** Suitable habitat and sandy soils were observed on the project site; however, this species was not observed during the appropriate blooming period in 2004 (Morro Group 2004).

Table 4.3-1. Special-status Plant Species Evaluated for Occurrence on the Project Site

Species Name	Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Rationale for Expecting Presence or Absence
San Luis Obispo County lupine *Lupinus ludovicianus*	-- / -- / 1B.2	Perennial herb. Occurs in chaparral and cismontane woodland on sandstone or sandy soils. Elevation 50 – 525 meters.	April – July	**Habitat Present / Occurrence not expected:** Suitable habitat and sandy soils were observed on the project site; however, this species was not observed during the appropriate blooming period in 2004 (Morro Group 2004).
Nipomo Mesa lupine *Lupinus nipomensis*	FE /SE /1B.1	Annual herb. Occurs in coastal dunes. Endemic to San Luis Obispo on dry sandy flats, restricted to back dunes, associated with central dune scrub habitat. Elevation 33 – 165 feet.	December-May	**Habitat Absent / No Species Occurrence:** Suitable habitat was not present on the project site. The site is out of the species' elevational range and was not observed during surveys conducted during the appropriate blooming period in 2004 (Morro Group 2004).
Crisp monardella *Monardella crispa*	-- / -- / 1B.2	Rhizomatous herb. Occurs in coastal dunes and coastal scrub with sandy soils. Elevation 10 – 120 meters.	April – August	**Habitat Present / Occurrence not expected:** Suitable habitat and sandy soils were observed on the project site; however, this species was not observed during the appropriate blooming period in 2004 (Morro Group 2004).
San Luis Obispo monardella *Monardella frutescens*	-- / -- / 1B.2	Rhizomatous herb. Occurs in coastal dunes and coastal scrub with sandy soils. Elevation 10 – 200 meters.	May – September	**Habitat Present / Occurrence not expected:** Suitable habitat and sandy soils were observed on the project site; however, this species was not observed during the appropriate blooming period in 2004 (Morro Group 2004).
Gambel's watercress *Nasturtium gambelii*	FE / ST / 1B.1	Rhizomatous herb. Occurs in freshwater and brackish marshes, swamps and the borders of lakes. Elevation 5 – 451 meters.	April – September	**Habitat Absent / No Species Occurrence:** Suitable habitat was not present on the project site. This species was not observed during the appropriate blooming period in 2004 (Morro Group 2004).

Table 4.3-1. Special-status Plant Species Evaluated for Occurrence on the Project Site

Species Name	Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Rationale for Expecting Presence or Absence
Short-lobed broomrape *Orobanche parishii* ssp. *brachyloba*	-- / -- / 4.2	Perennial herb parasitic. Occurs in coastal bluff scrub, coastal dunes, and coastal scrub (sandy). Elevation 3 – 305 meters.	April – October	**Habitat Present / Occurrence not expected:** Suitable habitat and sandy soils were observed on the project site; however, this species was not observed during the appropriate blooming period in 2004 (Morro Group 2004).
Black-flowered figwort *Scrophularia atrata*	-- / -- / 1B.2	Perennial herb. Occurs in closed cone conifer forest, chaparral, coastal dune, coastal scrub, and riparian scrub habitats. Diatomaceous shales. Elevation 10 – 500 meters.	March – July	**Habitat Absent / No Species Occurrence:** Chaparral habitat was observed on the project site; however, the appropriate soils were not present. This species was not observed during the appropriate blooming period in 2010 or in 2004 (Morro Group 2004).
San Bernardino aster *Symphyotrichum defoliatum*	--/--/1B.2	Rhizomatous herb. Occurs in cismontane woodland, coastal scrub, and foothill grassland near ditches and springs. 2-2,040 meters.	July-November	**Habitat Absent / No Species Occurrence:** Chaparral, oak woodland and grassland habitat was observed on the project site; however, the appropriate soils were not present. This species was not observed during the appropriate blooming period in 2004 (Morro Group 2004).
Natural Communities of Concern				
Central dune scrub	A back dune plant community characterized by low growing, drought tolerant shrubs that develop considerable cover. Diagnostic species include *Ericameria ericoides* and *Lupinus chamissonis*.			**Habitat Absent / No Potential for Occurrence:** Project site is not located on the coast and does not support any dune habitats.
Central foredunes	A foredune plant community characterized by scattered low growing perennial plants including *Abronia* sp. *Ambrosia* sp. and *Cackile* sp. Usually occurring in areas exposed to tidal action.			**Habitat Absent / No Potential for Occurrence:** Project site is not located on the coast and does not support any dune habitats.

Table 4.3-1. Special-status Plant Species Evaluated for Occurrence on the Project Site

Species Name	Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Rationale for Expecting Presence or Absence
Maritime chaparral	**A variable scrub community of moderate to high cover dominated by various *Arctostaphylos* or *Ceanothus* species. Found on well drained sandy soils in areas subject to summer fog.**			**Present: This habitat was observed on the property.**
Coastal and valley freshwater marsh	A wetland community that is found in areas of permanently or prolonged freshwater saturation without significant current or flow. Vegetation is dominated by perennial emergent monocots including cattails and rushes.			**Habitat Absent / No Potential for Occurrence:** This habitat was not observed on the project site.
Southern vernal pool	A wetland community dominated by plant species such as Juncus bufonius, Hordeum brachyantherum, *Gnaphalium palustre*, *Eleocharis* spp., *Crassula aqautica*, and *Plagiobothrys trachycarpa*.			**Habitat Absent / No Potential for Occurrence:** This habitat was not observed on the project site.

General references: CDFG 2008, Hickman (ed.) 1993, Munz 1974, CNDDB 2008

Status Codes:

Federal:

FE = Federally Endangered

FT = Federally Threatened

FP = Federally Protected

State:

SE = State Endangered

ST = State Threatened

SR = State Rare

California Native Plant Society (CNPS):

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

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

List 4 = A watch list. Species are of limited distribution or infrequent.

***Threat Code*:**

.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 or no current threats known)

Table 4.3-2. Special-status Wildlife Species Evaluated for Occurrence on the Project Site

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFG	Rationale for Expecting Presence or Absence
Amphibians			
California tiger salamander *Ambystoma californiense*	Vernal pools within grassland or oak woodlands; require seasonal water, ground squirrel burrows, or other underground refuges.	FT/--/SSC	**Species not observed or expected to occur:** The project site does not contain suitable vernal pool habitat or underground refuges suitable for California tiger salamanders.
Arroyo toad *Anaxyrus californicus*	Semi-arid areas near washes and intermittent streams including desert washes, and valley-foothill riparian and desert riparian areas.	FE/--/SSC	**Species not observed or expected to occur:** The project site does not contain suitable wash/riparian habitat for Arroyo toad.
California red-legged frog *Rana draytonii*	Aquatic habitats with little or no flow and surface water depths to at least 2.3 feet. Presence of fairly sturdy underwater supports such as cattails.	FT/--/SSC	**Species not observed or expected to occur:** The project site does not contain aquatic pool habitat or underground refuges suitable for California red-legged frog.
Western spadefoot *Spea hammondii*	Inhabits vernal pools primarily in grassland, but also in valley and foothill hardwood woodlands. Requires seasonal pools for breeding and egg-laying.	--/--/SSC	**Species not observed or expected to occur:** The project site does not contain vernal pool habitat.
Coast Range newt *Taricha torosa torosa*	Coastal drainages from Mendocino County to San Diego County. Resides in terrestrial habitats and migrates up to 1 km to breed in slow moving streams, ponds, and reservoirs. Frequents terrestrial habitats such as oak woodlands.	--/--/SSC	**Species not observed or expected to occur:** Suitable stream and pond habitat is not present on the project site. Though oak woodland habitat is present, coast range newts are not expected to use the site.
Birds			
sharp-shinned hawk *Accipiter striatus*	Occurs in ponderosa pine, black oak, deciduous riparian areas, mixed conifer, and Jeffrey pine habitats. North facing slopes with plucking perches and close proximity to water (within 275 feet).	MBTA/--/--	**Potential for Occurrence (Low):** Suitable roosting and foraging habitat conditions exists within the oak woodland and coastal scrub areas. Species not observed on the site.

Table 4.3-2. Special-status Wildlife Species Evaluated for Occurrence on the Project Site

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFG	Rationale for Expecting Presence or Absence
Tricolored blackbird *Agelaius tricolor*	(Nesting colony); requires open water, protected nesting substrate, and foraging area with insect prey.	--/--/SSC	**Species not observed or expected to occur:** Suitable habitat and foraging areas were not observed for tricolored blackbird.
Burrowing owl *Athene cunicularia*	Open, dry grasslands, deserts, and scrublands. Subterranean nester, dependent upon burrowing mammals.	MBTA/-- /SSC	**Species not observed or expected to occur:** Though grassland habitat is present on the project site, suitable open areas with burrowing mammals was not observed for burrowing owl.
Western snowy plover *Charadrius alexandrinus nivosus*	Occurs on sandy beaches, salt pond levees, and shores of large alkali lakes. Needs sandy, gravelly, or friable soils for nesting.	MBTA, FT/ --/SSC	**Species not observed or expected to occur:** Suitable habitat was not observed on the project site.
white-tailed kite *Elanus leucurus*	Open grasslands, meadows, or marshlands for foraging close to isolated trees for nesting and perching.	MBTA / -- / FP	**Potential for Occurrence (Moderate):** One white-tailed kite was observed flying over the large coastal scrub area located west of the ball fields. Suitable roosting and foraging habitat was also observed on the project site
Prairie falcon *Falco mexicanus*	Occurs in dry, open terrain that is level or hilly and breeds on cliffs.	MBTA/--/--	**Potential for Occurrence (Low):** Suitable roosting and foraging habitat was observed on the project site. However, suitable nesting habitat is not present. Species not observed on the site.
California condor *Gymnogyps californianus*	Occurs in open savannahs, grasslands, and foothill chaparral, in mountain ranges with moderate altitudes. Nest in deep canyons on rock walls with clefts.	FE/SE/--	**Species not observed or expected to occur:** Suitable habitat was not observed on the project site.

Table 4.3-2. Special-status Wildlife Species Evaluated for Occurrence on the Project Site

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFG	Rationale for Expecting Presence or Absence
California black rail *Laterallus jamaicensis coturnniculus*	Occurs most commonly in tidal emergent wetlands dominated by pickleweed, or in brackish marshes supporting bulrushes in association with pickleweed. In freshwater, usually found in bulrushes, cattails, and saltgrass. Usually found in immediate vicinity of tidal sloughs.	MBTA/ST/--	**Species not observed or expected to occur:** Suitable habitat was not observed on the project site.
California least tern *Sternula antillarum browni*	Largely a coastal species that feed on fish and nest on sandy dunes or beaches. Once a common species in California; currently nesting colonies are isolated to Southern California and scattered Bay Area beaches.	FE/SE/--	**Species not observed or expected to occur:** Suitable habitat was not observed on the project site
Class Aves Other migratory bird species (nesting)	Maritime chaparral, windrow and willow riparian forest may provide nesting habitat for migratory birds. .	MBTA/--/--	**Potential for Occurrence (High):** Potential nesting habitat occurs throughout the project site. Pre-disturbance nesting bird surveys are recommended prior to any grading or vegetation removal.
Fish			
Tidewater goby *Eucyclogobius newberryi*	Occurs in brackish shallow lagoons and lower stream reaches where water is fairly still, but not stagnant.	FE/--/SSC	**No Potential for Occurrence:** Suitable aquatic habitat is not present on the project site.
Arroyo chub *Gila orcutti*	Occurs in slow water streams with mud or sand bottoms and feeds on aquatic vegetation and the associated invertebrates.	--/--/SSC	**No Potential for Occurrence:** Suitable aquatic habitat is not present on the project site.
South-central California coast steelhead ESU *Oncorhynchus mykiss irideus*	Clear, cool water with abundant in-stream cover, well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio.	FT, PCH /-- /SSC	**No Potential for Occurrence:** Suitable aquatic habitat is not present on the project site.

Table 4.3-2. Special-status Wildlife Species Evaluated for Occurrence on the Project Site

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFG	Rationale for Expecting Presence or Absence
Gastropods			
Mimic tyronia *Tyronia imitator*	Coastal lagoons, estuaries, and salt marshes; found only in permanently submerged areas.	--/SA/--	**No Potential for Occurrence:** Suitable aquatic habitat is not present on the project site.
Insects			
Oso Flaco robber fly *Ablautus schlingeri*	Occurs in sand dunes.	--/SA/--	**Species not observed or expected to occur:** Suitable habitat was not observed on the project site
Oso Flaco flightless moth *Areniscythris brachypteris*	Open, coastal sand dune slopes in San Luis Obispo County.	--/SA/--	**Species not observed or expected to occur:** Suitable habitat was not observed on the project site
Oso Flaco patch butterfly *Chlosyne leanira elegans*	Sand dune habitat around Oso Flaco Lake, San Luis Obispo County. Distribution corresponds to its food plant *Castilleja affinis*.	--/SA/--	**Species not observed or expected to occur:** Suitable habitat was not observed on the project site
Sandy beach tiger beetle *Cicindela hirticollis gravida*	Coastal areas adjacent to non-brackish water; clean, dry light-colored sand in the upper zone.	--/SA/--	**Species not observed or expected to occur:** Suitable habitat was not observed on the project site
Monarch butterfly *Danaus plexippus*	Occurs along the coast from northern Mendocino to Baja California, Mexico. Winter roosts in wind protected tree groves (eucalyptus, Monterey pine and cypress), with nectar and water sources nearby.	--/SA/--	**Species not observed or expected to occur:** Suitable habitat was not observed on the project site. Existing Monterey pine and eucalyptus windrows are not dense enough to provide roosting habitat for this species.
White sand bear scarab beetle *Lichnanthe albipilosa*	Inhabits coastal dunes of San Luis Obispo County, in the vicinity of dune lakes.	--/SA/--	**Species not observed or expected to occur:** Suitable habitat was not observed on the project site

Table 4.3-2. Special-status Wildlife Species Evaluated for Occurrence on the Project Site

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFG	Rationale for Expecting Presence or Absence
Morro Bay blue butterfly *Plebejus icarioides moroensis*	Found in coastal dunes and adjacent habitat.	--/SA/--	**Species not observed or expected to occur:** Suitable habitat was not observed on the project site
Mammals			
pallid bat Antrozous pallidus	Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Night roosts may be in more open sites, such as porches and buildings.	--/--/SSC	**Potential for Occurrence (Moderate):** Suitable roosting habitat was observed on the project site. Species not observed on the site.
Monterey dusky-footed woodrat ***Neotoma fuscipes luciana***	**Occurs in coastal central California in habitats that exhibit a moderate vegetative canopy, with a brushy understory. Builds nests of sticks and leaves at the base of, or within, a tree or shrub, or at the base of a hill. Primarily feeds on woody plants, but also eats fungi, flowers, grasses, and acorns.**	**--/--/SSC**	**Potential for Occurrence (High): Suitable Conditions Present – numerous woodrat nest are present in the oak and chaparral areas. Nests are likely those of the common dusky-footed woodrat (*Neotoma fuscipes macrotis*)**
American badger *Taxidea taxus*	Occurs in open stages of shrub, forest, and herbaceous habitats; needs uncultivated ground with friable soils.	--/--/SSC	**Species not observed or expected to occur:** Though friable soils, and shrub, forest and herbaceous habitats are present on the project site, burrows capable of supporting this species were not observed.
Reptiles			
western pond turtle *Actinemys marmorata*	Quiet waters of ponds, lakes, streams, and marshes. Typically in the deepest parts with an abundance of basking sites.	-- /-- /SSC	**No Potential for Occurrence:** Suitable aquatic habitat is not present on the project site.
Silvery legless lizard *Anniella pulchra pulchra*	Sandy or loose loamy soils with high moisture content under sparse vegetation.	--/--/SSC	**Potential for Occurrence (Moderate):** Suitable habitat (sandy soils) is present on the project site. This species was not observed.

Table 4.3-2. Special-status Wildlife Species Evaluated for Occurrence on the Project Site

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFG	Rationale for Expecting Presence or Absence
two-striped garter snake *Thamnophis hammondii*	Inhabits perennial and intermittent streams with rocky beds bordered by dense vegetation. May also utilize stock ponds and other artificially-created aquatic habitats	--/--/SSC	**No Potential for Occurrence:** Suitable stream habitat is not present on the project site.
Coast horned lizard *Phrynosoma coronatum*	Frequents a wide variety of habitats including maritime chaparral. Most commonly occurring in lowlands along sandy washes with scattered low bushes.	--/--/SSC	**Potential for Occurrence (Moderate):** Suitable habitat is present on the project site. This species was not observed during surveys; however, based on personal observations by horseback riders in the NCP, this species has been observed in the warmer summer months.

Status Codes

--= No status

Federal:

FE = Federal Endangered

FT = Federal Threatened

FC = Federal Candidate

CH = Federal Critical Habitat

PCH = Proposed Federal Critical Habitat

MBTA = Protected by Federal Migratory Bird Treaty Act

State:

SE = State Endangered

California Department of Fish and Game:

SSC = State Species of Concern

FP = Fully Protected Species

SA = Not formally listed but included in CDFG “Special Animal” List.

4.3.3 Regulatory Setting

4.3.3.1 Federal Policies and Regulations

Section 404 of the Clean Water Act of 1977

Pursuant to §404 of the Clean Water Act (33 United States Code [USC] 1344), the U.S. Army Corps of Engineers (USACE) is responsible for the issuance of permits for the placement of dredged or fill material into "Waters of the United States." As defined by USACE at 33 CFR 328.3(a)(parts 1-6), the following summarizes Waters of the United States:

> "Those waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; tributaries and impoundments to such waters; all interstate waters including interstate wetlands; and territorial seas."

Waters of the United States are typically identified by the presence of an Ordinary High Water Mark (OHWM) and connectivity to traditional navigable waters or other jurisdictional features. If a project would result in dredge or fill of USACE jurisdictional waters, the project would be subject to USACE review under §404 of the Clean Water Act. Based on the site characteristics, the proposed construction of recreation facilities would not be subject to §404 of the Clean Water Act.

Section 401 of the Clean Water Act of 1977

Section 401 of the Clean Water Act and its provisions ensure that federally permitted activities comply with the federal Clean Water Act and state water quality laws. Section 401 is implemented through a review process that is conducted by the Regional Water Quality Control Board (RWQCB), and is triggered by the §404 permitting process. The RWQCB certifies via the §401 process that a proposed project complies with applicable effluent limitations, water quality standards, and other conditions of California law. Evaluating the effects of the proposed project on both water quality and quantity falls under the jurisdiction of the RWQCB. Based on the site characteristics, the proposed construction of recreation facilities would not be subject to §401 of the Clean Water Act.

Federal Endangered Species Act

The ESA of 1973 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 or individual to formally consult with the U.S. Fish and Wildlife Service (USFWS) or National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) to determine the extent of impact to a particular species. If USFWS or NOAA Fisheries determine that impacts to a federally-listed species would likely occur, alternatives and measures to avoid or reduce impacts must be identified. USFWS and NOAA Fisheries also regulate activities conducted in federal critical habitat, which are geographic units designated as areas that support primary habitat constituent elements for listed species. The proposed construction of recreation facilities is not expected to affect any species protected by the ESA; therefore, coordination with USFWS or NOAA Fisheries is not necessary.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects all migratory birds, including their eggs, nests, and feathers. The MBTA was originally drafted to put an end to the commercial trade in bird feathers, popular in the latter part of the 1800s. The MBTA is enforced by the USFWS, and potential impacts to species protected under the MBTA are evaluated by the USFWS in consultation with other federal agencies. The proposed construction of recreation facilities has potential to impact nesting bird species that are protected by the MBTA. Pre-disturbance nesting bird surveys are recommended to avoid impacts to nesting birds.

4.3.3.2 State Policies and Regulations

California Endangered Species Act

The CESA ensures legal protection for plants listed as rare or endangered, and wildlife species formally listed as endangered or threatened, and also maintains a list of SSC. SSC status is assigned to species that have limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Under state law, the CDFG is empowered to review projects for their potential to impact special-status species and their habitats. Under CESA, CDFG reserves the right to request the replacement of lost habitat that is considered important to the continue existence to CESA protected species. The project is not anticipated to affect any species listed under the CESA; however, several SSC species could be affected by the project including Monterey dusky-footed woodrat, silvery legless lizard (*Anniella pulchra pulchra)*, and Coast horned lizard (*Phrynosoma coronatum*). Avoidance measures are recommended to avoid any adverse affects on SSC species.

California Fish and Game Code

California Fish and Game Code §3511 includes provisions to protect Fully Protected species, such as: (1) prohibiting take or possession "at any time" of the species listed in the statute, with few exceptions; (2) stating that "no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to "take" the species; and (3) stating that no previously issued permits or licenses for take of the species "shall have any force or effect" for authorizing take or possession. The CDFG is unable to authorize incidental take of "fully protected" species when activities are proposed in areas inhabited by those species. §§3503 and 3503.5 of the Fish and Game Code state that it is unlawful to take, possess, or destroy the nest or eggs of any bird, with occasional exceptions. In addition, §3513 states that it is unlawful to take or possess any migratory bird as designated in the MBTA or any part of such migratory birds except as provided by rules and regulations under provisions of the MBTA.

CDFG also manages the California Native Plant Protection Act of 1977 (Fish and Game Code §1900, et seq.), which was enacted to identify, designate and, protect rare plants. In accordance with CDFG guidelines, CNPS 1B list plants are considered “rare” under the Act, and are evaluated in CEQA documents. Several specimens of sand mesa manzanita, a CNPS list 1B.2 listed plant species, occur throughout the NCP (refer to Figure 4.3-1).

Other Sections of the Fish and Game Code

Fully Protected species may not be taken or possessed without a permit from the Fish and Game Commission and/or CDFG. Information on these species can be found within §3511 (birds), §4700 (mammals), §5050 (reptiles and amphibians), and §5515 (fish) of the Fish and

Game Code. The white-tailed kite is a Fully Protected species that was observed foraging over the NCP.

Senate Bill 1334 Oak Woodlands Conservation

Under SB 1334 county governments are responsible for conserving oak woodlands within their jurisdiction. During the CEQA review process, SB 1334 requires County governments to determine if a proposed project would result in the conversion of oak woodland. If the County determines that the proposed project would result in the conversion of oak woodland, the County is mandated to require implementation of specified mitigation as outlined in an oak woodland management plan. In San Luis Obispo County, oak woodlands are defined as areas containing greater than 10% oak canopy cover. The County oak management plan defines conversion as cutting or removing 10% or more of the oak woodland canopy or removing more than 10 oak trees. The proposed project would result in the conversion of oak woodland; therefore, is subject to mitigation as mandated by SB1334 and the County oak management plan.

4.3.4 Thresholds of Significance

The significance of potential biological impacts is based on County of San Luis Obispo thresholds, in accordance with Appendix G of the CEQA Guidelines. Biological impacts would be considered significant if the proposed project would:

1. Result in a loss of unique or special status species or their habitats;
2. Reduce the extent, diversity, or quality of native or other important vegetation;
3. Impact wetland or riparian habitat;
4. Introduce barriers to movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife.

4.3.5 Impact Assessment and Methodology

Impact assessment focused on identifying potential project-related impacts associated with implementation of the project, and was based on details presented within the project description. Identified impacts represent a reasonable worst case scenario based on the provided conceptual project plans and preliminary grading plans for the tract improvements. Potential impacts were expected to occur where proposed construction or development activities would result in temporary or permanent modification of sensitive communities or habitats occupied by special-status species. Impacts to biological resources within the study area were evaluated by determining the sensitivity, significance, or rarity of each resource that would be adversely affected by the proposed project, and thresholds of significance were applied to determine if the impact constituted a significant impact. The significance threshold may be different for each habitat or species and is based on the resource's rarity or sensitivity and the level of impact that would result from the proposed project. Where potential project-related impacts to sensitive resources were identified, measures for avoiding or minimizing adverse effects to these resources were recommended.

4.3.6 Project-specific Impacts and Mitigation Measures

Potential impacts were identified where proposed project activities would result in temporary or permanent modification of habitats that could be used by special-status species. Potential impacts were also identified for proposed activities could result in direct "take" of special-status species. Where potential project-related impacts to biological resources were identified, mitigation measures for avoiding or minimizing adverse effects to these resources have been recommended in the following sections.

4.3.6.1 Unique or Special Status Species or their Habitats

Construction of the project would result in permanent impacts to plant communities, which provide habitat for special-status plant and animal species, including sand mesa manzanita, silvery legless lizard, coast horned lizard, Monterey dusky-footed woodrat and white-tailed kite. Approximately 1.22 acres of maritime chaparral would be impacted by the construction of the new trails and the widening of Osage Street. Several sand mesa manzanita specimens occur in this plant community and could be impacted as a result of the work. Construction of the new sports fields and the widening of Osage Street would result in the removal of 1.12 acres of oak woodland habitat, and could result in the removal of approximately 20 mature oak trees. Silvery legless lizards and Monterey dusky-footed woodrats/middens could be affected by the work proposed in oak woodland habitat. The new sports field areas would result in a loss of 13.14 acres of coastal scrub within the NCP. Silvery legless lizards and coast horned lizards are known to occur in coastal scrub habitats and could be affected by the removal of this habitat. The construction of equestrian facilities, the proposed community center and picnic areas would result in a loss of 6.7 acres of annual grassland and 2.94 acres of ruderal habitat. Though these habitats provide marginal habitat for coast horned lizard and silvery legless lizards, these species could potentially be found in these areas, and would be directly affected by habitat loss. In addition to the biological mitigation site proposed south of Camino Caballo, the County could coordinate with the Nipomo Native Garden to implement habitat restoration within the garden and other natural areas of the NCP.

BIO Impact 1 **Implementation of the proposed project would directly impact natural communities that provide habitat for special-status plant and wildlife species.**

BR/mm-1 ***Prior to all ground-disturbing activities within sensitive areas****, a qualified biologist shall provide pre-construction training to all workers involved in site activities. This training shall consist of instruction on special-status species with potential to occur on the property and their habitats. Workers shall be instructed as to appropriate contacts and how to proceed if special-status species are observed on the project site.*

<u>Special-Status Plants</u>

Sand Mesa Manzanita

BR/mm-2 ***Prior to site disturbance****, the County shall prepare a Special-status Plant Mitigation Plan that provides for the propagation, planting, and monitoring of sand mesa manzanita at a 5:1 replacement ratio if it is determined that these specimens cannot be avoided during construction activities. The mitigation plan shall detail methods for transplanting, propagating, planting, and maintaining the special-status plant species that would be impacted. The replant area should be located at the biological mitigation receptor site*

(5.6 acres). To ensure the success of any planted or transplanted individuals, the mitigation program will include monitoring and reporting guidelines.

Special-Status Wildlife Species

Silvery Legless Lizard and Coast Horned Lizard

BR/mm-3 *A biological monitor qualified to capture and move legless lizards and coast horned lizards shall be present during all initial ground-disturbing activities, such as grading, excavation and vegetation removal. Improvements within the existing park infrastructure are not expected to impact these species, however, construction associated with the construction of the proposed field sport, basins, equestrian facilities, trails, picnic, and community center areas shall require a biological monitor. The monitor shall capture and relocate silvery legless lizards and Coast horned lizards disturbed during tree clearance vegetation clearing and initial site grading. In addition, the monitor shall rake loose soil within oak woodlands, coastal scrub and maritime chapparal prior to excavation to find and move legless lizards. Efforts shall focus on relocation of silvery legless lizards and Coast horned lizards to safe habitat outside disturbance areas.*

Monterey Dusky-Footed Woodrat

BR/mm-4 ***Prior to all ground-disturbance within Maritime Chaparral and Oak Woodland Habitat for proposed trail work,*** *the following measures shall be implemented to minimize adverse impacts to Monterey dusky-footed woodrat. Removal of the woodrat nest would result in adverse impacts to the individuals occupying the nests. If future site improvements would impact any of the observed woodrat nests, the applicant should implement the following minimization measures.*

a. A County-approved biologist should assist in the removal of the nest after September 1 and before February 15. Under supervision of the biologist, the operators should remove all vegetation and other woodrat shelter within the area that surround the woodrat nest to be removed.

b. Upon completion of clearing the adjacent woodrat shelter, the operator should gently nudge the intact nest with equipment or long handled tools. The operators should place their equipment within the previously cleared area and not within undisturbed woodrat shelter area. The objective is to alarm the woodrats so that they evacuate the nest and scatter away from the equipment and into undisturbed habitat.

c. Once the woodrats have evacuated the nest, the operator should gently pick up the structure with a front loader and move it to the nearest undisturbed habitat. The objective of moving the structure is to provide the displaced woodrats with a stockpile of material to scavenge while they build a new nest; consequently, jeopardizing the integrity of the structure is not an issue.

Residual Impact

Implementation of preconstruction surveys, construction crew training, and biological monitoring would avoid direct disturbance of special status wildlife to the maximum extent feasible. In the event sand mesa manzanita cannot be avoided, implementation of restoration would occur to mitigate the loss of individual plants. With implementation of the above mitigation measures, indirect impacts associated with potential loss of special-status species would be considered *less than significant with mitigation* (Class II).

4.3.6.2 Native or Other Important Vegetation

Direct and permanent impacts to various habitats are expected to result from the proposed construction of recreation facilities. A discussion of impacts to habitats follows, and anticipated impacts to habitats are shown in Figure 4.3-1 and quantified in Table 4.3-3.

Table 4.3-3. Habitat Impacts

Habitat Type	Total Acres	Acres Affected
Maritime Chaparral	14.60	1.22
Oak Woodland	130.14	1.12
Coastal Scrub	27.37	13.14
Annual Grassland	13.56	6.71
Ruderal	4.13	2.94
Ornamental/Developed	20.76	0.30
Pine	14.06	2.45
Eucalyptus	0.33	0.19
Total	**224.95**	**28.07**

Maritime Chaparral

Maritime chaparral is considered a sensitive plant community by CDFG. As shown in Figure 4.3-1, this plant community covers approximately 14.60 acres within the NCP. The proposed trail work has the potential to impact 1.22 acres of intact maritime chaparral. Disturbance and removal of this habitat type would primarily occur during the expansion and improvement of existing sandy trails. Mitigation, including habitat restoration at a 2:1 ratio, is proposed to reduce this impact to less than significant.

BR Impact 2 **Construction of proposed trail improvements could potentially result in the loss of approximately 1.22 acres of intact maritime chaparral habitat.**

BR/mm-5 ***Prior to implementation of trail improvements,*** *the County shall develop a Habitat Restoration Plan (HRP) for review and approval by the CDFG and the County Environmental Coordinator. The HRP shall be prepared by a*

qualified biologist and/or botanist and shall detail the methods for restoring or enhancing any areas of maritime chaparral habitat impacted within the NCP. The goal of the HRP shall be to mitigate any temporary or permanent impacts to maritime chaparral at the biological mitigation receptor site (5.6 acres). At a minimum, the HRP shall allow for the following mitigation ratios, site protection measures, and monitoring requirements:

a. 2:1 restoration ratio for permanent and temporary impacts to intact maritime chaparral (for every one acre of intact maritime chaparral that is temporarily or permanently impacted, the County shall restore or enhance two acres of maritime chaparral at the biological mitigation receptor site (5.6 acres) located within the NCP.

b. The HRP shall include a site maintenance schedule, including weed abatement strategies and BMPs.

1. Maintenance shall be conducted bi-monthly for the first three years or until the County Environmental Coordinator determines that further maintenance is not required. The maintenance period will begin immediately upon completion of the mitigation planting, and will continue for a three-year period. At the end of three years, the appropriate regulatory resource agencies will review the monitoring reports, evaluate whether the performance standards have been met, and determine whether the maintenance period will be ended or extended.

2. Water will be supplied to planted materials during the initial planting period. Supplemental water will be supplied on an as needed basis until the Environmental Coordinator determines that the plantings are self-sustaining.

3. Weed control will be necessary to minimize competition from exotic plants. Additional weed abatement will be required during the maintenance period. Weeds shall be removed by hand or through herbicide applications. If herbicide applications are necessary, they will be conducted by an individual holding a valid Qualified Applicators License. Weeding activities will be performed bi-monthly or until the County Environmental Coordinator determines that the plantings are self-sustaining.

4. Removal of trash and litter will occur on a regular basis during the maintenance period. Non-fruiting organic debris created from hand removal of weeds may be left on-site if it will not significantly impact the establishment of native seedlings. However, noxious weed debris will be disposed of off-site to avoid further invasions of the exotic species.

5. Due to the sites proximity to public access, vandalism may be a problem. If vandalism occurs at the site and plants are

removed or trampled, the County will replace the vandalized plants and take appropriate actions to prohibit further vandalism.

6. *The County Environmental Coordinator will adjust specific replanting requirements if needed, including species, quantities, and schedules. Species selection will be consistent with those currently occupying the immediate area and at the direction of the Environmental Coordinator. Any replanted vegetation will be monitored until the County Environmental Coordinator determines that the plantings are self-sustaining.*

7. *At the discretion of the Environmental Coordinator, a single application of fertilizer may be included with the initial plant installation. Subsequent applications, while not anticipated, are at the discretion of the Environmental Coordinator.*

c. *The HRP shall include clearly defined restoration goals, annual performance standards and final success criteria.*

1. *In order to accomplish restoration goals and objectives, a monitoring program will provide both quantitative and qualitative data to be used to determine the success of the mitigation and restoration areas. The County Environmental Coordinator will evaluate data indicating the relationship between actual site conditions and the performance criteria. Field monitoring and sampling will be followed by preparation of annual reports that include photo-documentation and evaluation of the success of the mitigation effort based on whether or not the annual performance goals for that year were met.*

2. *The County's Environmental Coordinator will perform general monitoring site visits bi-monthly during the first three years after planting, and semi-annually for the last two years of the monitoring program (refer to Table 4.3-4). General monitoring visits can be conducted concurrently with maintenance visits. The focus of general monitoring visits is to assess the restoration and mitigation area's need for water or other maintenance related issues.*

3. *The County Environmental Coordinator will perform biological monitoring data collection annually throughout the five year monitoring program. The focus of the biological monitoring visits is to collect quantitative data that will provide an assessment of the sites vegetative cover and plant growth*

4. *Annual performance standards have been established to ensure a successful mitigation effort. The performance*

standards are based on the vegetative structure found on-site prior to construction related disturbances. Table 4.3-4 lists the annual performance standards for growth and survival of planted species that are proposed for the mitigation and restoration areas.

d. All restoration activities shall be monitored by a qualified biologist/Environmental Coordinator for a minimum of five years or until the final success criteria are attained.

1. At the end of the five-year monitoring period, the site will be evaluated to determine if the success criteria have been met. If the program is determined to be unsuccessful, the County Environmental Coordinator will recommend appropriate contingency measures. The mitigation site will not be considered successful until CDFG has provided written verification that the final success criteria have been met.

Table 4.3-4. Annual Performance Standards and Final Success Criteria

Performance Standards	Year 1	Year 2	Year 3	Year 4	Year 5
Total Percent of Native Cover	20%	25%	30%	40%	50%
Average Vigor Rating (see below)	1,2	1,2	1,2	1,2	1,2
Percent of Non-Native Cover (excluding annual grasses)	<60%	<60%	<45%	<25%	<25%
Plant Survival	90%	85%	80%	80%	80%

Notes:

The mitigation site must be self-sustaining (i.e., no maintenance or artificial irrigation) for a minimum of two years to be considered successful.

Plant survivorship may include original plantings, remedial plantings, or volunteers.

Any remedial plantings will be monitored for five years from the date of installation or until the Environmental Coordinator determines that they are self sustaining.

Plant vigor and survival in the restoration and mitigation area will be monitored annually for five-years following plant installation. A plant is considered "surviving" if at least half of the foliage (or stem if deciduous) is green and flexible. Plant vigor will be measured as follows:

- *1 = excellent – vigorous healthy plant (no necrotic or chlorotic leaves)*
- *2 = good – plant healthy with limited signs of vigorous growth*
- *3 = adequate – plant healthy with no signs of vigorous growth and some necrosis or other damage present*
- *4 = poor – low vitality, or main stem dead but basal sprouts emerging*

- *5 = dead – no evidence of recovery*

2. *Plant survival calculations will be based on the number of individual plants installed. Percent survival will be obtained by counting the number of surviving plants and dividing the result by the number of plants installed (initial and remedial installations).*

3. *Percent cover of native species will be obtained annually throughout the five year monitoring program. Percent cover calculations must be determined by a documented and field proven vegetation monitoring method such as Daubenmire, Braun-Blanquet, line-intercept, or similar.*

4. *Another important monitoring activity is to detect the presence and advance of invasive plant species, such as introduced pioneer species commonly found in disturbed areas. Russian thistle, perennial mustard, or other non-native species can also invade the restoration areas if left unchecked. Monitoring activities will determine the presence of such species and if action is required to control their advance.*

5. *All wildlife observed in and around the restoration will be documented as to species, number, and functional use of habitat (i.e., feeding, nesting, etc.). Observations of the general habitat quality will be documented.*

6. *Permanent photo points will be established throughout the mitigation site to assist in tracking the success of the mitigation program. Permanent photo points will be established during the preparation of the as-built planting plan, and ground view photos will be taken during each monitoring year from the same vantage point.*

7. *Typically, CDFG requires a mitigation and restoration completion report to be submitted at the end of three years. The applicant is responsible for preparing and submitting the report to CDFG within 30 days of the end of the three year maintenance program. The report must include photo documentation and detail the progression of the revegetation efforts.*

8. *The annual reports must quantify growth and progress of the restoration plantings to determine if the performance criteria have been met. All three of the required reports must include photographs that document the revegetation progress over time.*

BR/mm-6 ***Prior to implementation of trail improvements****, the County shall retain a qualified biologist/botanist to supervise the implementation of the HRP. The qualified biologist/botanist shall supervise site preparation, implementation*

timing, species utilized, planting installation, maintenance, monitoring, and reporting of the revegetation/restoration efforts. The qualified biologist/botanist shall prepare and submit four annual reports and one final monitoring report to the County for review and approval by the County Environmental Coordinator. The annual and final monitoring reports shall include discussions of the restoration activities, project photographs, and an assessment of the restoration efforts attainment of the success criteria.

Residual Impact

Although native habitats would not be avoided, implementation of a Habitat Restoration Plan would mitigate the loss by restoring and creating this habitat within the NCP. With implementation of the above mitigation measures, indirect impacts associated with potential loss of habitat would be considered *less than significant with mitigation* (Class II).

Oak Woodland

As shown in Figure 4.3-1, oak woodland habitat covers approximately 130.14 acres within the NCP. Construction of ball fields, picnic areas and the widening of Osage Street would result in the loss of approximately 1.25 acres of oak woodland habitat within the NCP. Approximately 20 mature coast live oak trees (greater than 5 inches dbh) could be potentially be impacted or be removed by construction activities. Pursuant to SB 1334, the County requires significant impacts to oak trees and oak woodlands to be mitigated. Significant impacts are defined as cutting or removing 10% or more of the oak woodland canopy or removing more than 10 oak trees. County guidelines encourage project modifications to avoid or reduce impacts to oak woodland. If project modifications are not feasible and conversion of oak woodland is unavoidable, the County allows mitigation for oak woodland impacts to be implemented via oak tree replanting and implementation of a conservation easement, or payment of a fee to the Wildlife Conservation Board. Tree replanting can constitute up to 50% of the required mitigation; and all planted trees must be monitored for seven years.

BR Impact 3 **The proposed project would result in the loss of approximately 1.12 acres of oak woodland habitat and approximately 20 mature (greater than 5 inches diameter at breast height), native, coast live oak trees.**

BR/mm-7 ***Prior to site disturbance and grading activities,*** *the County shall submit an Oak Woodland Protection and Restoration Plan to be reviewed and approved by the County Environmental Coordinator. Oak woodland restoration shall be accomplished through one of three options: 1) replanting of oak trees removed from the oak woodland at the biological mitigation receptor site; 2) providing for the protection of oak woodland habitat in perpetuity through acquisition or donation of a conservation easement that includes at least 2,000 square feet per tree removed; or 3) providing funds to the California Wildlife Conservation Board to be used for the purchase of Oak Woodland Conservation Easements If Option 1 is selected, it may account for no more than 50% of the required mitigation required for oak woodland impacts and a conservation easement (or similar measure) shall apply. The biological mitigation receptor site is 5.6 acres.*

BR/mm-8 *The Oak Woodland Protection and Restoration Plan shall include the following:*

a. *For onsite planting and protection purposes, oak trees removed shall be replaced at a minimum 4:1 ratio, and impacted trees shall be replaced at a 2:1 ratio.*

b. *Replacement oak trees shall be from regionally or locally collected seed stock grown in vertical tubes or deep one-gallon tree pots. Four-foot diameter shelters shall be placed over each oak tree to protect it from deer and other herbivores, and shall consist of 54-inch tall welded wire cattle panels (or equivalent material) and be staked using T-posts. Wire mesh baskets, at least two feet in diameter and two feet deep, shall be use below ground. Planting during the warmest, driest months (June through September) shall be avoided. The plan shall provide a species-specific planting schedule. If planting occurs outside this time period, a landscape and irrigation plan shall be submitted prior to permit issuance and implemented upon approval by the county.*

c. *Replacement oak trees shall be planted no closer than 20 feet on center and shall average no more than four planted per 2,000 square feet. Trees shall be planted in random and clustered patterns to create a natural appearance. As feasible, replacement trees shall be planted in a natural setting on the north side of and at the canopy/dripline edge of existing mature native oak trees; and on north-facing slopes. Replanting areas shall be either in native topsoil or areas where native topsoil has been reapplied. A seasonally timed maintenance program, which includes regular weeding (hand removal at a minimum of once early fall and once early spring within at least a 3-foot radius from the tree or installation of a staked "weed mat" or weed-free mulch) and a temporary watering program, shall be developed for all oak tree planting areas. A qualified arborist/botanist shall be retained to monitor the acquisition, installation, and maintenance of all oak trees to be replaced. Replacement trees shall be monitored and maintained by a qualified arborist/botanist for at least seven years or until the trees have successfully established as determined by the County Environmental Coordinator. Annual monitoring reports will be prepared by a qualified arborist/botanist and submitted to the County Environmental Coordinator by October 15 each year.*

BR/mm-9 *To mitigate the balance of the oak woodland impact, one of the following measures, or a combination thereof shall be used:*

a. ***Prior to site disturbance and grading activities**, the County shall record a conservation easement that protects 2000 square feet of existing oak woodland habitat for each tree removed from the oak woodland in perpetuity. The conservation easement shall be controlled by a qualified conservation organization approved by the County Environmental Coordinator. Potential conservation organizations include but are not limited to: The Nature Conservancy, San Luis Obispo Land Conservancy, or the Cambria*

Land Trust. This mitigation measure may be used to satisfy the mitigation requirement for oak woodland impacts.

b. If the County is not able to establish a conservation easement, the applicant shall provide funding to the California Wildlife Conservation Board or other County-approved entity to be used for the purchase of Oak Woodland Habitat Conservation Easements (currently established at $970.00 for each tree removed and $485.00 per impacted tree). This mitigation measure may be used to satisfy the mitigation requirement for the oak woodland impact.

c. If the County is not able to establish a conservation easement, or provide funding as noted in (b) above, the County may use a grant awarded pursuant to the Oak Woodlands Conservation Act (Article 3.5 [commencing with §1360] of Chapter 4 of Division 2 of the Fish and Game Code) to prepare an oak conservation element for a general plan, an oak protection ordinance, or an oak woodlands management plan, or amendments thereto, that meets the requirements of Senate Bill 1334.

BR/mm-10 ***Prior to site disturbance and grading activities****, the County shall prepare an Oak Tree Inventory, Avoidance, and Protection Plan as outlined herein. The plan shall be reviewed by a County-approved biologist and/or arborist, and shall include the following items:*

a. Comprehensive Oak Tree Inventory. This shall include the following information:

1. An inventory of all oak trees at least five inches in diameter at breast height within 50 feet of all proposed impact areas. All inventoried trees shall be shown on plans. The species, diameter at breast height, location, and condition of these trees shall be documented in data tables.

2. Identification of trees that will be retained, removed, or impacted. This information shall be shown on plans and cross-referenced to data tables described in item a.

3. The location of proposed structures, utilities, driveways, grading, retaining walls, outbuildings, water and wastewater facilities, and impervious surfaces shall be shown on maps. The applicant shall clearly delineate the building sites/building control lines containing these features on the project plans.

b. Oak Tree Avoidance Measures. Grading and development within proposed project shall avoid the removal of oak trees to the maximum extent possible. Such activities shall minimize potential disturbance to oaks and their associated root zones to the maximum extent possible.

c. *Oak Tree Protection Guidelines. Tree protection guidelines and a root protection zone shall be established and implemented for each tree to be retained that occurs within 50 feet of impact areas. The following guidelines shall be included:*

1. *A qualified arborist shall determine the critical root zone for each retained tree on a case-by-case basis, based upon tree species, age, and size. This area is generally defined as 1.0 to 1.5 times the distance from the tree base of the average measurement taken from the tree base to the edge of the canopy/dripline. At a minimum, the critical root zone shall be the distance from the trunk to the drip line of the tree.*

2. *All trees to remain within 50 feet of construction or grading activities shall be marked for protection (e.g., with flagging) and their root zone fenced prior to any grading. Grading, utility trenching, compaction of soil, or placement of fill shall be avoided within these fenced areas. If grading in the root zone cannot be avoided, retaining walls shall be constructed to minimize cut and fill impacts. Care shall be taken to avoid surface roots within the top 18 inches of soil. If any roots must be removed or exposed, they shall be cleanly cut and not left exposed above the ground surface. The project arborist shall approve any work within the root protection zone.*

3. *Unless previously approved by the county, the following activities are not allowed within the root zone of existing or newly planted oak trees: year-round irrigation (no summer watering, unless "establishing" new tree or native compatible plants for up to seven years); grading (includes cutting and filling of material); compaction (e.g., regular use of vehicles); placement of impermeable surfaces (e.g., pavement); disturbance of soil that impacts roots (e.g., tilling).*

4. *The County shall minimize trimming of oak trees to remain onsite. Removal of larger lower branches should be minimized to: 1) avoid making tree top heavy and more susceptible to "blow-overs," 2) reduce having larger limb cuts that take longer to heal and are much more susceptible to disease and infestation, 3) retain wildlife habitat values associated with the lower branches, 4) retain shade to keep summer temperatures cooler (retains higher soil moisture, greater passive solar potential, provides better conditions for oak seedling volunteers), and 5) retain the natural shape of the tree. The amount of trimming (roots or canopy) done in any one season shall be limited as much as possible to reduce tree stress/shock (10% or less is best, 25% maximum). If trimming is necessary, the applicant shall use a certified arborist when removing limbs. Unless a*

hazardous or unsafe situation exists, major trimming shall be done only during the summer months.

Residual Impact

As proposed, the project would not avoid individual, mature, native oak trees or oak woodland habitat. Replanting oak trees within NCP, and establishing an onsite conservation easement (or similar mitigation) would minimize potential adverse effects by the creation of oak woodlands onsite and within the native range. With implementation of the above mitigation measures, indirect impacts associated with potential loss of habitat would be considered *less than significant with mitigation* (Class II).

4.3.6.3 Wetland or Riparian Habitat

No wetland or riparian habitat is present within the project site; therefore, there would be no impact.

4.3.6.4 Impacts to Nesting Birds and Roosting Bats

Removal of vegetation in all habitats within the NCP has the potential to affect nesting birds, and roosting bat species such as pallid bat. Maritime chaparral, oak woodlands, coastal scrub, grassland, ruderal, eucalyptus and pine trees, and buildings within the developed areas of the NCP provide suitable roosting, nesting, and foraging habitat for a variety of bird and bat species, including several that are considered sensitive by resource agencies (e.g., Cooper's hawk, sharp-shinned hawk, white-tailed kite). Nesting birds could be directly and/or indirectly impacted by construction activities occurring any time during the typical nesting season (from March 1 to August 30). Removal of trees and buildings also has the potential to effect roosting bats and potentially maternal bat colonies. Tree-nesting birds could have nests directly damaged or destroyed during any tree-removal activities, or their nesting and foraging behaviors could be indirectly affected by noise and other sources of construction related disturbance. Tree removal would be required to accommodate access improvements at Pomeroy Road and Juniper Street, and Osage Road widening and trail/pathway improvements. Ground nesting birds such as Western meadowlark, California towhee, and spotted towhee could have nests directly impacted and behaviors indirectly impacted during any construction activities in maritime chaparral, coastal scrub, and annual grassland within the NCP.

BIO Impact 4 **Implementation of project activities in or adjacent to natural plant communities has potential to impact birds by disturbing their nesting behavior.**

BIO/mm-11 ***Removal of vegetation and pruning of trees shall be conducted in the fall and winter (between September 1 and February 28)****, if possible, after fledging and before the initiation of avian breeding activities. If construction activities are scheduled to occur during the typical bird nesting season (from March 1 to August 31) a qualified biologist shall be retained to conduct a pre-construction survey (approximately one week prior to construction) to determine presence/absence for tree and ground nesting birds. If no nesting activities are detected within the proposed work area, noise-producing construction activities may proceed and no further mitigation is required. If nesting activity is confirmed during pre-construction nesting surveys or at any time during the monitoring of construction activities, work*

activities shall be delayed within 300 feet (500 feet if raptors) of active nests until the young birds have fledged and left the nest. In addition, the results of the surveys shall be passed immediately to the CDFG and the County, possibly with recommendations for buffer zone changes, as needed, around individual nests. Tree removal in riparian zones shall be monitored and documented by the biological monitor regardless of time of year.

BIO/mm-12 ***If tree removal occurs between September 1 and March 1,*** *within seven days of ground disturbance or tree removal/trimming activities, a survey for wintering raptors shall be conducted. If surveys do not locate wintering raptors, construction activities may be conducted. If wintering raptors are located, construction activities shall observe a 500-foot buffer for the wintering location(s). A pre-construction survey report shall be submitted to the County Environmental Coordinator immediately upon completion of the survey. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements.*

Residual Impact

Timing of construction activities to avoid nesting birds is recommended; however, in the event other factors require activity during the nesting season, mitigation is recommended to ensure no nests are removed or disturbed. Other, suitable habitat for nests will remain with NCP. With implementation of mitigation, impacts associated with potential impacts to nesting birds would be considered *less than significant with mitigation* (Class II).

BIO Impact 5 **Implementation of project activities and tree removals has the potential to impact roosting bats, including pallid bat.**

BR/mm-13 ***Within two weeks prior to tree removal,*** *a qualified biologist shall conduct a pre-construction survey for pallid bat and/or other roosting bats. If bats are not found, tree removal can proceed. If bats are observed, bat exclusion measures shall be instituted prior to disturbance. If maternal bat colonies are found they shall not be disturbed until young bats have left the site. Subsequently bat exclusion measures shall be instituted prior to disturbance.*

Residual Impact

Implementation of the project would include the removal of trees potentially used for bat roosting; however, mitigation is recommended to ensure roosting bats are avoided during grading and construction activities, and suitable habitat would remain within the NCP. With implementation of mitigation, impacts associated with potential impacts to roosting bats would be considered *less than significant with mitigation* (Class II).

4.3.7 Cumulative Impacts

Several projects are proposed within the immediate area, which would result in the conversion of undeveloped pockets to urbanized uses in the vicinity of NCP. Impacts to habitat, nesting and foraging sites, and special status species may occur in these locations, and mitigation would be required including pre-construction surveys and revegetation of oak trees. In addition to the direct effects identified above, build-out of the Master Plan would result in an

increase in park visitors, which has the potential to affect natural resources and habitats. The specific impacts resulting from the proposed project would be mitigated to a less than significant level, and the project would not contribute to cumulatively significant impacts. Cumulative impacts would be *less than significant* (Class III). No additional mitigation is required.

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