3.2 Biological Resources

This subchapter is summarized from the Montecito Ranch Biological Technical Report (BTR) in Appendix E of this EIR, completed by REC Consultants, Inc. (REC; 2008b. The BTR is based on surveys (on and off site) of vegetation, jurisdictional areas, plants, and wildlife conducted by REC (2008b), Mooney (2005), and EVC (2005).

3.2.1 Discussion of Existing Conditions Relating to Biological Resources

Biological Surveys

Within the Project site, vegetation surveys were conducted by REC during the spring, summer, and early fall of 2001, and the fall of 2003. Jurisdictional delineations were performed on site by REC in 2001 and 2002. Protocol surveys were performed on site for the federally listed as endangered Stephens' kangaroo rat (*Dipodomys stephensi*) and federally listed as threatened coastal California gnatcatcher (*Polioptila californica californica*). Focused surveys also were conducted on site for the federally listed as endangered quino checkerspot butterfly (*Euphydryas editha quino*). In addition, habitat assessments were conducted for the federally listed as endangered San Diego and Riverside fairy shrimp (*Branchinecta sandiegonensis* and *Streptocephalus woottoni,* respectively) and arroyo toad (*Bufo californicus*; REC 2008b).

Off-site biological resource surveys were conducted by REC along the proposed off-site roadway widening alignments, as well as the water storage tank site and associated access road alignment. REC performed general surveys from March 2001 to June 2004 along off-site segments of Ash Street, Montecito Way, and Montecito Road that are proposed to be widened.

Habitats (On-site SPA and Off-site Road Alignments)

The Project site currently supports 11 habitats including: southern coast live oak riparian forest, dense Engelmann oak woodland, open Engelmann oak woodland, southern riparian scrub, disturbed wetlands (agricultural ponds), Diegan coastal sage scrub (inland form), southern mixed chaparral, chamise chaparral, non-native grassland, eucalyptus woodland, and developed land (Figure 3.2-1 and Table 3.2-1). In addition, previously impacted areas occur on site and include land that was disked for agricultural purposes in 2002 (for which previous mitigation has occurred). Three habitats occur within the roadway and utility footprints along Ash Street between the eastern Project site boundary and Pine Street, including non-native grassland, disturbed habitat, and developed land (Figure 3.2-2 and Table 3.2-2). Non-native grassland, pasture land, eucalyptus woodland, disturbed habitat, and developed land occur within the proposed off-site roadway and utility footprints along Montecito Way (Figure 3.2-3 and Table 3.2-2). Riparian woodland, non-native grassland, pasture land, eucalyptus woodland, disturbed habitat, and developed land occur within the roadway footprint along Montecito Road between Montecito Way and Main Street (Figure 3.2-4a and b and Table 3.2-2). Diegan coastal sage scrub is the only habitat to occur within the off-site water storage tank site and access road alignment. With the exception of eucalyptus woodland, disturbed habitat, developed land, and mitigated impacted areas, all of the on- and off-site habitats are considered sensitive and/or regionally important, and impacts to them would require mitigation. A discussion of the aforementioned habitats follows. Figures 3.2-1 through 3.2-5 show the existing habitats on site and within the proposed off-site roadway/utility alignments. All proposed on- and off-site utility alignments would

be within existing roadways and therefore would not result in impacts exceeding those already assessed. They are not addressed separately in this subchapter.

Southern Coast Live Oak Riparian Forest

Southern coast live oak riparian forest forms a closed-canopy woodland of coast live oak (*Quercus agrifolia*) on site. A scattered understory of shrubs, including poison oak (*Toxicodendron diversilobum)*, elderberry (*Sambucus mexicana)*, California wildrose (*Rosa californica*), and California blackberry (*Rubus ursinus*) occur under the canopy. This habitat occurs near the middle of the Montecito Ranch property and supports extensive, high quality, riparian woodlands which are part of the much larger riparian system of Clevenger Canyon that trends along the northern boundary of the site. Other species documented in this habitat include California mugwort (*Artemisia douglasiana*), San Diego sedge *(Carex spissa),* rush *(Juncus* sp.), woodland star *(Lithophragma affine*), coffee fern *(Pellaea andromedifolia*), meadow-rue (*Thalictrum fendleri*), and desert grape (*Vitis girdiana*). Southern coast live oak riparian woodland covers approximately 10.60 acres on the Montecito Ranch property.

Southern Riparian Scrub

Southern willow scrub is a dense, broad-leaved, winter deciduous riparian thicket dominated by several species of willow (*Salix* spp.) in association with mulefat (*Baccharis salicifolia*). Scattered individuals of cottonwood (*Populus* sp.) and western sycamore (*Platanus racemosa*) may exist as canopy emergents. Southern riparian scrub occupies the blueline drainage that flows toward the eastern side of the site. Vegetation in this drainage includes sparse coverage consisting of mulefat, narrow-leaved willow (*Salix exigua*), curly dock (*Rumex crispus*), and western ragweed (*Ambrosia psilostachya*). The habitat covers approximately 0.30 acre within the Project site.

Disturbed Wetlands

Three man-made agriculture ponds, built for cattle, are categorized as disturbed wetlands. One pond is located west of the Montecito Ranch House, and two are located within coastal sage scrub habitat in the north central portion of the Project site. Species found in this habitat include grass poly (*Lythrum hyssopifolium*), annual beard grass (*Polypogon monspeliensis*), soft chess (*Bromus hordeaceus*), and Mexican speedwell (*Veronica peregrina*). Disturbed wetlands cover approximately 0.73 acre within the Project site.

Dense Engelmann Oak Woodland

Dense Engelmann oak woodland is similar to open Engelmann oak woodland, but with a significantly greater tree density. This habitat is typically found in more mesic sites, especially in canyons, and often integrates with coast live oak woodland. This habitat type occurs between the open Engelmann oak woodland and the southern coast live oak riparian forest, along the northern drainages on site. Poison oak is another characteristic species that is also abundant in this on-site habitat, as are annual grasses (e.g., *Bromus* spp.) and wildflowers (e.g., rancher's fireweed [*Amsinckia menziesii*], miner's lettuce [*Claytonia perfoliata*], and shooting star [*Dodecatheon clevelandii*]). This habitat covers approximately 13.60 acres within the Project site.

Open Engelmann Oak Woodland

Open Engelmann oak woodland habitat occurs on slopes at or near the tops of topographic drainages on site. This habitat type is evergreen woodland dominated by Engelmann oak (*Quercus engelmannii*) with an understory of grassland species. This habitat usually occurs on relatively moist, fine-textured soils along gentle slopes and valley bottoms. Other characteristic vegetation species observed in this habitat on site include sugar bush (*Rhus ovata*) and coast live oak. Brome grasses (*Bromus* spp.) dominate the understory, accompanied by white sage (*Salvia apiana*), flat-topped buckwheat (*Eriogonum fasciculatum*), and California sagebrush (*Artemisa californica*). Open Engelmann oak woodland covers approximately 18.60 acres in the eastern portion of the Project site.

Riparian Woodland

Riparian woodland is a tall, open, streamside community dominated by facultative riparian trees that typically require water near the soil surface. The dominant plant species observed in this habitat include arroyo willow (*Salix lasiolepis*), Goodding willow (*Salix gooddingii*), and mulefat. Approximately 0.24 acre of riparian woodland occurs off site within the Montecito Road widening alignment. This habitat is highly degraded at this location due to surrounding development and proximity to yards and houses.

Diegan Coastal Sage Scrub (Inland Form)

Low shrubs dominate the Diegan coastal sage scrub community, which typically occurs on sites with low moisture availability. The dominant shrub species observed in this habitat include California sagebrush, flat-topped buckwheat, laurel sumac (*Malosma laurina*) and white sage. Yellow-bush penstemon (*Keckiella antirrhinoides*), matchweed (*Gutierrezia sarothrae*), monkeyflower (*Mimulus aurantiacus*), California broom (*Lotus scoparius*), and black sage occur as shrub co-dominants on site. Golden yarrow (*Eriophyllum confertiflorum*), slender sunflower (*Helianthus gracilentus*), cryptantha (*Cryptantha* spp.), and sun cups (*Camissonia* spp.) occur as herbaceous co-dominants on site. Cattle grazing and agricultural activity have disturbed portions of the on-site Diegan coastal sage scrub. Approximately 318.93 acres of Diegan coastal sage scrub occur within the SPA site. Diegan coastal sage scrub covers slopes in the southern half of the property and part of the northwestern portion of the site. The SPA contains two groves of eucalyptus trees (*Eucalyptus* spp.) with some Diegan coastal sage scrub species in the understory. A large grove is located in the western portion of the Project site and a smaller grove is located at the eastern end of the Project property near the eastern terminus of Ash Street. A row of olive trees (*Olea europaea)* planted adjacent to the smaller grove was grouped with the eucalyptus for habitat mapping purposes. These areas are dominated by coastal sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), and flat-topped buckwheat. The smaller grove also contains a row of olive trees (*Olea europaea*). These two groves are mapped as "eucalyptus woodland/Diegan coastal sage scrub" on Figure 3.2-1. The acreages of these two eucalyptus groves have been included in the Diegan coastal sage scrub acreage to provide a conservative analysis of impacts and required mitigation. Approximately 111.26 acres of the on-site Diegan coastal sage scrub have been previously set aside as open space under another action.

An additional 2.20 acres of this habitat occurs within the proposed water storage tank site and associated access road alignment off site.

Southern Mixed Chaparral

Southern mixed chaparral occurs primarily on the north-facing slopes on the northern half of the Project site. This is a fire- and drought-adapted community characterized by a dense growth of evergreen shrubs. Many species of this community are crown- or stump-sprouters that regenerate immediately following fire or other types of disturbances. On site, this habitat is limited to northern slopes in the north-central section of the site. The composition and dominant species present in this community vary with slope, soil, and exposure. Typical southern mixed chaparral species found on site include chamise (*Adenostoma fasciculatum*), Ramona lilac (*Ceanothus tomentosus*), bushrue (*Cneoridium dumosa*), toyon (*Heteromeles arbutifolia*), honeysuckle (*Lonicera subspicata*), laurel sumac, scrub oak (*Quercus berberidifolia*), mission manzanita (*Xylococcus bicolor*), and our Lord's candle (*Yucca whipplei*). Yellow-bush penstemon and spiny redberry (*Rhamnus crocea*) are also common shrubs present on site. The understory is sparse and dominated by foxtail chess, cryptantha, herba impia (*Filago californica*), and other annuals. Southern mixed chaparral covers approximately 229.10 acres of the Montecito Ranch property. Approximately 4.00 acres of the on-site southern mixed chaparral have been dedicated as open space under another action (REC 2008b).

Chamise Chaparral

Chamise chaparral is a monotypic habitat of chamise, almost to the exclusion of other species. This habitat comprises 25.20 acres within the eastern portion of the Project site.

Non-native Grassland

Where grazing, agriculture, or other disturbance has degraded native vegetation, non-native grasses and weeds can become the dominant vegetation. Extensive non-native grassland areas on site are dominated by long-beak filaree, red-stem filaree, oats, ripgut, foxtail chess, Bermuda grass, ryegrass, and vulpia grass. The non-native grassland habitat located on the Project site is part of a larger, regionally important expanse of grasslands called the Ramona Grasslands (see the description of the Ramona Grasslands below). Non-native grassland currently covers approximately 297.14 acres in the southwestern and eastern portions of the Project site; however, 246.92 acres of the on-site non-native grassland was previously impacted. Therefore, for the purposes of this analysis, 50.22 acres of non-native grassland occur within the Project site (refer to Figure 3.2-1). The previously impacted areas are discussed below under "Mitigated Impacted Areas."

Approximately 4.52 acres of non-native grassland also occur within the proposed off-site roadway widening alignments along Ash Street, Montecito Way, and Montecito Road.

Eucalyptus Woodland

A small grove of eucalyptus trees is located in the southwestern portion of the Project site. The understory of this eucalyptus grove consists of non-native grassland species. Eucalyptus woodland covers approximately 2.50 acres within the Project site.

Eucalyptus trees occur along Montecito Way and Montecito Road, primarily as landscaping. Approximately 0.32 acre of eucalyptus woodland occurs within the off-site roadway widening alignment of Montecito Way and 1.32 acres occur within the Montecito Road widening alignment.

Agriculture and Pasture Land

This category includes lands recently used for grazing and agricultural fields. Approximately 2.10 acres of this habitat type occur within the Montecito Way widening alignment. In addition, 1.12 acres of pasture land occur within the Montecito Road widening alignment.

Disturbed Habitat

Disturbed habitat includes cleared lands that provide little to no habitat value to native animal species or contain a preponderance of non-native plant species. Approximately 2.92 acres of disturbed habitat occur within the proposed off-site roadway alignments along Ash Street and Montecito Way, and 0.97 acre occur within the proposed roadway alignment of Montecito Road.

Developed Land

Within the Project site, the developed habitat category has been applied to the area immediately surrounding and including the Montecito Ranch House, on-site dirt roads and perimeter fire clearing areas. The ranch house and its yard have been significantly modified with ornamental plantings, buildings and driveways. Much of the yard contains non-native grasses and ornamentals, including Australian pine (*Casuarina* sp.), eucalyptus, ornamental pine (*Pinus* spp.), olive, ornamental prickly pear (*Opuntia* spp.), and California pepper (S*chinus molle*). Dirt roads on the property are regularly graded and are primarily unvegetated. Unvegetated firebreaks are maintained along the southern boundary and part of the northeastern boundary in the eastern half of the property. Developed land covers approximately 18.50 acres of the site.

Approximately 8.97 acres of developed land occur within the proposed off-site roadway alignments along segments of Ash Street, Montecito Way and Montecito Road.

Mitigated Impacted Area

This area is currently composed of non-native grassland. In 2002, approximately 246.92 acres of the Project site underwent agricultural disking. Much of the disked land had either been previously farmed or grazed, and was non-native grassland prior to disking. During the 2002 disking activity, however, some biological resources identified in 2001, including Diegan coastal sage scrub, southern mixed chaparral, vernal pools, and disturbed wetlands, were inadvertently impacted. The County has addressed these impacts separately. These previous impacts have been mitigated through the preservation of on-site habitat (refer to Figure 3.2-1). Although the Project would result in impacts to the previously disked area, because the previously impacted areas have been mitigated, additional impacts to these areas under the Proposed Project would not require additional mitigation. Therefore, to avoid additional, unnecessary mitigation, previously impacted areas have been mapped as "mitigated impacted areas" on Figure 3.2-1.

Rock Outcrops

Although not mapped on Figure 3.2-1 as an on-site habitat type, rock outcrops are interspersed throughout the site and provide cover for various animal species.

Jurisdictional Features (On and Off Site)

The Project site supports a variety of wetland/drainage areas shown on Figure 3.2-1. Jurisdictional Waters of the U.S. are regulated by the U.S. Army Corps of Engineers (Corps) while the California Department of Fish and Game (CDFG) regulates streambeds with associated vegetation. Wetlands are also regulated under the County RPO. Wetlands are defined by the presence of hydrophytic vegetation, hydric soils, and site hydrology. According to Corps methodology, all three of the above indicators must be present to be considered a wetland. The County's RPO, however, is more restrictive than the Corps criteria. Under the RPO, a wetland must only meet one of the following criteria in order to be classified as a wetland: (1) at least periodically the land supports predominantly hydrophytes (plants whose habitat is water or very wet places); (2) the substratum is predominantly undrained hydric soils, or (3) an ephemeral or perennial stream is present the substratum of which is predominantly non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

Wetland and drainage types found within the Project site included ditches in uplands (CDFG), disturbed depressional wetlands (potential Corps, CDFG, and RPO), agricultural ponds (Corps and/or RPO), and Waters of the U.S. (Corps and CDFG). Corps jurisdictional areas include 0.50 acre of wetlands and 5,150 linear feet of Waters of the U.S., CDFG jurisdictional areas include 0.80 acre of wetlands and 22,715 linear feet of Waters of the U.S., and County RPO wetlands include 0.80 acre and 3,875 linear feet (REC 2008b; Table 3.2-3). Figure 3.2-1 shows the jurisdictional areas within the Project site.

The proposed alignment for the widening of Montecito Road would cross Santa Maria Creek. Table 3.2-4 and Figure 3.2-4b show the jurisdictional areas within the alignment for the widening of Montecito Road. The alignment includes Corps and CDFG jurisdictional areas and County RPO wetlands (0.24 acre of wetlands).

The County also regulates impacts to wetland buffers, which are defined to include an area of an appropriate size to protect the environmental and functional habitat values of the wetland, or which are integrally important in supporting the full range of the wetland and adjacent upland biological communities. Wetland buffers of a minimum of 50 feet are required for the RPO wetland resources and on site. RPO wetland buffers also include adjacent oak woodland habitat, not to exceed 200 feet. Buffers also are typically required around preserved Corps and CDFG jurisdictional wetlands.

Plant Species Observed On Site

Two hundred fifty-five (255) plant species were observed on site during biological surveys. A complete list of plant species observed, with common and scientific names, is provided in Appendix E.

Animal Species Observed On Site

Ninety-six (96) animal species were observed on site during biological surveys. Due to the diversity of habitat types that occur on site, the SPA supports a rich wildlife population. Specifically, 10 species of mammals, 56 species of birds, 5 species of reptiles, 2 species of amphibians, 23 species of butterflies, and numerous other insect and invertebrate species were recorded. A complete list of wildlife observations, with common and scientific names, is provided in Appendix E.

Wildlife Corridors (On and Off Site)

The primary regional corridor in the vicinity of the Project site is Bandy Canyon (Corridor No. 1 on Figure 3.2-6), which contains Santa Maria Creek. The Project site is located approximately 2.5 miles east of this primary regional corridor between Ramona and the San Pasqual River Valley. Clevenger Canyon (Corridor No. 4 on Figure 3.2-6), located just east of the Project site, provides an additional secondary corridor that may be used for wildlife movement. Clevenger Canyon also contains an unnamed blue line creek, which is a tributary to Santa Ysabel Creek. As SR 78 traverses much of Clevenger Canyon, the canyon's viability as a wildlife corridor is limited. Additionally, Clevenger Canyon wildlife corridor traverses rural residential areas, whereas the Bandy Canyon primary regional corridor consists of more pristine habitat.

A small area to the east of the Cumming SPA that extends across SR 67 currently contains open grassland and agricultural land. Residential and school developments currently are proposed in the portion of this area located to the southeast of SR 67. Wildlife movement to or from the Cumming SPA would be via Etcheverry Creek and across or under SR 67 (Corridor No. 1 on Figure 3.2-6). There is little or no cover or concealment habitat southeast of SR 67, other than the depth of drainages and tall grass or weeds. The nearest shrubland and oak woodland habitats to Cumming SPA are approximately two to three miles to the east. Etcheverry Creek is sparse in the available amount of cover and concealment and currently offers better protection for potential wildlife movement along the creek bottom. Although no large predator or prey sign was observed along Etcheverry Creek, small- and medium-sized animal movement does occur along this corridor, as evidenced by direct observations of amphibian species, coyote (*Canis latrans*), and gray fox (*Urocyon cinereoargenteus*). The potential for any wildlife movement to the east from Santa Maria Creek (Corridor No. 2 on Figure 3.2-6) is very low; however, this is still considered a wildlife corridor. This area adjacent to the Cumming SPA is much more densely developed with rural residences with fenced properties. Any movement in the corridor along the residential dirt roads or within the Santa Maria Creek drainage would be highly restricted and lead animals into the heart of the town center.

There also is a corridor that traverses the northern portion of Cumming SPA, the eastern portion of the Ramona Airport property, the western portion of Montecito SPA, and Davis SPA north to SR 78 (Corridor No. 3 on Figure 3.2-6). A secondary corridor from this main corridor traverses the Ramona Grasslands just north of the airport and connects to Bandy Canyon.

In addition, the main drainage extending between Unit 1 and Unit 2 residential development areas in the eastern portion of the Project site has been designated as a local wildlife corridor.

Sensitive Resources (On and Off Site)

Sensitive or special interest plant and wildlife species and habitats are those that are considered rare, threatened, or endangered within the State or region by local, State, or federal resource conservation agencies. Sensitive habitats, as identified by the resource agencies, generally support sensitive plant or wildlife species. Sensitive species and habitats are so called because of their limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, degradation due to development or invasion by non-native species, or a combination of these factors.

Sensitive Habitats

A total of 11 sensitive habitats occur on site and/or within the proposed off-site roadway widening alignments including: southern coast live oak riparian forest, southern riparian scrub, disturbed wetlands, dense Engelmann oak woodland, open Engelmann oak woodland, riparian woodland, Diegan coastal sage scrub (inland form), southern mixed chaparral, chamise chaparral, non-native grassland, and agricultural/pasture land. In addition, eucalyptus woodland is considered sensitive if used by raptors. These habitats are described above in greater detail.

The County considers rock outcrops a unique microhabitat, and numerous rock outcrops occur on site. Rock outcrops add diversity to vegetation communities by providing a discrete ecological niche for species not found elsewhere in the surrounding habitat. Within the Project site, rock outcrops support a number of fern species such as California cottonfern (*Cheilanthes newberryi*) and California polypody (*Polypodium californicum*). Flowering plant species with an affinity for rock outcrops include brickellbush (*Brickellia californica*), California figwort (*Scrophularia californica*), and skunkbrush (*Rhus trilobata*). These rock outcrops also provide cover and potential nesting cavities for several wildlife species, including woodrats. Some reptile species are attracted to the sun-warmed surfaces of the rocks, and many birds use boulders as perches and vantage points.

Sensitive Plants (On Site)

Five sensitive plant species were observed on site including: peninsular spineflower (*Chorizanthe leptotheca*), delicate clarkia (*Clarkia delicata*), rush-like bristleweed (*Machaeranthera juncea*), Engelmann oak (*Quercus engelmannii*), and southern tarplant (Figure 3.2-1). These species are discussed below. Refer to Appendix E for additional information on these sensitive plant species.

Peninsular Spineflower (*Chorizanthe leptotheca*). Peninsular spineflower, an annual herb in the buckwheat family, is a CNPS List 4 species (limited distribution), with a R-E-D ranking of 1-2-2, and a County Group D species. This species is not considered State or federally sensitive. Typical habitat includes chaparral, coastal sage scrub, and lower montane coniferous forest. A population of several hundred individuals was observed on site on a hilltop vegetated with sparse Diegan coastal sage scrub and one individual was observed in Diegan coastal sage scrub along the southern site boundary (Figure 3.2-1).

Delicate Clarkia (*Clarkia delicata*). Delicate clarkia, an annual herb in the evening primrose family, is a CNPS List 1B species (rare/threatened/endangered in California and elsewhere), with an R-E-D ranking of 2-2-2, and a County Group A species. Habitat for this species includes chaparral and cismontane woodland. One population of approximately 75 individuals was observed within chaparral habitat within the eastern portion of the site (Figure 3.2-1).

Rush-like Bristleweed (*Machaeranthera juncea*). Rush-like bristleweed is an herbaceous perennial member of the Aster family. This CNPS List 4 species (limited distribution) has an R-E-D ranking of 1-1-1 and is a County Group D species. This species usually grows in chaparral or Diegan coastal sage scrub. Two colonies of this species, containing approximately 100 and 47 individuals, respectively, were found within Diegan coastal sage scrub on site (Figure 3.2-1).

Engelmann Oak (*Quercus engelmannii*). Engelmann oak is a CNPS List 4 species (limited distribution), with an R-E-D ranking of 1-2-2, and a County Group D species. This species can occur in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland habitats. Approximately 290 individual Engelmann oak trees were observed on site. Engelmann oaks occur in the dense and open Engelmann oak woodlands in the eastern half of the site (Figure 3.2-1).

Southern Tarplant (*Centromadia parryi* ssp. *australis*). Southern tarplant is an annual herb in the Aster family. As a CNPS List 1B species, this plant is considered rare/threatened/endangered in California and elsewhere. This species has an R-E-D of 3-3-2 and is a federal Species of Concern and a County Group A species. The typical habitats for this species are marsh and swamp margins, vernally mesic valley and foothill grasslands, and vernal pools. Although disturbed by agricultural activities, a population of this species persists on site in the southwest corner of the property south of the Montecito Ranch House (Figure 3.2-1).

Sensitive Plants (Off-site Road Alignments)

No sensitive plant species were observed along the off-site roadway improvement alignments along Ash Street, Montecito Way, or Montecito Road.

Sensitive Wildlife (On Site)

A total of 13 sensitive animal species were observed on site during surveys conducted between 2001 and 2004, including: coastal California gnatcatcher, southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), California thrasher (*Toxostoma redivivum*), loggerhead shrike (*Lanius ludovicianus*), red-shouldered hawk (*Buteo lineatus*), turkey vulture (*Cathartes aura*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), two-striped garter snake (*Thamnophis hammondii*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and San Diego desert woodrat (*Neotoma lepida* ssp. *intermedia*) (Figure 3.2-1). These species are discussed below. Refer to Appendix E for additional information.

Coastal California Gnatcatcher (*Polioptila californica californica*). The coastal California gnatcatcher is a federally listed as threatened species, California Special Concern Species, and County Group I sensitive species. This small gray songbird is a resident of scrub-dominated communities in southwestern California from the Los Angeles Basin through Baja California, Mexico. Coastal California gnatcatcher populations have declined due to extensive loss of Diegan coastal sage scrub habitat to urban and agricultural uses. During a series of focused protocol surveys for this species completed by REC biologists, 20 gnatcatchers were observed on site, and included four "family groups" (two pairs with two juveniles, one pair with three juveniles, and one pair with one juvenile) and two pairs (Figure 3.2-1). These results are consistent with the previous focused survey conducted by Dudek and Associates, Inc. in 1997, which located five pairs of gnatcatchers on site.

Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*). The southern California rufous-crowned sparrow, a California Special Concern Species and County Group I sensitive species, is usually found in Diegan coastal sage scrub, grassland, and open pine/oak woodlands, where it nests on the ground. One individual of this species was observed in Diegan coastal sage scrub habitat on site (Figure 3.2-1).

California Thrasher (*Toxostoma redivivum*). The California thrasher, a federal Species of Concern, occurs in a variety of habitats, including Diegan coastal sage scrub and southern riparian scrub. Approximately 35 California thrashers were observed on site during the 2001 surveys.

Loggerhead Shrike (*Lanius ludovicianus*). The loggerhead shrike is a federal Species of Concern, California Special Concern Species, and County Group II sensitive species. This species typically occurs in open areas with scattered shrubs and trees. One individual of this species was observed in Diegan coastal sage scrub habitat on site (Figure 3.2-1).

Raptors. All raptors are protected under CDFG Code 3503, and are therefore considered sensitive. Raptors observed on-site include 15 American kestrels, 2 red-shouldered hawks (County Group I sensitive species), 9 turkey vultures (County Group I sensitive species), 2 white-tailed kites, and 11 red-tailed hawks.

Coastal Whiptail (*Cnemidophorus tigris multiscutatus*). The coastal whiptail does not have State or federal listing status, but is a County Group II sensitive species. This species is usually found in open, semi-arid habitats, woodlands, and streamside areas. One coastal western whiptail was observed on site in Diegan coastal sage scrub habitat (Figure 3.2-1).

San Diego Horned Lizard (*Phrynosoma coronatum blainvillei*). The San Diego horned lizard, a regional subspecies of the widespread coast horned lizard, is classified as a federal Species of Concern and County Group II sensitive species. This spiny, wide-bodied lizard occurs primarily in Diegan coastal sage scrub communities. Two San Diego coast horned lizards were observed on site in Diegan coastal sage scrub habitat (Figure 3.2-1).

Two-striped Garter Snake (*Thamnophis hammondii*). The two-striped garter snake, a California Special Concern Species and County Group I sensitive species, occurs along fresh water streams. This species prefers permanent streams with rocky bottoms and riparian vegetation. The individual observed on site was found in the Diegan coastal sage scrub habitat (Figure 3.2-1).

Black-tailed Jackrabbit (*Lepus californicus bennettii*). The San Diego black-tailed jackrabbit is a federal Species of Concern, California Special Concern Species, and County Group II sensitive species. This species typically occurs in open grassland and sparsely vegetated areas. Five San Diego black-tailed jackrabbits were observed in Diegan coastal sage scrub and non-native grassland on site (Figure 3.2-1).

San Diego Desert Woodrat (*Neotoma lepida* ssp. *intermedia*). The San Diego desert woodrat is a California Special Concern Species. This woodrat builds nests of twigs in rocky outcrops in dry scrubby habitats. This species was identified on site by Dudek and Associates, Inc. in 1997. Woodrat nests were observed on site during recent surveys; however, it was not determined if the nests belonged to the San Diego desert woodrat or the dusky-footed woodrat (*Neotoma fuscipes*), which is not sensitive. Because the San Diego desert woodrat was previously reported on site, it is assumed that at least some of the nests could belong to this sensitive species.

Other Sensitive Species. Seven additional sensitive species have been previously observed on site (Dudek 1997a); however, these species were not observed on site during surveys conducted from 2001

to 2004 and are therefore assumed to no longer occur on site. These species are considered to have a high potential to occur on site. Refer to Appendix E for additional information about these species.

Sensitive Wildlife (Off-site Road Alignments)

No sensitive animal species were observed along the off-site roadway improvement alignments along Ash Street, Montecito Way, and Montecito Road.

Regionally Sensitive Resources - Ramona Grasslands

As stated above, the non-native grassland habitat located on the Project site is part of a larger, regionally important expanse of grasslands called the Ramona Grasslands (Figure 3.2-7). The Ramona Grasslands area is located in the Santa Maria Valley primarily north of Santa Maria Creek and encompasses a series of large land holdings. The Ramona Grasslands do not have an officially defined boundary, but are approximately 9,000 acres in size. The area extends across the valley floor and is generally flat to gently sloping with numerous rock outcroppings. The general topography consists of low rises (10 to 20 feet) around these outcrops of granitic boulders separated by swales and flats.

The Ramona Grasslands consist mainly of undeveloped pastures that support cattle and are dominated by non-native grass species. Grazing activities have been discontinued in some areas, such as the eastern portion of the airport and the northern portion of the Cumming SPA. An area within the western portion of the Ramona Grasslands is used as an effluent spray field by RMWD and supports denser, greener groundcover than other areas. Similarly, areas fenced to keep livestock out of airport facilities support somewhat denser vegetation with a higher ratio of grasses to annual forbs than grazed areas.

The Ramona Grasslands are considered an important ecosystem in the region, supporting raptor populations as well as two federally listed endangered species: Stephens' kangaroo rat and San Diego fairy shrimp. In addition, two California Special Concern Species, the western burrowing owl (*Athene cunicularia hypugaea*) and golden eagle, occupy the grasslands, among other raptor species.

Regional Context and Regulatory Issues

Natural Community Conservation Plan

The State of California passed the Natural Communities Conservation Planning Act (NCCP) in 1991. The NCCP is broader in its orientation and objectives than the California and federal Endangered Species Acts (ESAs). These laws are designed to identify and protect individual species that have already declined significantly in number. The objective of the NCCP is to conserve natural communities and accommodate compatible land uses. This pilot program is a cooperative effort between the State and federal governments and numerous private partners, and its primary focus is the coastal sage scrub habitat of southern California. This habitat is home to the coastal California gnatcatcher, a federally listed, threatened species, and approximately 100 other potentially threatened or endangered species. Coastal sage scrub is distributed over more than 6,000 square miles of southern California, encompassing portions of San Diego, Orange, Riverside, Los Angeles and San Bernardino counties.

For planning purposes, the NCCP planning areas have been organized into subregions and smaller "subareas" that correspond to the geographic boundaries of participating jurisdictions and/or landowners. In each subregion and subarea, a local lead agency coordinates the collaborative planning process. Working with landowners, environmental organizations, and other interested parties, the local agency oversees the numerous activities that compose the development of a conservation plan. The U.S. Fish and Wildlife Service (USFWS) and CDFG provide the necessary support, direction, and guidance to NCCP participants in these functions. The County of San Diego is participating in the NCCP and has a Multiple Species Conservation Program (MSCP) in place for the southern and western portions of the County (County 1997c). The Biological Mitigation Ordinance (BMO) is the mechanism by which the County implements the MSCP at the project level within the unincorporated area to attain the goals set forth in the County MSCP Subarea Plan. The BMO contains design criteria and mitigation standards that, when applied to projects requiring discretionary permits, protect habitats and species and ensures that a project does not preclude the viability of the MSCP preserve system. The Proposed Project, however, does not fall within the limits of the adopted MSCP. Thus, conformance with the MSCP and associated BMO are not required for the Project at this time. Instead, the Project would be subject to the requirements of the NCCP and Section 4(d) of the federal ESA for take of Diegan coastal sage scrub. Pursuant to Section 4(d) of the federal ESA, impacts to Diegan coastal sage scrub are limited to five percent of the total acreage occurring within the County as of 1994, and require a Habitat Loss Permit (HLP) pursuant to Habitat Loss Ordinance 8365.

Multiple Species Conservation Program

If the Project is approved after the adoption of the North County MSCP Subarea Plan, the Project would be required to make findings of conformance to the Subarea Plan. The County, USFWS, CDFG, and other local jurisdictions joined together in the late 1990s to develop the MSCP, a program to ensure habitat and species viability throughout the region, while still permitting some level of continued development. The MSCP provides the framework for local jurisdictions to obtain incidental take authority for a number of species for projects processed in accordance with the requirements of the adopted MSCP Subarea Plan.

Wetlands

Wetlands are regulated by the Corps pursuant to Section 404 of the Clean Water Act; CDFG pursuant to Section 1602 (Streambed Alteration Agreement) of the California Fish and Game Code; and the County pursuant to the RPO. The various intermittent wetland areas within the Project site and proposed off-site roadway widening alignments were reviewed for jurisdictional determinations, based on the corresponding definition of each agency. Figure 3.2-1 depicts each of the drainages and the corresponding jurisdictions.

Federal Endangered Species Act (ESA)

Administered by the USFWS, the federal ESA provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a "take" under the ESA. Section 9(a) of the ESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

Sections 4(d) and 7 of the federal ESA regulate actions that could jeopardize endangered or threatened species. A special rule under Section 4(d) of the ESA authorizes take of certain protected species under approved NCCP programs, which are administered by the states. The County of San Diego participates in a 4(d) program relative to Diegan coastal sage scrub. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species. A Section 7 consultation (formal or informal) is required when there is a nexus between listed species' use of the site and ACOE jurisdictional areas such as those that occur on the Project site. A biological assessment is required for any major construction activity if it may affect listed species. In such a case, take can be authorized via a letter of biological opinion, issued by the USFWS for non-marine related listed species issues.

California Endangered Species Act

The California ESA is similar to the federal ESA in that it contains a process for listing of species and regulating potential impacts to listed species. Section 2081 of the California ESA authorizes CDFG to enter into a memorandum of agreement for take of listed species for scientific, educational, or management purposes.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) is a federal statute that prohibits the ability to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention… for the protection of migratory birds… or any part, nest, or egg of any such bird." This statute allows the USFWS to enforce the prohibition of direct "taking" of active nests. Implementation of this law typically includes restrictions on development activities when sensitive nesting birds, including raptors, are present.

3.2.2 Identification and Discussion of Guidelines for the Determination of Significance

The Proposed Project would have a significant adverse biological effect if any of the following would occur as a result of a Project-related component:

<u>Sensitive Habitats</u>

1. Any component of native or naturalized habitat would be removed through grading, clearing, and/or other construction activities.

2. The Project would impact County-defined wetlands, including but not limited to: removal of associated vegetation; grading; obstruction or diversion of water flow; change in velocity or siltation rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause a change in species composition, diversity, or abundance.

3. The Project does not conform to the requirements regarding wetlands, wetland buffers or sensitive habitat lands as outlined in the RPO.

Sensitive Species

4. Direct, indirect and/or cumulative impacts may reduce the local population of a plant species listed by federal or State agencies/governments as endangered or threatened, or as County Group A or B, by more than 20 percent, or cause impacts that may be considered detrimental to the regional long-term survival of such listed species. Impacts detrimental to the regional long-term survival of a species would be considered potentially significant if:
    a. Impacts would occur to a local population that is regionally significant;
    b. The site supports a core block of habitat or linkage that is critical to the species' survival; or
    c. Impacts to individuals on the site would interfere with regional conservation efforts or goals for the species.

5. Direct, indirect and/or cumulative impacts may reduce the estimated local population of an animal species listed by federal or State agencies/governments as endangered or threatened, or federal Species of Concern or California Special Concern Species, or as County Group I, by more than 20 percent, or cause impacts that may be considered detrimental to the regional long-term survival of the species. Impacts detrimental to the regional long-term survival of a species would be considered potentially significant if:
    a. Impacts would occur to a local population that is regionally significant;
    b. The site supports a core block of habitat or linkage that is critical to the species' survival; or
    c. Impacts to individuals on the site would interfere with regional conservation efforts or goals for the species.

6. Direct, indirect and/or cumulative impacts may occur that may be detrimental to the regional long-term survival of a Group II animal or Group C or D plant species as listed by the County. Impacts detrimental to the regional long-term survival of a species would be considered potentially significant if:
    a. Impacts would occur to a local population that is regionally significant;
    b. The site supports a core block of habitat or linkage that is critical to the species' survival; or
    c. Impacts to individuals on the site would interfere with regional conservation efforts or goals for the species.

7. Grading, clearing, and/or construction would occur within the following distances and within the following time periods for one or more of these species:

Species	Distance	Breeding Season
Coastal cactus wren	300 feet from occupied habitat	February 15 to August 15
Coastal California gnatcatcher	300 feet from occupied habitat	February 15 to August 30
Nesting raptors	300 feet from nest	February 15 to July 15

8. Substantial raptor foraging habitat (e.g., Ramona Grasslands) would be removed.

9. A block of habitat considered essential to the regional biological environment would be eliminated or substantially degraded such that it no longer provides the same function or value.

Wildlife Corridors and Edge Effects

10. Activities within or adjacent to corridors, linkages, or other areas utilized for wildlife movement would:
    a. Prevent wildlife from accessing areas considered necessary to their survival;
    b. Restrict wildlife from utilizing their natural movement paths;
    c. Further constrain a narrow corridor by reducing width, removing available vegetative cover, creating edge effects, or placing barriers in the movement path; or
    d. Create artificial corridors that do not follow natural movement corridors.

11. On- or off-site wildlife habitat would be subjected to substantial edge effects, including:
    a. Post-construction noise levels in excess of 60 dB during daytime hours and 50 dB during nighttime hours within Diegan coastal sage scrub occupied by coastal California gnatcatchers;
    b. Artificial light adjacent to open space must be in conformance with the County Light Pollution Code;
    c. Potential for unauthorized encroachment of any kind, including but not limited to clearing within preserved areas and unauthorized pedestrian, equestrian, or off-road vehicle traffic;
    d. Degradation of the habitat through unrestrained domestic pets or invasive plants; or
    e. Water runoff causing a change in natural moisture levels and/or increasing the spread of pollution and pesticides.

Regulations

12. The Project does not conform to the goals and requirements of the HLP Ordinance, NCCP, or MSCP.

13. The Project does not conform to the requirements of the County Grading Ordinance.

14. The Project does not conform to the goals and requirements of applicable federal or State regulations, including but not limited to the federal Endangered Species Act, Migratory Bird Treaty Act, Bald Eagle Protection Act, Clean Water Act, Porter-Cologne Water Quality Act, and the California Fish and Game Code.

Guideline Sources/Methodology

The identified guidelines are based on Appendix G of the State CEQA Guidelines; State and federal laws and regulations; and the RPO, RCP, and other County guidance, as described below.

The removal of native or naturalized habitat through Project-related activities, as described in Guideline No. 1, would directly affect habitat acreage and plant/animal species located therein, as well as affecting potential associated resources/uses such as species diversity, foraging, breeding and access. Such habitats impacts are addressed in State CEQA Guidelines Appendix G, as well as the RPO.

Impacts to wetlands, as discussed in Guideline Nos. 2 and 3, can have widespread ramifications beyond the immediate loss of sensitive habitat. The loss of wetlands, for example, can affect the riparian species located therein, as well as upland species, which use wetlands as a source of water and as access corridors. Additionally, even minor impacts to wetlands can result in substantial changes in downstream hydrology and/or water quality, with indirect effects therefore not necessarily confined to the area of Project-related activities. CDFG and Corps regulate impacts to wetlands. Finally, a project is required to be in conformance with applicable County standards related to maintaining the viability of sensitive habitats, including the noted RPO criteria on wetlands and associated buffers. Non-compliance would result in a project that is inconsistent with County standards.

Analyses of potential impacts to applicable plant and animal species concluded that individual populations of sensitive species could remain viable if no more than 20 percent was removed (County 1997c). Accordingly, Guideline Nos. 4 and 5 identify this criterion for applicable species including: (1) plant species listed as federal or State endangered or threatened, or listed as County Group A or B; and (2) animal species listed as federal or State endangered, threatened, or federal Species of Concern or California Special Concern Species, or listed as County Group I. In addition, impacts to less than 20 percent of individual plant and animal populations also can potentially be detrimental to regional long-term species survival, with related criteria therefore included in Guideline Nos. 4 and 5. It should also be noted that determining accurate estimates of given animal populations may be more difficult than generating similar estimates for plant populations. Accordingly, the "detrimental to regional long-term survival" criteria should be used (rather than the "20 percent" criteria) in cases where the estimate of an animal population is questionable.

The Group C and D species identified in Guideline No. 6 are thought to be in decline, although not to the extent that extirpation or extinction is imminent. Because these species are often prolific within suitable habitat, standards based on protection of such habitats (as outlined in Guideline Nos. 1

through 3, among others) are generally adequate to protect Group C and D species. Due to the generally declining nature of these species (and associated habitats), however, some instances may occur where Project-related impacts may be detrimental to their regional long-term survival. Accordingly, the criteria identified in Guideline No. 6 are included to ensure adequate protection of Group C and D species where circumstances warrant.

The criteria identified in Guideline No. 7 are intended to address the potential loss of offspring for particularly sensitive avian species. Any direct or indirect impacts that might affect the nesting success of these species would be considered significant, with the described buffer distances and breeding season dates derived from various studies completed for birds in San Diego County (and generally accepted by the scientific community). Furthermore, nesting raptors and coastal California raptors are protected by the USFWS through the MBTA and the federal Endangered Species Act, respectively. The checklist in Appendix G of the CEQA Guidelines indicates a potential significant impact if a project would "impede the use of native wildlife nursery sites."

Raptor species regularly use both native and non-native grassland habitats for foraging. These species are protected under the MBTA. The 9,000-acre Ramona Grasslands referenced in Guideline No. 8 are believed to represent one of the few remaining large areas of native grassland in coastal southern California. Conservation planning for this area is currently underway with partners such as the County of San Diego, California State Parks, the SWRCB, the State of California Resources Agency, the USFWS, the Wildlife Conservation Board, and the Nature Conservancy, as well as local partners like the Wildlife Research Institute, the Conservation Biology Institute, and the Ramona Community Planning Group. These organizations and agencies have identified the Ramona Grasslands as a regionally important resource for native habitat preservation and raptor foraging that should be protected.

Guideline No. 9 is associated with the identification of regionally important habitat blocks in sources such as the NCCP (e.g., Core Areas) and the RCP (e.g., Resource Conservation Areas [RCAs]). This guideline is intended to protect both the function and value of such individual habitat areas from Project-related development, and to maintain the contribution of such areas to the regional biological environment.

The criteria related to wildlife movement corridors identified in Guideline No. 10 are intended to protect such areas due to their critical role in species survival. CEQA Guidelines Appendix G indicates that a project could have a significant impact if it would "interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors." Wildlife movement corridors and linkages accommodate a number of essential activities for species viability, including foraging, juvenile dispersal, genetic flow, migration and colonization. Without adequate movement areas to provide for these ecological needs, all other efforts to protect wildlife are undermined and the probability of species extirpation and eventual extinction is substantially increased. Because of the importance of adequate wildlife movement corridors and linkages, they have been subject to substantial analysis in conservation biology literature. Despite this intensive study, however, universally accepted standards for maintaining corridors have not been generated due to the inherent variability in regional and local biological conditions and requirements. Optimal criteria for individual wildlife movement areas are instead based on site-specific factors, such as function (e.g., to accommodate regional linkage or local movement), individual species needs and the type and quality of habitats present. The criteria

identified in Guideline No. 10 incorporate the use of described site-specific factors, pursuant to the principles established by the conservation biology community.

The criteria identified in Guideline No. 11 are intended to protect open space from edge effects related to development, with such effects potentially extending several hundred feet into open space preserves. Such effects are addressed through the NCCP and can result in significant direct changes to species composition, diversity and abundance, as well as indirect effects that can vary widely depending on the nature of development and adjacent resources. Noise and artificial lighting, for example, can affect foraging and breeding habits of all types of species, including moths (an important prey source for bats), nesting birds and nocturnal mammals. Edge affects can also adversely impact the availability of resources such as water or prey species, and can change habitat suitability by altering (for example) moisture or vegetation conditions. Due to their potential to affect large areas of preserved open space, edge effects have been subject to substantial analysis in multiple species recovery plans, reports, technical journals and scientific conferences. Similar to the discussion provided above for Guideline No. 10, however, universally accepted standards for addressing edge effects have not been generated due to the variability in site-specific conditions. The criteria identified for potential Project-related edge effects in Guideline No. 11 were therefore generated on the basis of both local conditions and commonly accepted practices in the biological community.

Guideline No. 12 is intended to address applicable goals and requirements under the County HLP Ordinance 8365 and related NCCP. The NCCP was enacted by the State of California in 1991, and is generally intended to conserve natural communities and accommodate compatible land uses. The Southern California Coastal Sage Scrub NCCP was the first effort of this program (with related guidelines adopted in 1993), and authorized a total interim Diegan coastal sage scrub (DCSS) habitat loss of five percent (based on calculations of then existing habitat acreage by an established Scientific Review Panel). As a participant in the NCCP program, the County is the local jurisdiction in the Project area with authority to issue an HLP and correspondingly allow "take" of the federally listed coastal California gnatcatcher, pursuant to Section 4(d) of the federal ESA. An HLP is required for parcels located outside of the MSCP, and must be issued prior to issuance of a Brushing and Clearing Permit, Grading Permits or Improvement Permits in lieu of Grading Permits. The County has an MSCP Plan in place for the southern portions of the County, although the Project site is not within the limits of this plan. While a "North County Subarea Plan" is currently being drafted for areas in northern San Diego County that include the Project site, it has not yet been approved and the Proposed Project must therefore conform with the NCCP and HLP Ordinance guidelines.

Guideline No. 13 is intended to address applicable goals and requirements of the County Grading Ordinance. Compliance with the Grading Ordinance is required and is related to biological resources when natural vegetation is cleared.

All of the federal and State requirements identified in Guideline No. 14 include goals and objectives intended to protect (among other issues) sensitive species, habitats and related resource values such as water quality. Many of these goals and objectives are addressed either directly or indirectly in elements of Guideline Nos. 1 through 12. Compliance with the referenced laws and regulations is required and is related to biological resources. The agencies responsible for enforcing these laws and regulations are responsible agencies with respect to this EIR, including the USFWS, CDFG, RWQCB, and Corps. These agencies and/or the laws and regulations they enforce are specifically referenced in the CEQA Guidelines, Appendix G, which indicates that impacts to the biological resources protected by these agencies may constitute a significant environmental impact.

3.2.3 Analysis of Project Effects and Determination as to Significance

Direct Impacts to On-site Habitats (Significance Guideline No. 1)

Direct impacts are immediate impacts resulting from the permanent removal of habitat. The Project's direct impacts on site were quantified by overlaying the limits of all Project grading including: residential lots, roads, trails, sewer pump stations, parks, charter high school site, WRF site and associated treated water storage ponds and spray field (under Wastewater Management Option 2), fuel management zones, and BMPs (e.g., detention basins) on the biological resources map of the site (Figure 3.2-8). For purposes of this assessment, all biological resources within the limits of grading for development, trails, fuel modification, and the spray field are considered directly impacted. Table 3.2-1 summarizes the total on-site acres of each habitat directly impacted by the Project.

Under Wastewater Management Option 1, the Proposed Project would result in impacts to approximately 372.34 acres within the Project site, including: 0.93 acre of dense Engelmann oak woodland (including 0.14 acre of oak root zone), 0.39 acres of open Engelmann oak woodland (including 0.11 acre of oak root zone), 69.31 acres of Diegan coastal sage scrub (including eucalyptus woodland/Diegan coastal sage scrub on Figure 3.2-8), 123.27 acres of southern mixed chaparral, 11.57 acres of chamise chaparral, 26.85 acres of non-native grassland, 0.14 acre of eucalyptus woodland, 12.58 acres of developed land, and 127.30 acres of mitigated impacted area (Figure 3.2-8; Table 3.2-1). Under Option 2, the Project would impact 24.70 acres more than under Option 1, including 0.76 acre more of non-native grassland, 0.61 acre more developed land, and 23.33 acres more of mitigated impacted area. Additional direct loss of on-site non-native grassland may occur through implementation of the mitigation for off-site wetland impacts, which would convert some non-native grassland into wetlands, if approved by the Director of DPLU. Pursuant to Significance Guideline No. 1, impacts to sensitive habitats on site (including dense Engelmann oak woodland, open Engelmann oak woodland, Diegan coastal sage scrub, southern mixed chaparral, chamise chaparral, and non-native grassland) would be significant. **(Significant Impact Nos. 3.2.3a through f**, respectively)

Impacts to eucalyptus woodland and developed land would be **less than significant**, because they are not sensitive habitats. Implementation of the Proposed Project would not result in direct impacts to the southern coast live oak riparian forest, southern riparian scrub, or disturbed wetland habitats on site.

Direct Impacts to On-site Jurisdictional Areas (Significance Guideline Nos. 2 and 3)

The Proposed Project would directly impact approximately 3,500 linear feet of Waters of the U.S., all of which is considered jurisdictional by CDFG and 300 linear feet of Waters of the U.S. considered jurisdictional by the Corps. Pursuant to Significance Guideline No. 2, impacts to Corps and CDFG jurisdictional areas would be significant. **(Significant Impact No. 3.2.3g)**

Pursuant to Significance Guideline No. 3, the Project would not impact any on-site RPO wetlands or wetland buffers.

Direct Impacts to On-site Sensitive Plant Species (Significance Guideline Nos. 4 and 6)

As previously discussed, five plant species present on the Project site are recognized as sensitive by the resources agencies and/or conservation organizations, including Engelmann oak, delicate clarkia, peninsular spineflower, rush-like bristleweed, and southern tarplant.

The Proposed Project would impact several Engelmann oak trees; however, impacts to individual oak trees have been accounted for in the impacts to open and dense oak woodland mentioned above. The loss of individual Engelmann oak trees would be **less than significant** because: (1) these oaks are relatively abundant in their range and the majority of the population that occurs on site would be preserved; (2) the Project site does not support a core block of this species population that is critical to the species survival; and (3) impacts to individuals on the Project site would not interfere with regional conservation efforts or goals for the species, pursuant to Significance Guideline No. 6. Development within 50 feet of Engelmann oaks may adversely affect the root zones, which would be a direct impact to the trees; however, these impacts also have been accounted for within the impacts to open and dense Engelmann oak woodlands, above.

Approximately three southern tarplant individuals are within the boundary of the proposed spray field and would be impacted under Wastewater Management Option 2. This impact is considered **less than significant**, pursuant to Significance Guideline No. 4, because this population occurs within an area that was previously impacted and mitigation for these impacts has already been implemented under another action. **No impact** would occur to any southern tarplant under Wastewater Management Option 1.

On-site individuals of delicate clarkia, peninsular spineflower, and rush-like bristleweed would be preserved within open space. The Project would **not impact** these species.

Direct Impacts to On-site Sensitive Animal Species (Significance Guideline Nos. 5, 6, 7, and 8)

Implementation of the Proposed Project would result in the direct impact of 69.31 acres of the on-site Diegan coastal sage scrub habitat. The Project has been designed to avoid to the maximum extent feasible the locations of the coastal California gnatcatchers observed on site. This included locating proposed development on the eastern and central portions of the site and eliminating the extension of Montecito Road to the west. The Project would avoid impacts to the highest quality Diegan coastal sage scrub on site, which is known to provide habitat for a number of gnatcatchers (REC 2008b). The Proposed Project would, however, impact portions of occupied Diegan coastal sage scrub supporting two gnatcatcher pairs. Pursuant to Significance Guideline No. 5, this impact would be considered significant. The Project Applicant would be required to obtain an HLP or a Section 10 permit from USFWS for take of this species. **(Significant Impact No. 3.2.3h)**

The site contains three species considered California or federal Species of Special Concern. These include the southern California rufous-crowned sparrow, loggerhead shrike, and California thrasher. These species are locally abundant and occur in the high quality habitat proposed for preservation with open space, including the coastal sage scrub and oak woodlands. In addition, these species are relatively abundant in the region, the Project site does not support habitat critical to the survival of the species, and impacts would not interfere with the regional conservation efforts for these species.

Therefore, impacts to these species are expected to be **less than significant**, pursuant to Significance Guideline No. 5.

The site contains foraging habitat, including non-native grassland, for a variety of raptor species. Although raptors are opportunistic in their foraging strategies and will use almost any open habitat where rodents, birds, and reptiles are present, they typically prefer open shrublands, grasslands, and pasturelands because raptor prey is more conspicuous and accessible in these habitats. The eucalyptus trees on site provide roosting and potential nesting habitat for raptors. While the loss of 26.47 acres of non-native grassland under Wastewater Option 1 (27.23 acres under Option 2) would result in diminished carrying capacity for raptors on site and in the immediate Project vicinity, raptor foraging habitat within San Diego County and the Ramona area is still relatively abundant. In addition, the Proposed Project has been designed to avoid the largest contiguous block of the on-site non-native grassland habitat and the on-site proposed open space connects to foraging habitat to the north, west, and south. This reduction in foraging habitat would, however, be a significant impact to raptors, pursuant to Significance Guideline No. 8. **(Significant Impact No. 3.2.3i)**

Three sensitive reptile species were observed on site, including two-striped garter snake, San Diego horned lizard, and coastal whiptail. These species were observed in Diegan coastal sage scrub in the western portion of the site (Figure 3.2-8). Pursuant to Significance Guideline Nos. 5 and 6, direct impacts to these species are expected to be **less than significant**; however, the loss of 69.31 acres of Diegan coastal sage scrub on site would reduce the available habitat for these species.

Pursuant to Significance Guideline No. 6, the loss of habitat for the black-tailed jackrabbit and San Diego desert woodrat is considered **less than significant** because these species are relatively abundant in the region, the Project site does not support habitat critical to the survival of the species, and impacts would not interfere with the regional conservation efforts for these species.

No sensitive fish, amphibians, or invertebrates have been observed on site.

Direct Impacts to Wildlife Corridors Associated with On-site Development (Significance Guideline No. 10)

The Proposed Project was designed to focus the majority of impacts in the eastern portion of the site, abutting existing rural residential development. The Project has been designed to provide the maximum contiguous area of open space, including sensitive habitats such as grasslands, shrublands, and woodlands. This contiguous area would be included within the Ramona Grasslands assemblage. The Project site's ability to serve as a regional corridor in the eastern portion of the site is limited by the amount of development to the north, east, and south (Figure 3.2-6). Therefore, the habitat linkages to the northwest and west may be the most important for the regional movement of wildlife species. This corridor connects to the San Pasqual River Valley, which is known to be a high value wildlife area. The proposed residential development area and Montecito Ranch Road would be located east and south of regional wildlife corridors. Pursuant to Significance Guideline No. 10, impacts to regional wildlife corridors would be **less than significant**.

The main drainage that runs between the Unit 1 and Unit 2 residential development areas in the eastern portion of the Project site has been designated as a local wildlife corridor and would be dedicated as open space. Although the corridor would be abutted on two sides by proposed development, the habitat and topography of this canyon would still provide value for localized wildlife

use. The corridor in this location varies in width from 300 to 800 feet and connects to the much wider open space to the north. The vegetation within the two HOA maintenance lots on either side of the canyon would be thinned; however, the two lots would remain undeveloped. The slopes of the canyon are relatively steep and the density of the vegetation within the canyon would allow for substantial wildlife cover. Therefore, this local corridor would remain an important part of the overall open space design by providing a connection to the north and valuable cover and nesting opportunities. Impacts to this local corridor would be **less than significant**, pursuant to Significance Guideline No. 10.

Indirect On-site Impacts (Significance Guideline Nos. 4, 5, 6, 7, and 11)

Indirect impacts result from changes in land use adjacent to natural habitat, primarily associated with adverse "edge effects." Such effects may be either short-term, indirect impacts related to construction or long-term, chronic indirect impacts associated with urban development. During construction of the Proposed Project, potential short-term indirect impacts include dust, soil erosion/siltation, and noise, which could temporarily disrupt habitat and species vitality. The Proposed Project would incorporate a number of best management practices (BMPs) related to erosion and sedimentation as design features. These BMPs are derived from the SWMP and other applicable sources, and would avoid or reduce identified erosion and sedimentation (and related water quality) impacts to below a level of significance. Impacts to vegetation associated with short-term fugitive dust would be potentially significant. Although impacts associated with short-term fugitive dust would be significant and unmitigable from an air quality standpoint (refer to Subchapter 2.2, Air Quality), impacts to vegetation would be mitigated to below a level of significance by implementation of the measures presented in Subchapter 2.2, Air Quality. If noise-sensitive, threatened or endangered avian species (e.g., gnatcatchers) are present, County policy is to maintain peak one-hour noise levels of 60 dB L_{eq} or less during construction or operation during the nesting/breeding season consistent with wildlife management agency requirements. A discussion of short-term indirect impacts is provided below.

Long-term indirect impacts may include intrusions by humans and domestic pets, noise, lighting, invasion by exotic plant and animal species, use of toxic chemicals (fertilizers, pesticides, herbicides and other hazardous materials), soil erosion, litter, fire, and hydrological changes (e.g., excess runoff into habitat areas). Such long-term impacts potentially could be significant. A discussion of such impacts is provided below.

Indirect Impacts to On-site Habitats

Indirect impacts from the proposed development on sensitive upland habitats would include diminished habitat quality along the edge of development areas, primarily because of exotic plants and animals, and increased chance of human encroachment. These impacts along the edge of development and along the trails located within dedicated open space would be most severe within the first 50 feet. This includes the entire length of the trails. The Proposed Project has been designed to reduce the linear feet of edge effect by removing "islands" of open space that would have diminished carrying capacity and to avoid the more sensitive drainages on site. However, indirect impacts to upland habitats would be regarded as potentially significant, pursuant to Significance Guideline No. 11. **(Significant Impact No. 3.2.3j[a])**

Indirect impacts from the Proposed Project on riparian and woodland habitat (dense and open Engelmann oak woodland, southern coast live oak riparian forest, and southern riparian scrub) would include diminished habitat quality along the edge of development areas, primarily because of exotic plants and animals, and increased chance of human encroachment. The greatest potential for indirect impacts would occur where residential lots abut southern coast live oak riparian forest in the northern portion of the Project site. With the inclusion of a sufficient buffer between development and the woodlands, indirect impacts would be minimized. Nonetheless, these potential indirect impacts are considered potentially significant. Potentially significant indirect impacts may occur in areas where the proposed trail system traverses oak riparian forest and oak woodlands within the Project site, due to increased chance of human encroachment by trail users, pursuant to Significance Guideline No. 11. **(Significant Impact No. 3.2.3j[b])**

In addition, the proposed open space would be protected from unrestrained domestic pets and invasive plants through the management and maintenance tasks outlined in the Resource Management Plan (RMP; REC 2008c). These management and maintenance tasks would include installation of signage around boundaries adjacent to privately owned properties; restrictions of trespassing through signage, gating, and patrolling; and removal of exotic plant species on an as-needed basis (see Appendix E). The Proposed Project also incorporates desiltation basins, stormwater runoff control, and would comply with RWQCB regulations. Therefore, indirect impacts associated with unrestrained domestic pets, invasive plants, and runoff would be **less than significant**, pursuant to Significance Guideline No. 11.

Indirect Impacts to On-site Sensitive Plant Species

There is the potential for significant indirect impacts to sensitive plant species preserved within the open space, pursuant to Significance Guideline Nos. 4 and 6. Significant indirect impacts may be attributed to trampling, illegal off-road vehicle use, erosion due to excessive stormwater runoff, and plant collection. **(Significant Impact No. 3.2.3k)**

Irrigation runoff from the proposed residences may negatively affect adjacent oak trees as well as promote growth of opportunistic, exotic weed species. Implementation of current water quality guidelines (addressed in Section 4.1.1, Hydrology/Water Resources) would result in **less than significant** impacts associated with runoff.

Indirect Impacts to On-site Sensitive Animal Species

The Proposed Project has been designed to minimize habitat fragmentation and provide a large contiguous block of open space that would continue to function as a wildlife corridor; however, the Project could result in significant indirect impacts to sensitive wildlife on site, pursuant to Significance Guideline Nos. 5 and 6. **(Significant Impact No. 3.2.3l)**

The majority of the mapped coastal California gnatcatchers are more than 300 feet away from the proposed limit of grading; however, one pair was observed near the proposed alignment of Montecito Ranch Road. It is presumed that all of the Diegan coastal sage scrub on site has the potential to support gnatcatchers. Pursuant to Significance Guideline No. 7, removal of any Diegan coastal sage scrub during the gnatcatcher breeding season (February 15 through August 30) or any grading,

clearing, or construction activities within 300 feet of an active coastal California gnatcatcher nest would be significant. **(Significant Impact No. 3.2.3m)**

Similarly, any grading, clearing, or construction within 300 feet of an active raptor nest between the raptor breeding season (February 15 and July 15) would be significant, pursuant to Significance Guideline No. 7. **(Significant Impact No. 3.2.3n)**

No construction is expected to occur within 300 feet of the observed on-site location of the California rufous crowned sparrow. Therefore, indirect impacts would occur to this species would be **less than significant**.

There is the potential for noise levels in excess of 60 dBA CNEL within approximately 100 feet from the centerline of the proposed Montecito Ranch Road. Initial modeling, however, does not take into account topography or future mature landscaping. The right-of-way along this roadway varies from 80 to 118 feet, so only approximately 41 to 60 feet of habitat would be exposed to noise levels greater than 60 dBA CNEL. In addition, topography and landscaping would reduce this distance. It is anticipated that this impact (i.e., increases over existing conditions) would not be significant, pursuant to Significance Guideline No. 11, because the stretch of roadway is so short and housing development already exists to the south. Post-construction noise level impacts to gnatcatchers would be **less than significant**.

The Project would conform to the LPC. A lighting plan is included in Section III of the MUP. As stated in the plan, lights would be shielded away from open space and would be within the parameters allowed in the LPC. Accent lighting would be provided at the park sites for safety and would not affect wildlife behavior in the proposed adjacent open space areas. Therefore, indirect impacts due to lighting are expected to be **less than significant**, pursuant to Significance Guideline No. 11.

Direct Impacts to Off-site Habitats (Significance Guideline No. 1)

Roadway widening along Ash Street, Montecito Way, and Montecito Road, as well as construction of the water storage tank and associated access road, would impact approximately 0.24 acre of riparian woodland, 2.20 acres of Diegan coastal sage scrub, 5.00 acres of non-native grassland, 1.64 acre of eucalyptus woodland, 2.10 acres of agriculture/pasture land, 3.89 acres of disturbed habitat, and 11.80 acres of developed land, for a total of 26.87 acres (Figures 3.2-2 through 3.2-4b; Table 3.2-2). If Wastewater Management Option 1 is implemented, construction would occur within and immediately south of Kalbaugh Street (for sewer line placement), resulting in an additional 0.07 acre of impacts to developed land (Figure 3.2-5; Table 3.2-2).

Impacts to riparian woodland, Diegan coastal sage scrub, non-native grassland, and agriculture/pasture land would be significant and would require mitigation. **(Significant Impact Nos. 3.2.3o through r**, respectively)

Impacts to eucalyptus woodland and disturbed/developed land would not be significant, because these habitats are not sensitive.

Proposed off-site water and sewer lines would be placed within existing roadways (i.e., Ash Street, Montecito Way, Montecito Road, and Kalbaugh Street) and therefore biological impacts would be **less than significant**.

Direct Impacts to Off-site Jurisdictional Areas (Significance Guideline Nos. 2 and 3)

Roadway widening along Ash Street and Montecito Way would not impact any jurisdictional areas.

Improvements to Montecito Road would result in impacts to 0.24 acre of CDFG, Corps, and RPO wetlands (Table 3.2-4). Impacts to these jurisdictional areas would be significant, pursuant to Significance Guideline No. 2. **(Significant Impact No. 3.2.3s)**

As discussed in the Resource Protection Study (REC 2008a; Appendix D), Montecito Road improvements meet the permitted use criteria for allowed impacts to RPO wetlands and wetland buffers, per Section 86.604(a)(5) of the RPO. Therefore, pursuant to Significance Guideline No. 3, the Project would conform with the RPO and impacts would be **less than significant**.

Direct Impacts to Off-site Sensitive Plant Species (Significance Guideline Nos. 3, 4 and 6)

No sensitive plant species occur within or adjacent to proposed off-site roadway improvements. Accordingly, **no impacts** to such species would occur, pursuant to Significance Guideline Nos. 3, 4, and 6.

Direct Impacts to Off-site Sensitive Animal Species (Significance Guideline Nos. 5 and 6)

No sensitive animal species were observed within the proposed off-site roadway widening alignments. In addition, off-site sewer and water lines would be constructed within existing roadways, as previously discussed, and therefore would **not impact** sensitive animal species, pursuant to Significance Guideline No. 5 and 6.

Direct Impacts to Wildlife Corridors Associated with Off-site Development (Significance Guideline No. 10)

The Proposed Project would not result in impacts to off-site wildlife corridors.

Indirect Off-site Impacts (Significance Guideline Nos. 4, 5, 6, 7, and 11)

Indirect Impacts to Off-site Habitats

Improvements to the Montecito Road bridge (i.e., widening) would cross Santa Maria Creek. Although the bridge spans the creek, indirect impacts due to shading would occur. These impacts are conservatively accounted for under direct impacts to habitats (see above) and would be considered significant, pursuant to Significance Guideline No. 1. **(Significant Impact Nos. 3.2.3o and s)**

Indirect Impacts to Off-site Sensitive Plant and Wildlife Species

No indirect impacts would occur to sensitive plant or wildlife species off site, as no such species occur within or adjacent to the off-site roadway improvement alignments.

Regulatory Impacts (Significance Guideline Nos. 12 through 14)

NCCP

California's NCCP focuses largely on conserving large areas of coastal sage scrub and the habitats that link those areas. The County is preparing a regional conservation plan for northern San Diego County, the North County MSCP Subarea Plan, but it has not yet been adopted. Therefore, take of coastal sage scrub would require an HLP be obtained from the County pursuant to the 4(d) rule of federal ESA for potential take of the coastal California gnatcatcher through impacts to sage scrub habitats granted under the federal Section 4(d) process with the requirement of conformance with the NCCP Guidelines (CDFG 1997). As a result, according to the NCCP Guidelines flowchart, the site is considered to have a high potential for long-term conservation. Therefore, Project impacts to coastal sage scrub habitat would require mitigation at a 2:1 ratio. Obtaining an HLP would ensure conformance with the goals and requirements of the NCCP, pursuant to Significance Guideline No. 12. Accordingly, impacts would be **less than significant**.

North County MSCP Subarea Plan

If the Project is approved after the adoption of the North County MSCP Subarea Plan, the Project would be required to make findings of conformance to the Subarea Plan. The Project site has been mapped on the North County Subarea Plan Habitat Evaluation Map as having high and very high value for habitat preservation.

Since it is likely that the North County MSCP Subarea Plan will be approved prior to construction of the Project, a hardline approval is being sought by the Project Applicant, who has initiated hardline open space discussions with the County, as well as the USFWS and CDFG. The current Project design incorporates that hardline open space, which would allow for take authorization of the impacted area with no further approvals necessary from the resource agencies (Figure 3.2-9).

The hardline open space as proposed for the Project includes all areas outside of the proposed grading and fuel modification limits. The hardline agreement between the Project Applicant, County, and resource agencies would incorporate the mitigation measures discussed within this subchapter. In addition to the mitigation detailed below, the Project would include an RMP that outlines the management tasks that would be conducted to preserve the proposed open space in perpetuity. The Proposed Project would be in conformance with the North County MSCP Subarea Plan hardline, pursuant to Significance Guideline No. 12. Therefore, impacts would be **less than significant**.

County Grading Ordinance

The Project Applicant would obtain a grading permit prior to any grading activities on or off the Project site. The Project would be in conformance with the requirements of the County Grading Ordinance, pursuant to Significance Guideline No. 13 and impacts would be **less than significant**.

Other Applicable Federal and State Regulations

Pursuant to Significance Guideline No. 14, the Proposed Project would be in conformance with applicable federal or State regulations, including but not limited to the federal Endangered Species

Act, MBTA, Bald Eagle Protection Act, Clean Water Act, Porter-Cologne Water Quality Act, and the California Fish and Game Code, and impacts would be **less than significant**.

Analysis of Effects Associated With SA 330 Extension

This analysis is applicable only to the projected extension of SA 330 from Montecito Road to SR 67. Buildout of this roadway is not part of the Proposed Project, but would be implemented by another entity in the future.

Eight habitats totaling 14.82 acres occur within the relocated roadway footprint along the SA 330 extension, including riparian scrub, cismontane alkali marsh, vernal swale/agriculture, Diegan coastal sage scrub, valley needlegrass grassland, non-native grassland, and developed land. Effects to sensitive habitats (all but developed land) would result in **significant** impacts. The alignment includes Corps jurisdictional areas, CDFG jurisdictional areas, and County RPO wetlands, as it would cross Santa Maria Creek, Etcheverry Creek, and an unnamed tributary. Impacts to these jurisdictional areas would be **significant**. The roadway extension, however, would be in conformance with RPO wetland and wetland buffer requirements, as stated in Subchapter 3.1, Land Use.

San Diego navarretia and San Diego tarplant were observed within or adjacent to the relocated alignment. San Diego navarretia **would not be directly impacted** during road construction. Impacts to San Diego tarplant would be **less than significant**, because the roadway construction impact would be less than 20 percent of the total population and would not be significant to the regional population. San Diego fairy shrimp (*Branchinecta sandiegonenis*), western spadefoot toad (*Spea hammondii*), and golden eagle (*Aquila chrysaetos canadensis*) were adjacent to or in the vicinity of the alignment, but based on current surveys, **would not be impacted** during road construction. Direct impacts to wildlife corridors would be **less than significant**.

The relocated roadway alignment would avoid direct impacts to the vernal pools within the Ramona Airport property and Cumming SPA. Although the pools have been avoided, approximately 0.26 acre (2.5 percent) of one watershed supporting eight vernal pools would be impacted, potentially affecting the quantity and quality of water reaching the pools; such impacts would be **significant**. The relocated SA 330 alignment may result in **significant** indirect impacts to a population of San Diego navarretia on the Cumming SPA, as well as San Diego fairy shrimp and western spadefoot toad. The reader is referred to Section 5.8.6, Extension of SA 330 Design Scenario Alternative, for additional analysis and potential mitigation measures for impacts associated with the construction of the SA 330 extension (both construction and mitigation to be implemented by others).

3.2.4 Cumulative Impact Analysis

Cumulative impacts refer to incremental, individual, environmental effects of two or more projects when considered together. These impacts may be minor when addressed individually, but still be collectively significant as they occur over a period of time. When assessing cumulative impacts to biological resources, the geographic area included in the cumulative analysis should reflect: (1) biological parameters similar to those occurring on the Project site or within the same watershed area; (2) distribution of sensitive species populations and home ranges similar to those occurring the Project site; and (3) habitat use patterns of common wildlife species similar to those occurring the

Project site. Based on these criteria, cumulative assessment areas were determined for the various biological resources on site (REC 2008b; Figure 3.2-7 and Table 3.2-5).

Regional Ecosystems

The Project site is located at the western edge of the majority of development within the community of Ramona. Sparsely developed lands consisting of grasslands, oak woodlands, and chaparral and coastal sage scrub covered hillsides are located to the west. The Ramona Grasslands have been maintained by grazing and represent a unique biological resource in the region. These grasslands occur on the western portion of the project site and extend west and south beyond the Ramona Airport, forming a contiguous habitat throughout the Santa Maria Valley. The Ramona Grasslands provide foraging habitat for many species of raptors and support federal- and State-listed species. The area also is characterized by clay soils that sustain vernal pools and their inhabitants, and support important populations of sensitive plant species. The Ramona area has been identified as one of the most important areas in the region for vernal pool conservation and large portions of the area have been designated as critical habitat for the San Diego fairy shrimp.

Another important biological resource in the Ramona area is Santa Maria Creek. This intermittent creek flows generally east to northwest through Ramona. Although few sections of this creek support high quality riparian habitat, overall it provides an important regional corridor for wildlife movement. Segments of the creek also are known to support populations of listed species, such as the southwestern arroyo toad. Santa Maria Creek flows under the Montecito Road Bridge.

In addition, the shrublands (such as coastal sage scrub and chaparral) and oak woodlands also provide important habitat in the Ramona area. These habitats provide cover, foraging, and nesting habitat for a wide range of wildlife and contribute to the floral diversity of the region. Chaparral and coastal sage scrub are dominant on the slopes and hillsides in the Project area, while open and dense oak woodlands occupy the shadier area in the valleys. Although the shrublands and woodlands are important biological components of the community, the Ramona Grasslands, vernal pools, and Santa Maria Creek corridor are unique to the region and would be considered more important critical priorities for long-term conservation in the Project vicinity.

The Proposed Project is located outside of the County's MSCP Subarea Plan, but is located within the Draft North County Subarea Plan. The County is in the process of preparing the Draft North County Subarea Plan; however, this document is not yet available to the public. The Project site has been mapped on the North County Subarea Plan Habitat Evaluation Map as having high and very high value for habitat preservation.

Cumulative projects that were reviewed in association with the cumulative biological resources impacts analysis include the Ramona Airport Improvement Project, Boundary Avenue School, Olive Peirce Middle School and Ramona High School reconstruction and expansion, Leulf Ranch, Stonecrest, Borysecwicz, Salvation Army Divisional Camp, Monte Vista Oaks, Rancho Esquilago, Oak Country Estates, Rancho Canada, A Touch from Above, Rancho San Vicente, Black Canyon, MDS Development Corporation/DECA Group Project, A Natural High, Inc., Rainbird Road, Sunset Vista, Elliot TM, Lakeside Ventures TM, Nickel Creek, McCandles TPM, Means TPM, KVAAS TPM, Saffian TPM, Wakeman TPM, Fenton Ranch, Koury TPM, Spitsbergen, McDonald TPM, Herold TPM, Alamo Storage, Ramona Library, Olive Street Storage, Sgobassi, Dahl, and Huber (refer to Table 11 in the BTR [Appendix E of the EIR]).

Cumulative Impacts to Sensitive Habitats

The cumulative impact area for wetland habitat and oak woodlands is the Ramona Hydrologic Subarea, the watershed in which the Project is located. Oak woodlands are included within this area, because the oak woodlands on site are associated with minor watersheds within this hydrological subarea. The cumulative impact area for coastal sage scrub and chaparral includes the Central Foothills Humid Temperate Ecological Region (as defined by the County) between the San Diego River to the south and San Dieguito River to the north.

Permanent impacts to sensitive habitats associated with the Proposed Project include Diegan coastal sage scrub, oak woodland, southern mixed chaparral non-native grassland, and riparian woodland.

Implementation of the recent and foreseeable projects discussed above would result in a permanent loss of approximately 288.31 acres of coastal sage scrub, 37.62 acres of oak woodlands, 786.94 acres of chaparral, 500.21 acres of non-native grassland, 8.24 acres of riparian habitat, and 14.1 acres of other wetlands in the Ramona area (REC 2008b; Appendix E).

The collective loss of small amounts of coastal sage scrub, coast live oak woodland, and southern mixed chaparral would not be considered cumulatively substantial and would be **less than significant**. The collective loss of 500.21 acres (representing approximately eight percent) of the non-native grassland regionally would not be considered cumulatively substantial, as impacts to this vegetation community in Ramona are primarily occurring within in-fill parcels surrounded by development or along the fringes of large contiguous patches of this habitat community. Development of small patches of vegetation along the fringes of these habitat communities results in minimization of edge effects and the preservation of large, contiguous patches of habitat.

Federal, State, and County policies require that projects have a no net loss of wetland vegetation communities, including southern coast live oak riparian forest, southern riparian scrub, disturbed wetland, and riparian woodland. The Proposed Project would mitigate its impacts to (off-site) riparian woodland at a 3:1 ratio, including a minimum 1:1 creation ratio, resulting in no net loss of wetland habitat. The other cumulative projects resulting in impacts to southern willow scrub, riparian woodland, and other wetlands also would be required to comply with the no-net-loss policy. Therefore, the cumulative impact to these habitat types would be **less than significant**.

Several of the projects considered in this analysis have or likely would impact vernal pools. The Ramona Airport Improvement Project and the Olive Peirce Middle School and Ramona High School reconstruction and expansion include plans to implement vernal pool enhancement and management programs to mitigate impacts to vernal pools. Because of the rare status of vernal pools within the County and the even more rare status of Ramona vernal pools, any direct impact would be considered significant at the project and at the cumulative level. The Proposed Project, however, would not directly or indirectly impact any vernal pools, and therefore would not contribute to the cumulative impacts to vernal pools.

Diegan coastal sage scrub that would be impacted by the Proposed Project is known to support the federally threatened coastal California gnatcatcher. Regionally, the NCCP Act requires that a proposed project conform to NCCP planning guidelines, verified through the making of findings of fact pursuant to Section 4(d) of the Endangered Species Act, prior to adoption of an NCCP Subarea Plan. The requirements of the NCCP Act and 4(d) process are designed to maintain the viability of

ecosystems and future regional preserve design, such that cumulative project impacts to Diegan coastal sage scrub, other habitats and sensitive species are **less than significant**.

The County of San Diego, in coordination with the USFWS and the CDFG, is preparing a regional habitat conservation program for sensitive habitats and species. The proposed North County MSCP Subarea Plan will ensure that significant resources will be adequately preserved in permanent open space and that all projects will be in conformance with that plan. An assemblage of corridors, open space linkages and habitat preservation systems will need to be put in place as these projects are reviewed and approved. The Proposed Project would add to the regional cumulative loss of habitat, but is also designed to fully mitigate Diegan coastal sage scrub impacts by permanently preserving 249.62 acres of Diegan coastal sage scrub on site, 106.90 acres of which have been preserved as part of previous agricultural activities. The related projects listed above would also be required to mitigate for any loss of Diegan coastal sage scrub under the NCCP guidelines or the proposed North County MSCP Subarea Plan. Until implementation of the Subarea Plan, however, these impacts must be considered significant, pursuant to Significance Guideline No. 12. **(Significant Impact No. 3.2.4a)**

Once the North County MSCP Subarea Plan is adopted, the Proposed Project and cumulative projects would be required to make findings of conformance to the Subarea Plan. The Project Applicant is seeking a hardline approval and has initiated hardline open space discussion with the County, as well as USFWS and CDFG. The current Project design incorporates that hardline open space, which would allow for take authorization of the impacted area with no further approvals necessary from the resource agencies. Upon agreement of the hardline for the Project, it would be in conformance with the North County MSCP Subarea Plan hardline. All other cumulative project also would need to conform with the Subarea Plan. Accordingly, cumulative impacts would be **less than significant** with regard to coastal sage scrub.

Cumulative Impacts to Sensitive Plants

The southern tarplant occurs primarily in the grasslands almost exclusively in the Ramona area. The cumulative impact area for this species was determined to be the Ramona Grasslands. This is appropriate because the range of this species in the Project's vicinity is within these grasslands and they comprise similar habitat as the Project site.

Southern tarplant is an annual plant that occurs throughout the Ramona Grasslands. Populations of this species within this area expand and contract in size based on weather patterns and/or mechanical soil alteration. In addition, the populations identified throughout the grasslands are continually affected by grazing and spray fields in the area. Known populations occur within the Project site, Ramona Airport, Oak Country Estates SPA, and Cumming Ranch SPA, as well as numerous smaller undeveloped parcels that currently are not processing any development projects.

Approximately one-third (as measured in 1996) of the southern tarplant population in the Ramona Airport property would be impacted as part of the Ramona Airport Improvement Project. It is currently unknown when the airport improvements would occur. The EIR for that project identified mitigation measures for impacts to this species that would reduce impacts to less than significant levels. The entire population of southern tarplant (approximately 1.6 acres containing an estimated 32,000 individuals) that occurs in the Oak Country Estates SPA would be avoided and protected in open space as part of the proposed development project for that property. The Cumming Ranch Project would impact approximately 3.3 acres of the on-site southern tarplant population. This

significant impact would be mitigated to below a level of significance. As stated above, the Proposed Project would preserve the large population in the southwestern corner of the site and only two individuals would be impacted under Wastewater Management Option 2, due to creation of the spray field.

Because (1) much of the Ramona Grasslands has already been preserved and continues to be a high priority for the County to preserve, (2) the ability of southern tarplant to regenerate after disturbance, and (3) the mitigation required for the above projects, significant regional/cumulative impacts to this species are not expected to occur. Accordingly, Montecito Ranch would **not contribute to a significant cumulative impact**.

Cumulative Impacts to Sensitive Wildlife

The analysis of cumulative impacts to sensitive species should take into account the home range of the species and the distribution of these species as a whole, as well as the reproducing population. The coastal California gnatcatcher distribution is throughout the coastal region in San Diego County, to the west of the foothills. The Project site is near the eastern edge of this species distribution. This species is hindered from connectivity to some other larger populations by topographic and urban development. Therefore, the cumulative impact area for this species is the Central Foothills Humid Temperate Ecological Region (as defined by the County) between the San Diego River to the south and San Dieguito River to the north. This region comprises similar habitat at similar elevations as the Proposed Project. Connectivity to other populations is blocked by urban development (Poway to the west, Lakeside to the south, and Ramona to the north). East of Ramona was not included in this analysis because the elevations to the east rise above the known use elevations for this species.

The cumulative impact area for other sensitive wildlife species, including raptors, is comprised of the Central Foothills Humid Temperate Ecological Region and Ramona Grasslands. The cumulative impact area for San Diego fairy shrimp also includes the entire Ramona Vernal Pool planning area, as defined by County MSCP staff. The vernal pools within this area form a regional complex that supports similar species and experiences similar environmental conditions (i.e., rainfall, etc). Therefore, it is appropriate to limit the cumulative impact analysis on vernal pools and their associated species to the Ramona vernal pool planning area rather than including other areas where vernal pools are found (i.e., Otay Mesa and Miramar).

Implementation of cumulative projects would result in the permanent loss of eight percent of non-native grassland in the Ramona area, which provides for potential raptor foraging habitat. However, this loss is not considered significant, as impacts would be located primarily along the fringes of large patches of habitat, which allows for avoidance and preservation of large contiguous patches of habitat. Therefore, cumulative impacts to raptors are considered **less than significant**.

Extensive development of shrublands throughout Ramona and the region would impact coastal California gnatcatcher. Impacts, however, would be **less than significant** due to the implementation of regional conservation efforts and regulations.

Cumulative Impacts to Commonly Occurring Habitats and Species

Potential cumulative impacts to the other detected species and habitats are considered **less than significant** due to their relative common distribution throughout the chaparral and grassland habitats in the San Diego region, and because impacts to these species are generally mitigated through habitat-based mitigation measures.

3.2.5 Effects Found Not to be Significant (On- and Off-site Non-Sensitive Habitats and Wildlife Corridors)

Direct impacts to on-site eucalyptus woodland, developed land, and mitigated impacted areas, as well as direct off-site impacts to eucalyptus woodland, disturbed habitat, and developed land would be **less than significant**, as these habitats are not considered sensitive by the USFWS, CDFG, or County.

The Proposed Project would consolidate residential development within the eastern portion of the site, designating the western and northern portions of the site as open space. The Project has been designed to provide the maximum contiguous area of undeveloped land including grasslands, shrublands, and woodlands to be included within the Ramona Grasslands assemblage. The open space area along the northern boundary provides a local wildlife corridor through the oak woodland drainage on site and is contiguous with open space off site.

Regional and local wildlife corridors would **not be significantly impacted** by the Proposed Project since approximately 558.2 acres of the site would be preserved as biological open space under Wastewater Management Option 1 (533.5 acres under Option 2).

3.2.6 Mitigation Measures Proposed to Minimize the Significant Effects

The Proposed Project would significantly impact sensitive habitats and animal species through direct loss and could cause significant indirect impacts as well. Open space easements would be placed on all biologically meaningful areas outside grading and fire clearing impact areas to protect the resources in perpetuity. The mitigation measures would be finalized through consultation with the resource agencies and the County as part of the permitting and regulatory processes.

The existing acreages, acres of impact, mitigation ratios, mitigation required for direct impacts, the quantity of habitat available on site for mitigation, and the remaining habitat acreage on site (if any) are listed in Tables 3.2-6 (under Wastewater Management Option 1) and 3.2-7 (under Wastewater Management Option 2) for on-site impacts and Table 3.2-8 for off-site impacts.

<u>Mitigation for Significant Impact No. 3.2.3a</u>

- Direct impacts to 0.93 acre of on-site dense Engelmann oak woodland shall be mitigated at a 3:1 ratio through the preservation of 2.79 acres of dense Engelmann oak woodland within on-site dedicated open space. Although not required as mitigation, as part of Project design, an additional 9.88 acres of this habitat will be retained on site within dedicated open space. (Wastewater Management Options 1 and 2)

Mitigation for Significant Impact No. 3.2.3b

- Direct impacts to 0.39 acre of on-site open Engelmann oak woodland shall be mitigated at a 3:1 ratio through the preservation of 1.17 acres of open Engelmann oak woodland within on-site dedicated open space. Although not required as mitigation, as part of Project design, an additional 17.04 acres of this habitat will be retained on site within dedicated open space. (Wastewater Management Options 1 and 2)

Mitigation for Significant Impacts No. 3.2.3c and 3.2.4a

- Direct impacts to 69.31 acres of on-site Diegan coastal sage scrub on site shall be mitigated at a 2:1 ratio through the preservation of 138.62 acres of Diegan coastal sage scrub within on-site dedicated open space. Although not required as mitigation, as part of Project design, an additional 111.0 acres of this habitat will be retained on site within dedicated open space. (Wastewater Management Options 1 and 2)

Mitigation for Significant No. Impact 3.2.3d

- Direct impacts to 123.27 acres of on-site southern mixed chaparral shall be mitigated at a 0.5:1 ratio through the preservation of 61.63 acres of southern mixed chaparral within on-site dedicated open space. Although not required as mitigation, as part of Project design, an additional 44.20 acres of this habitat will be retained on site within dedicated open space. (Wastewater Management Options 1 and 2)

Mitigation for Significant No. Impact 3.2.3e

- Direct impacts to 11.57 acres of on-site chamise chaparral shall be mitigated at a 0.5:1 ratio through the preservation of 5.78 acres of chamise chaparral within on-site dedicated open space. Although not required as mitigation, as part of Project design, an additional 7.85 acres of this habitat will be retained on site within dedicated open space. (Wastewater Management Options 1 and 2)

Mitigation for Significant Impacts No. 3.2.3f and i

- Direct impacts to 26.85 acres of on-site non-native grassland shall be mitigated at a 1:1 ratio through the preservation of 6.69 acres of non-native grassland within on-site dedicated open space and the purchase of 20.16 acres of non-native grassland in an approved mitigation bank or area approved by the Director of DPLU. The 1:1 ratio accounts for a 0.5:1 mitigation ratio for impacts to non-native grassland habitat and an additional 0.5:1 mitigation ratio for impacts associated with the loss of raptor foraging lands in the Ramona Grasslands area. Although not required as mitigation, as part of Project design, an additional 16.68 acres of this habitat will be retained on site within dedicated open space. (Wastewater Management Option 1 only)
- Direct impacts to 27.61 acres of on-site non-native grassland shall be mitigated at a 1:1 ratio through the preservation of 5.93 acres of non-native grassland within on-site dedicated open space and the purchase of 21.68 acres of non-native grassland in an approved mitigation bank or area approved by the Director of DPLU. The 1:1 ratio accounts for a 0.5:1 mitigation ratio for impacts to non-native grassland habitat and an additional 0.5:1 mitigation ratio for impacts associated with the loss of raptor foraging lands in the Ramona Grasslands area.

Although not required as mitigation, as part of Project design, an additional 16.68 acres of this habitat will be retained on site within dedicated open space. (Wastewater Management Option 2 only)

- If wetland (riparian woodland) impacts associated with off-site road and/or sewer improvements are mitigated for on the Project site rather than through an off-site mitigation bank (see Mitigation for Significant Impact No. 3.2.3o), additional impacts to non-native grassland will occur (as creation of the wetlands would result in removal of non-native grassland). Impacts to the non-native grassland occurring as a result of their use for wetland creation also will require mitigation. Mitigation for impacted non-native grassland will be required at a 2:1 ratio because the proposed mitigation site is already allocated for mitigation from previous impacts to the property. This mitigation will be required to occur within a parcel approved by the Director of DPLU. Specifically, direct impacts to 0.24 acre of non-native grassland shall require the preservation of 0.48 acre of non-native grassland.

Sufficient land currently exists within the Project's vicinity to meet the required mitigation measures for impacts to non-native grasslands, as described above. Specifically, three privately owned, large parcels containing approximately 197 acres are located within the Ramona Grasslands. Smaller parcels also occur within the region.

Mitigation for Significant Impact No. 3.2.3g

- Prior to grading, sufficient evidence must be provided to the County Director of DPLU that all State and federal wetland permits have been obtained or that permits are not required. (Wastewater Management Options 1 and 2)
- Direct impacts to 3,500 linear feet of on-site jurisdictional Waters of the U.S. shall be mitigated by the preservation of the remaining Waters of the U.S. on site (approximately 19,215 linear feet). (Wastewater Management Options 1 and 2)

Mitigation for Significant Impact No. 3.2.3h

- Direct impacts to the coastal California gnatcatcher shall be mitigated by the preservation of 249.62 acres of suitable and occupied gnatcatcher habitat (Diegan coastal sage scrub) on site. (Wastewater Management Options 1 and 2)
- If Project grading, clearing, or construction activities are scheduled to begin during the breeding season for coastal California gnatcatcher (February 15 through August 30), surveys pursuant to USFWS protocol shall be conducted to determine the presence or absence of the species in coastal sage scrub habitat within 300 feet of proposed activities. If it is determined that the species is absent, activities may proceed without restrictions. If the coastal California gnatcatcher is present, no grading, clearing, or construction activities shall be allowed between February 15 and August 30 within 300 feet of the habitat for this species or until the nest is vacated, as determined by a qualified biologist.

Mitigation for Significant Impact Nos. 3.2.3j through n

- The following general mitigation measures shall be applied to the Proposed Project (under Wastewater Management Options 1 and 2) to protect the resources during construction:

- The Project Applicant shall participate in a Landscape Maintenance District as the funding mechanism for the long-term management of open space.
- Biological monitoring of clearing and grading shall be conducted as follows:
  - A biological monitor shall be hired by the Project Applicant prior to initiation of construction including staging, brushing, clearing, scraping, or any other ground-disturbance work.
  - The biological monitor shall attend any pre-construction meetings and provide the foreman with a map of areas considered sensitive and shall monitor construction activities in areas adjacent to sensitive habitat.
  - The biological monitor shall keep logs of construction activities and submit monthly monitoring reports to the County.
  - Should work occur during bird breeding seasons (including coastal California gnatcatcher), noise monitoring shall be conducted by either an acoustical specialist or the biological monitor.
  - If an impact occurs to a sensitive resource, the biological monitor shall have the ability to cease construction activity and shall notify the appropriate authority immediately. If construction is not ceased based on the monitor's direction, the monitor shall report the incident to the County inspector.
- The limits of the sensitive habitat shall be flagged or fenced by a qualified biologist prior to grading to prevent inadvertent impacts to the habitat.
- The population of approximately 75 individuals of delicate clarkia within the chamise chaparral habitat on the eastern side of the property, the population of approximately 2,340 individuals of southern tarplant, and, under Wastewater Management Option 1, the approximately 3 individuals of southern tarplant, shall be flagged during construction to prevent encroachment.
- If Project grading, clearing, or construction activities are scheduled to begin during the breeding season for raptors (February 15 through July 15), surveys shall be conducted by a qualified biologist to determine the presence or absence of nesting raptors within 300 feet of proposed activities. If it is determined that nesting raptors are absent, activities may proceed without restrictions. If an active raptor nest is present, no grading, clearing, or construction activities shall be allowed between February 15 and July 15 within 300 feet of the active nest or until the nest is vacated, as determined by a qualified biologist.
- No trash, oil, parking, or other construction related activities shall be allowed outside the grading limits.

- Prior to occupancy, a fence shall be installed to create a permanent barrier between residential yards and open space. The fence shall be a minimum of five feet in height and be of sufficient material to discourage trespassing into open space (Figure 3.2-10).
- The Project shall implement the required RMP (REC 2008c; Appendix E) for the Proposed Project (under Wastewater Management Options 1 and 2), including the following measures:
  - All open space for Units 1 and 2 shall be dedicated upon completion of Unit 1.

- Selected areas along on-site trails shall be fenced with lodgepole fencing at select locations to provide direction and prevent encroachment into the open space (Figure 3.2-10). The on-site trails shall be posted with "off-limits" signs that also explain why the area should be avoided (Figure 3.2-11).
- The Project Applicant shall participate in a Landscape Maintenance District as the funding mechanism for the long-term management of open space.
- Exotic plant species shall be removed from high quality woodlands, wetlands, and grasslands on an as-needed basis to be assessed every five years.
- Sensitive plant population boundaries shall be mapped every three years.
- Trash shall be removed from open space annually.
- All habitats and sensitive plant and animal species shall be monitored annually. Biological surveys shall be conducted every five years for sensitive plant and animal species.

Mitigation for Significant Impact No. 3.2.3o

- Direct impacts to 0.24 acre of off-site riparian woodland shall be mitigated at a 3:1 ratio through the creation of 0.24 acre (1:1 ratio) of riparian woodland and the preservation of 0.36 acre of riparian woodland, for a total of 0.48 acre. Mitigation shall occur within an approved mitigation bank or area approved by the Director of DPLU.

Mitigation for Significant Impact No. 3.2.3p

- Direct impacts to 2.20 acres of off-site Diegan coastal sage scrub shall be mitigated at a 2:1 ratio through the preservation and/or purchase of 4.40 acres of Diegan coastal sage scrub within on-site dedicated open space and/or an approved mitigation bank or area approved by the Director of DPLU.

Mitigation for Significant Impact No. 3.2.3q

- Direct impacts to 5.00 acres of off-site non-native grassland shall be mitigated at a 1:1 ratio through the purchase of 5.00 acres of non-native grassland in an approved mitigation bank or area approved by the Director of DPLU.

Mitigation for Significant Impact No. 3.2.3r

- Direct impacts to 2.10 acres of off-site agriculture/pasture land shall be mitigated at a 1:1 ratio through the purchase of 2.10 acres of agriculture/pasture land in an approved mitigation bank or area approved by the Director of DPLU.

Mitigation for Significant Impact No. 3.2.3s

- Direct impacts to off-site jurisdictional Waters of the U.S. shall be mitigated by the preservation of the remaining Waters of the U.S. on site (approximately 19,215 linear feet).

3.2.7 Conclusion

The implementation of the mitigation measures listed above would reduce all impacts to biological resources to less than significant levels. The Proposed Project's direct on-site impacts to dense

Engelmann oak woodland, open Engelmann oak woodland, Diegan coastal sage scrub, southern mixed chaparral, chamise chaparral, and non-native grassland (Significant Impact Nos. 3.2.3a through 3.2.3f, respectively) would be fully mitigated through on-site preservation and/or off-site purchase of mitigation credits. The Proposed Project's direct off-site impacts to riparian woodland, Diegan coastal sage scrub, non-native grassland, and agriculture/pasture lands (Significant Impact Nos. 3.2.3o through 3.1.3r, respectively) also would be fully mitigated through preservation of habitat within the Project site and/or or off-site purchase of mitigation credits. Implementation of these mitigation measures would avoid or substantially reduce the significant effect because the mitigation ratios for impacts to these habitats were developed based on NCCP Guidelines (CDFG and California Resources Agency 1997), and the wildlife agencies have reviewed and approved these mitigation ratios. Additionally, these standard ratios have been applied to projects within the County since DPLU developed its first Biological Report Guidelines in the mid 1990s (adopted by the Board of Supervisors). The ratio is effective, because these reviewing agencies have reached consensus that retention at these ratios will result in sustainable levels of these habitats.

On- and off-site impacts to jurisdictional Waters of the U.S. (Significant Impact Nos. 3.2.3g and 3.2.3s, respectively) would be mitigated by the preservation of the remaining Waters of the U.S. on site. Implementation of this mitigation measure would fully mitigate impacts to these non-vegetated jurisdictional areas, because the typical mitigation ratio for impacts to Water of the U.S. is 1:1, which is a ratio the resource agencies reviewed and approved. The Project would mitigate at a 5.5:1 ratio. This exceeds the requirement by approximately 450 percent.

Mitigation for direct Project impacts to coastal California gnatcatchers and raptors (Significant Impact Nos. 3.2.3h and 3.2.3i, respectively) would be satisfied through the required mitigation for impacts to habitats. The habitat preservation ratio is effective, because through retention of sustainable habitat, sensitive species can continue to thrive. Protected habitat provides compensation for the wildlife value of these sensitive vegetation communities. The specified habitat mitigation ratios take into consideration the importance of preserving areas necessary to ensure the continued survival of coastal California gnatcatchers and raptors. The mitigation would preserve species habitat, and thus, help ensure survival of gnatcatchers and raptors within the Project site (open space) and within the County. The mitigation ratios utilized for impacts to gnatcatcher and raptor habitats were developed based upon NCCP Guidelines (CDFG and California Resources Agency 1997) intended to accomplish preservation of sensitive species, and the wildlife agencies have reviewed and approved these mitigation ratios. Mitigation for indirect impacts to coastal California gnatcatchers also includes cessation of grading or construction activities if species nests are located within 300 feet of a construction area. Gnatcatchers would be protected from disturbance associated with movement and noise from construction activities during the breeding season due to the required 300-foot distance between construction activities and active nests, a distance determined by the wildlife agencies to adequately attenuate the disturbance. Because the daily activities of this species would not be disrupted, breeding and nesting activities would continue within proposed on-site open space, thus helping to ensure the survival of this species.

Indirect impacts to habitat and sensitive plant and animal species during and after Project construction (Significant Impact Nos. 3.2.3j through 3.2.3n) also would be appropriately mitigated. General mitigation for indirect impacts would include funding for long-term management of the proposed open space; biological monitoring during clearing and grading activities; flagging of sensitive habitats and plants; no trash, oil, parking, or other construction-related activities outside of grading limits; placement of a fence between proposed residential lots and open space; and

implementation of the RMP. These mitigation measures would be adequate to avoid or reduce Project impacts, because they would ensure that construction equipment and personnel would not be allowed outside of the limits of grading, thus preventing indirect impacts to habitats and sensitive species during construction. Species survival in this area would be ensured during grading and construction activities. A funding mechanism also would be provided to manage and preserve the open space in perpetuity. Mitigation for indirect impacts to California gnatcatchers was described above. Mitigation for indirect impacts to raptors would include cessation of grading or construction activities if raptor nests are located within 300 feet of an area. This mitigation would be appropriate, because raptors would be protected from construction activities and noise during the breeding season due to the required distance between construction activities and active nests. As stated above with regard to gnatcatchers, this distance has been approved by the wildlife agencies, because noise at this distance would not disrupt the daily activities of these species, supporting continuation of breeding and nesting activities within proposed on-site open space, and helping to ensure species' survival.

In the absence of an adopted MSCP Subarea Plan, the net loss of 69.31 acres of Diegan coastal sage scrub on site as a result of the Proposed Project must be regarded as a mitigable significant contribution to cumulative impacts on this habitat and the coastal California gnatcatcher (Significant Impact No. 3.2.4a). The project would be required to incorporate an RMP for the biological preserve areas within the dedicated open space. Cumulative impacts to Diegan coastal sage scrub and the coastal California gnatcatcher would be mitigated through the above-described preservation of on-site Diegan coastal sage scrub. As noted, the mitigation ratio would be 2:1, which has been developed based upon NCCP Guidelines (CDFG and California Resources Agency 1997) and deemed adequate by the wildlife agencies. The ratio is effective because it factors in the importance of preserving areas necessary to ensure the continued survival of coastal California gnatcatchers on a regional level. The mitigation would preserve species habitat, and thus, help ensure survival of gnatcatchers within the Project site (open space) and within the County.

If the North County MSCP Subarea Plan is adopted prior to Project approval, the Proposed Project would be required to make findings of conformance to the Subarea Plan. The current Project design incorporates a proposed hardline open space, which would allow for take authorization of the impacted area with no further approvals necessary from the resource agencies. Upon agreement of the hardline for the Project, it would be in conformance with the North County MSCP Subarea Plan hardline.

Table 3.2-1
EXISTING VEGETATION COMMUNITIES/HABITATS WITHIN THE PROJECT SITE AND PROPOSED IMPACTS

Vegetation Community/Habitat[a]	Existing	Impacted On Site	
		Wastewater Management Option 1 (Off-site Sewer Connection)	Wastewater Management Option 2 (WRF)
Southern coast live oak riparian forest (61310)	10.60	0	0
Southern riparian scrub (63300)	0.30	0	0
Disturbed wetlands (11200)	0.73	0	0
Dense Engelmann oak woodland (71182)	13.60	0.93[b]	0.93[b]
Open Engelmann oak woodland (71181)	18.60	0.39[c]	0.39[c]
Diegan coastal sage scrub, including eucalyptus woodland/Diegan coastal sage scrub (inland form; 32520)	318.93	69.31	69.31
Southern mixed chaparral (37120)	229.10	123.27	123.27
Chamise chaparral (37210)	25.20	11.57	11.57
Non-native grassland (42220)	50.22	26.85	27.61
Eucalyptus woodland (11100)	2.50	0.14	0.14
Developed land (12000)	18.50	12.58	13.19
Mitigated impacted area	246.92	127.30	150.63
TOTAL	**935.20**	**372.34**	**397.04**

Source: REC 2008b
[a] Vegetation communities and numerical codes are from Holland (1986) and Oberbauer (1996).
[b] Includes 0.14 acre of oak root zone impacts.
[c] Includes 0.11 acre of oak root zone impacts.

Table 3.2-2
SUMMARY OF OFF-SITE VEGETATION COMMUNITY – EXISTING/IMPACTED AREAS

Vegetation Community/Habitat	Existing/Impacted (Acre)	
	Wastewater Management Option 1	Wastewater Management Option 2
Riparian woodland	0.24	0.24
Diegan coastal sage scrub	2.20	2.20
Non-native grassland	5.00	5.00
Eucalyptus woodland	1.64	1.64
Agriculture/pasture land	2.10	2.10
Disturbed habitat	3.89	3.89
Developed land	11.87	11.80
TOTAL	**26.94**	**26.87**

Source: REC 2008b

Table 3.2-3
ON-SITE JURISDICTIONAL AREAS WITHIN THE PROJECT SITE AND PROPOSED IMPACTS

Jurisdictional Area	Agency					
	Corps		CDFG		RPO	
	Existing	Impacts	Existing	Impacts	Existing	Impacts
Wetlands	0.50 ac	0	0.80 ac	0	3,875 l.f. and 0.80 ac	0
Waters of the U.S.	5,150 l.f.	300 l.f.	22,715 l.f.	3,500 l.f.	--	0

Source: REC 2008b
ac = acre; l.f. = linear feet

Table 3.2-4
OFF-SITE JURISDICTIONAL AREAS – EXISTING/IMPACTED AREAS

Jurisdictional Area	Agency		
	Corps	CDFG	RPO
Wetlands	0.24 ac	0.24 ac	0.24 ac
Waters of the U.S.	--	--	--

Source: REC 2008b
ac = acre; l.f. = linear feet

Table 3.2-5
CUMULATIVE IMPACT RESOURCE STUDY AREA

Biological Resources	Cumulative Assessment Area	Justification for Cumulative Assessment Area
Wetlands/riparian/oak woodland	Ramona Hydrologic Subarea as defined by RWQCB Basin Plan	Encompasses major and minor watersheds of the Ramona area
Grasslands	Ramona Grasslands (Figure 3.2-7)	Ramona Grasslands are a contiguous and localized resource
Vernal pools	Ramona Vernal Pool Complex (including downtown Ramona)	Ramona vernal pools are a distinct separate complex from Otay Mesa and Miramar pools
Coastal sage scrub/ Chaparral and coastal California gnatcatcher	Central Foothills Humid Temperate Ecological Region (as defined by County), except stopping at San Diego River to the south and San Dieguito River to the north	Exceed appropriate elevation to the east and development to the south, west and north
Raptors and southern tarplant	Ramona Grasslands (Figure 3.2-7)	In Ramona, raptors and southern tarplant are associated with the contiguous Ramona Grasslands

Table 3.2-6
SUMMARY OF REQUIRED MITIGATION FOR ON-SITE IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT (WASTEWATER MANAGEMENT OPTION 1 ONLY)

Vegetation Community/ Habitat	Existing On Site (acres)	Project Impacts (acres)	Open Space (acres)	Mitigation Ratio	Mitigation Required (acres)	Acreage Not Available for Mitigation	Acreage Available for Mitigation	Acreage Mitigated On Site	Excess Habitat Remaining On Site After Mitigation (acres)	Acreage Mitigated Off Site
Southern coast live oak riparian forest	10.60	0	10.60	3:1	0	9.42[a]	1.18	0	1.18	0
Southern riparian scrub	0.30	0	0.30	3:1	0	0.30	0	0	0	0
Disturbed wetland	0.73	0	0.73	3:1	0	0	0.73	0	0.73	0
Dense Engelmann oak woodland	13.60	0.93[b]	12.67	3:1	2.79	8.61[a]	4.06	2.79	1.27	0
Open Engelmann oak woodland	18.60	0.39[c]	18.21	3:1	1.17	4.19[a]	14.02	1.17	12.85	0
Diegan coastal sage scrub (including eucalyptus woodland/Diegan coastal sage scrub)	318.93	69.31	249.62	2:1	138.62	0.52[a] + 106.90[d]	142.20	138.62	3.58	0
Southern mixed chaparral	229.10	123.27	105.83	0.5:1	61.63	1.16[a] + 4.00[d]	100.67	61.63	39.04	0
Chamise chaparral	25.20	11.57	13.63	0.5:1	5.78	0	13.63	5.78	7.85	0
Non-native grassland	50.22	26.85	23.37	1:1[e]	26.85	1.60[a] + 15.08[d]	6.69	6.69	0	20.16
Eucalyptus woodland	2.50	0.14	2.36	0:1	0	0	2.36	0	2.36	0
Developed land	18.50	12.58	5.92	0:1	0	1.25	4.06	0	4.06	0
Mitigated impacted area	246.92	127.30	119.62	0:1	0	0.27[a] + 93.27[d]	26.08	0	26.08	0
TOTAL	**935.20**	**372.34**	**562.86**	--	**236.84**	**246.57**	**316.32**	**216.68**	**99.00**	**20.16**

Source: REC 2008b
[a] This amount is not available for use as mitigation because it is considered an RPO wetland or wetland buffer.
[b] Includes impacts to 0.14 acre of oak root zone.
[c] Includes impacts to 0.11 acre of oak root zone.
[d] This amount is not available for use as mitigation because it is already within open space.
[e] The 1:1 ratio accounts for a 0.5:1 mitigation ratio for impacts to non-native grassland habitat and an additional 0.5:1 mitigation ratio for impacts associated with the loss of raptor foraging lands in the Ramona Grasslands area.

Table 3.2-7
SUMMARY OF REQUIRED MITIGATION FOR ON-SITE IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT (WASTEWATER MANAGEMENT OPTION 2 ONLY)

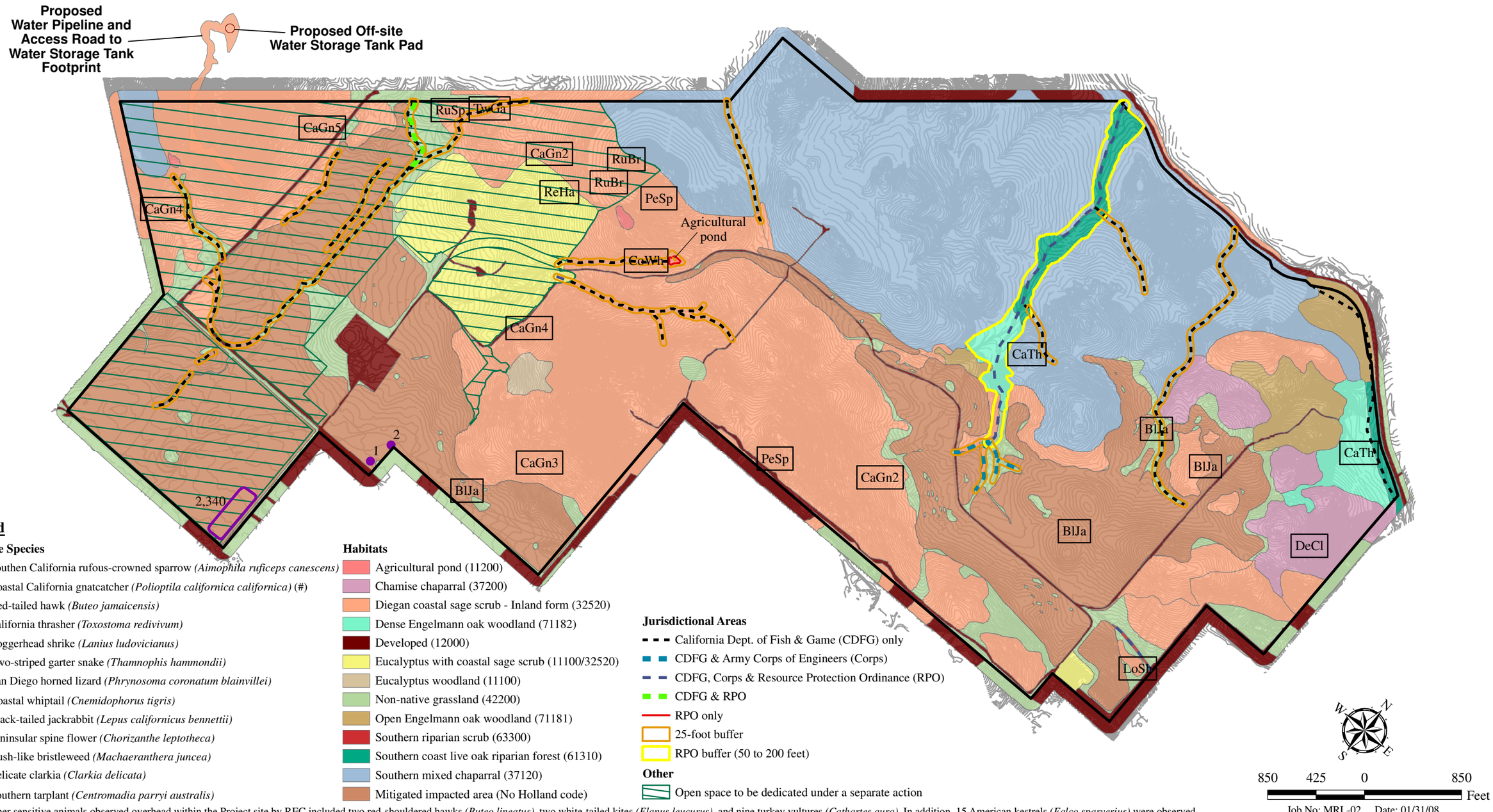
Vegetation Community/ Habitat	Existing On Site (acres)	Project Impacts (acres)	Open Space (acres)	Mitigation Ratio	Mitigation Required (acres)	Acreage Not Available for Mitigation	Acreage Available for Mitigation	Acreage Mitigated On Site	Excess Habitat Remaining On Site After Mitigation (acres)	Acreage Mitigated Off Site
Southern coast live oak riparian forest	10.60	0	10.60	3:1[a]	0	9.42[b]	1.18	0	1.18	0
Southern riparian scrub	0.30	0	0.30	3:1[a]	0	0.30	0	0	0	0
Disturbed wetland	0.73	0	0.73	3:1[a]	0	0	0.73	0	0.73	0
Dense Engelmann oak woodland	13.60	0.93[c]	12.67	3:1	2.79	8.61[b]	4.06	2.79	1.27	0
Open Engelmann oak woodland	18.60	0.39[d]	18.21	3:1	1.17	4.19[b]	14.02	1.17	12.85	0
Diegan coastal sage scrub (including eucalyptus woodland/Diegan coastal sage scrub)	318.93	69.31	249.62	2:1	138.62	0.52[b] + 106.90[e]	142.20	138.62	3.58	0
Southern mixed chaparral	229.10	123.27	105.83	0.5:1	61.63	1.16[b] + 4.00[d]	100.67	61.63	39.04	0
Chamise chaparral	25.20	11.57	13.63	0.5:1	5.78	0	13.63	5.78	7.85	0
Non-native grassland	50.22	27.61	22.61	1:1[f]	27.61	1.60[b] + 15.08[e]	5.93	5.93	0	21.68
Eucalyptus woodland	2.50	0.14	2.36	0:1	0	0	2.36	0	2.36	0
Developed land	18.50	13.19	5.31	0:1	0	1.25	4.06	0	4.06	0
Mitigated impacted area	246.92	150.63	96.29	0:1	0	0.27[b] + 93.27[e]	2.75	0	2.75	0
TOTAL	**935.20**	**397.04**	**538.16**	--	**237.59**	**246.57**	**291.59**	**215.92**	**75.67**	**21.68**

Source: REC 2008b
[a] Includes a minimum 1:1 creation ratio.
[b] This amount is not available for use as mitigation because it is considered an RPO wetland or wetland buffer.
[c] Includes impacts to 0.14 acre of oak root zone.
[d] Includes impacts to 0.11 acre of oak root zone.
[e] This amount is not available for use as mitigation because it is already within open space.
[f] The 1:1 ratio accounts for a 0.5:1 mitigation ratio for impacts to non-native grassland habitat and an additional 0.5:1 mitigation ratio for impacts associated with the loss of raptor foraging lands in the Ramona Grasslands area.

Table 3.2-8
SUMMARY OF REQUIRED MITIGATION FOR OFF-SITE IMPACTS

Vegetation Community/Habitat	Existing/ Impacted Acreage	Mitigation Ratio	Mitigation Required	Acreage Mitigated Within Project Site	Acreage Mitigated Off Site
Riparian woodland	0.24	3:1	0.72	0	0.72
Diegan coastal sage scrub	2.20	2:1	4.40	3.58	0.82
Non-native grassland	5.00	1:1	5.00	0	5.00
Eucalyptus	1.64	0:1	0	0	0
Agriculture/pasture land	2.10	1:1	2.10	0	2.10
Disturbed habitat	3.89	0:1	0	0	0
Developed land	11.87 or 11.80[b]	0:1	0	0	0
TOTAL	**26.94 or 26.87**[a]	--	**12.22**	**3.58**	**8.64**

Source: REC 2008b
[a] Under Wastewater Management Options 1 and 2, respectively.



Note: Other sensitive animals observed overhead within the Project site by REC included two red-shouldered hawks *(Buteo lineatus)*, two white-tailed kites *(Elanus leucurus)*, and nine turkey vultures *(Cathartes aura)*. In addition, 15 American kestrels *(Falco sparverius)* were observed within on-site non-native grassland and mitigated impacted. Woodrat nests were observed on site during recent surveys; however, it wast not determined if the nests belonged to the San Diego desert woodrat *(Neotoma lepida* spp. *intermedia)* or another woodrat species.

Job No: MRL-02 Date: 01/31/08
Source: REC Consultants, Inc. 2008b

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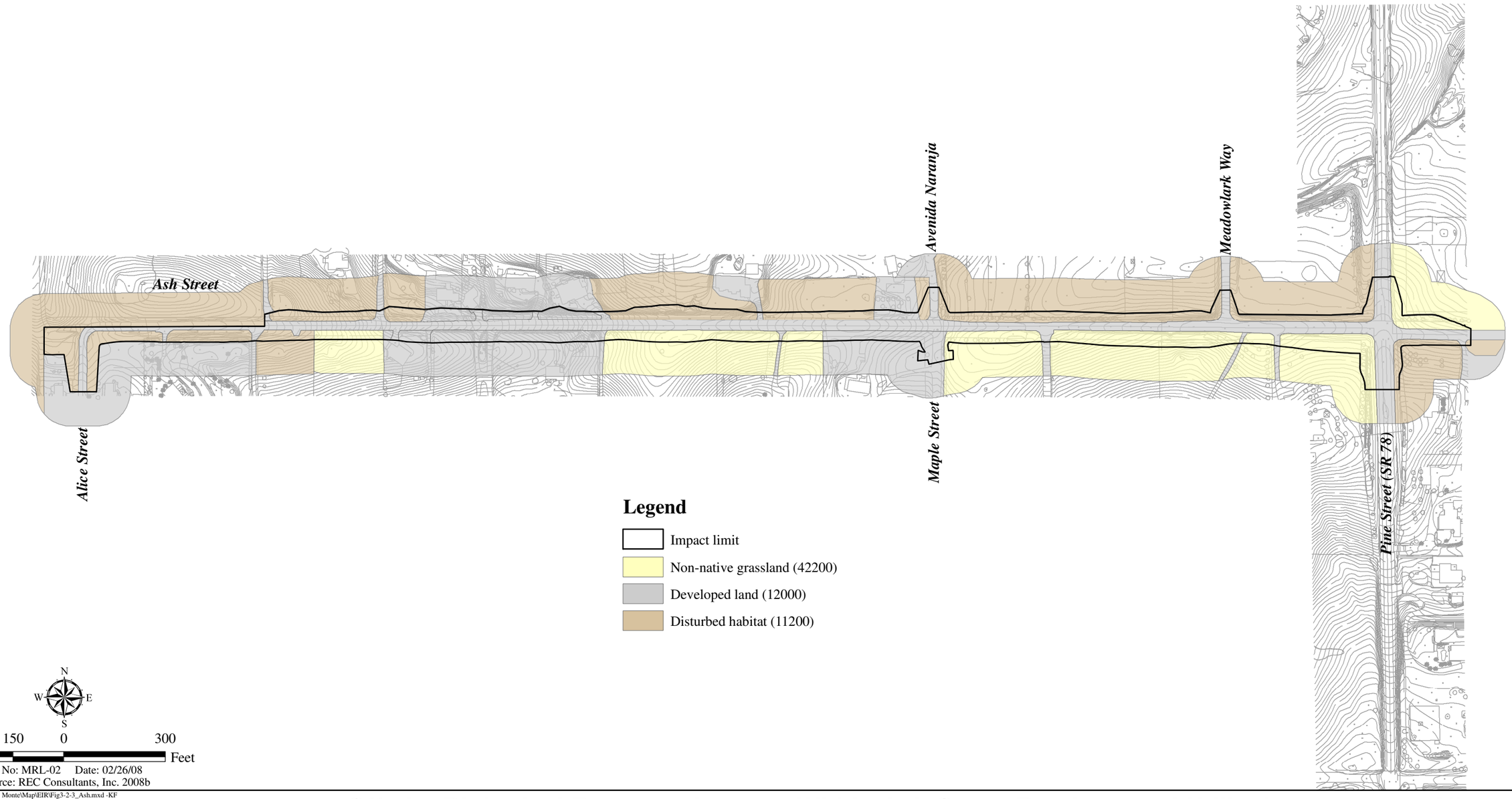
On-site Biological Resources Map

MONTECITO RANCH - EIR

HELIX

Figure 3.2-1



Job No: MRL-02 Date: 02/26/08
Source: REC Consultants, Inc. 2008b

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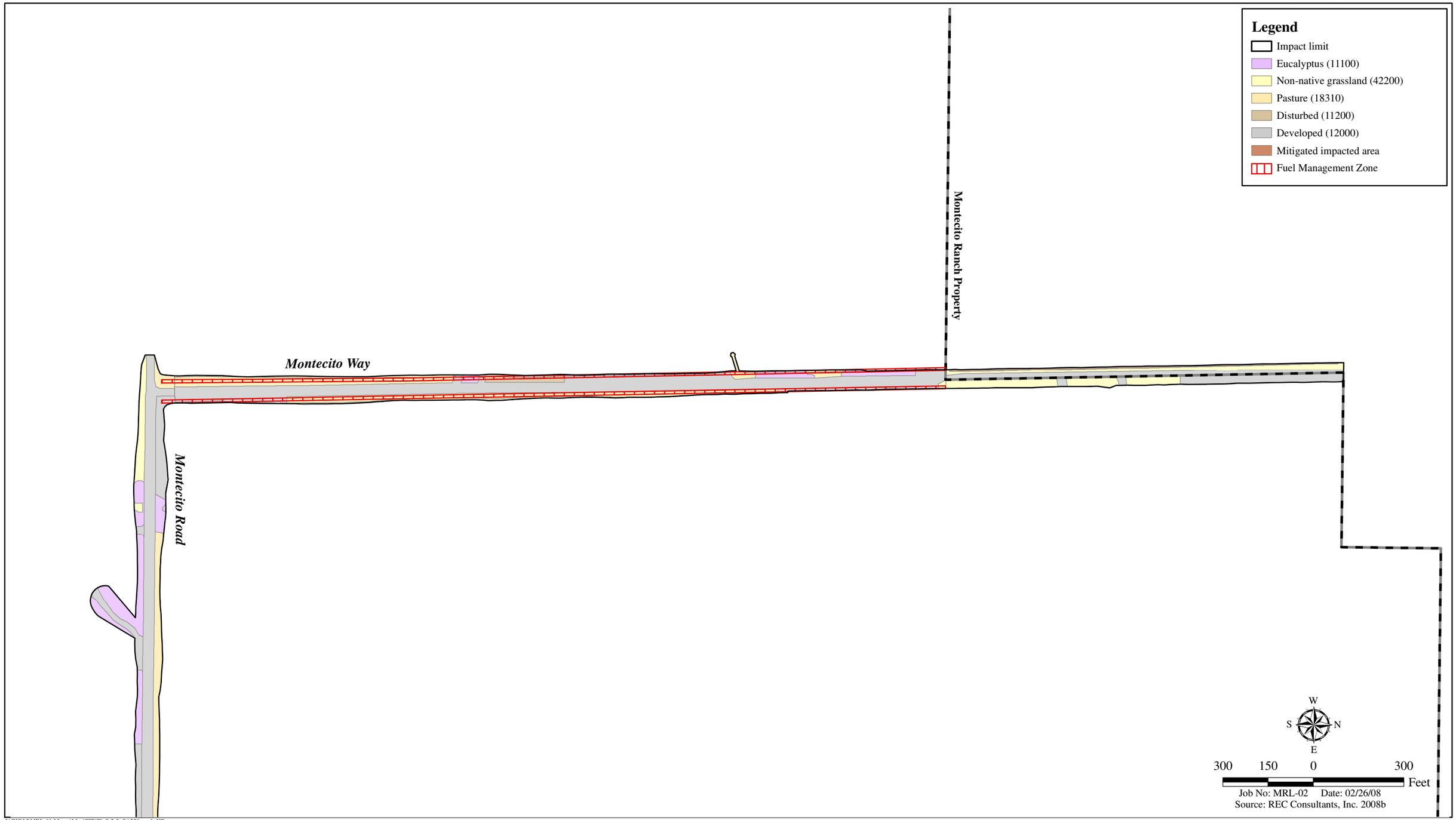
Off-site Biological Resource Impacts Within Ash Street Roadway and Utility Improvement Alignments

HELIX

MONTECITO RANCH - EIR

Figure 3.2-2



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Off-site Biological Resource Impacts Within Montecito Way Roadway and Utility Improvement Alignments

HELIX

MONTECITO RANCH - EIR

Figure 3.2-3

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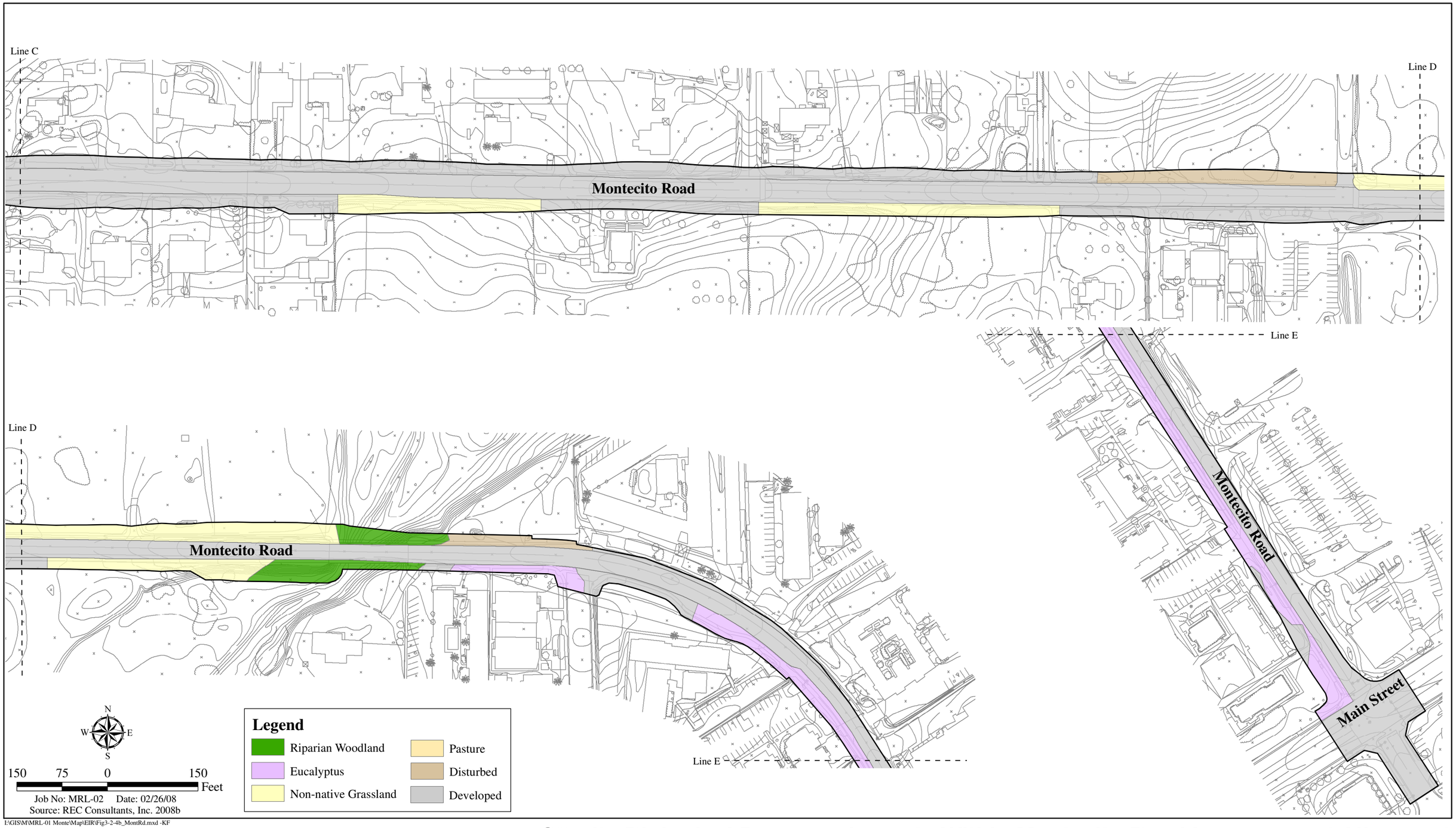
Off-site Biological Resource Impacts Within Montecito Road Improvement Alignment

HELIX

MONTECITO RANCH - EIR

Figure 3.2-4a



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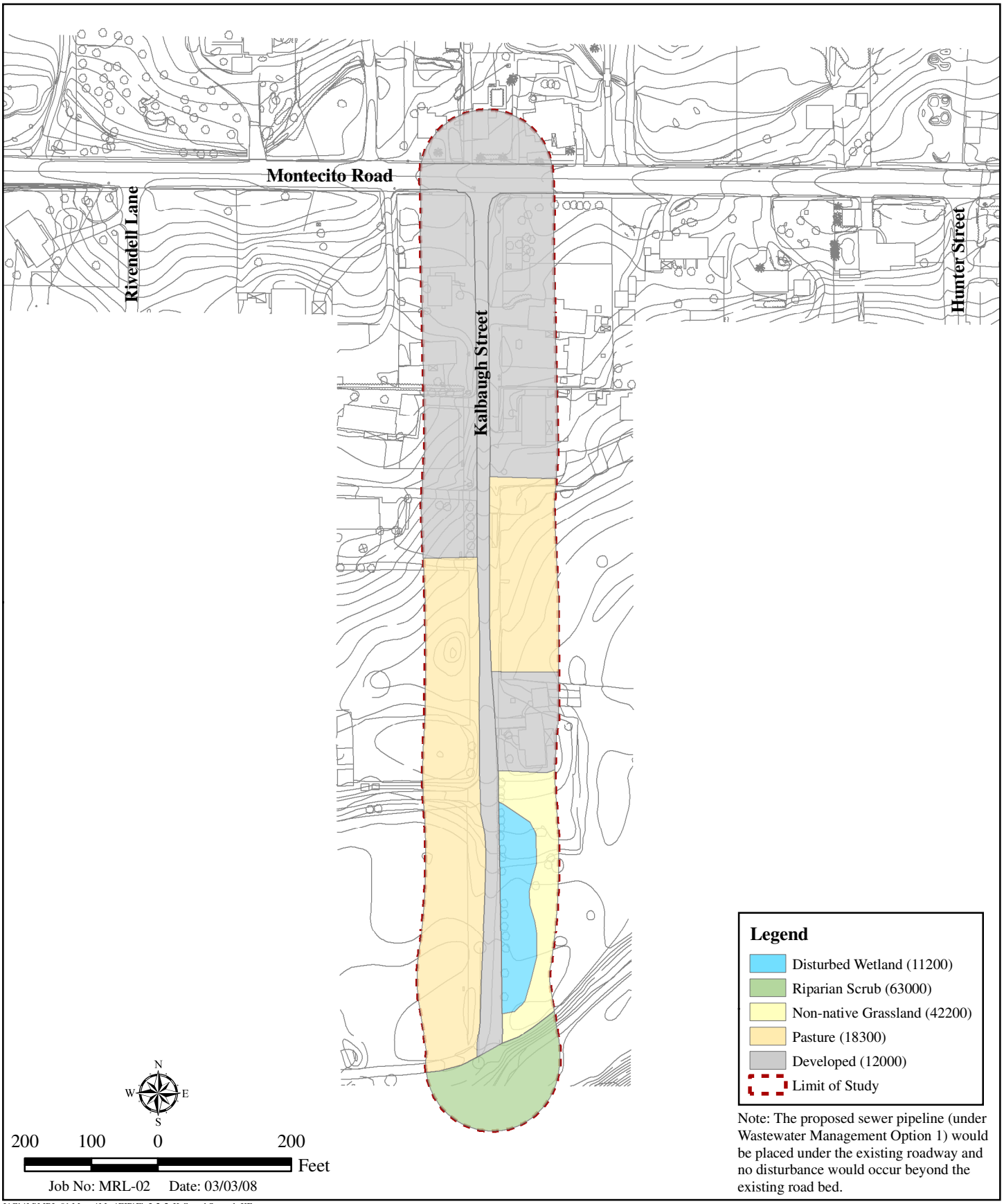
Off-site Biological Resource Impacts Within Montecito Road Improvement Alignment

HELIX

MONTECITO RANCH - EIR

Figure 3.2-4b



Note: The proposed sewer pipeline (under Wastewater Management Option 1) would be placed under the existing roadway and no disturbance would occur beyond the existing road bed.

I:\Gis\M\MRL-01 Monte\Map\EIR\Fig3-2-5_KalbaughSt.mxd -KF

Off-site Biological Resources Within and Adjacent to Kalbaugh Street

MONTECITO RANCH - EIR

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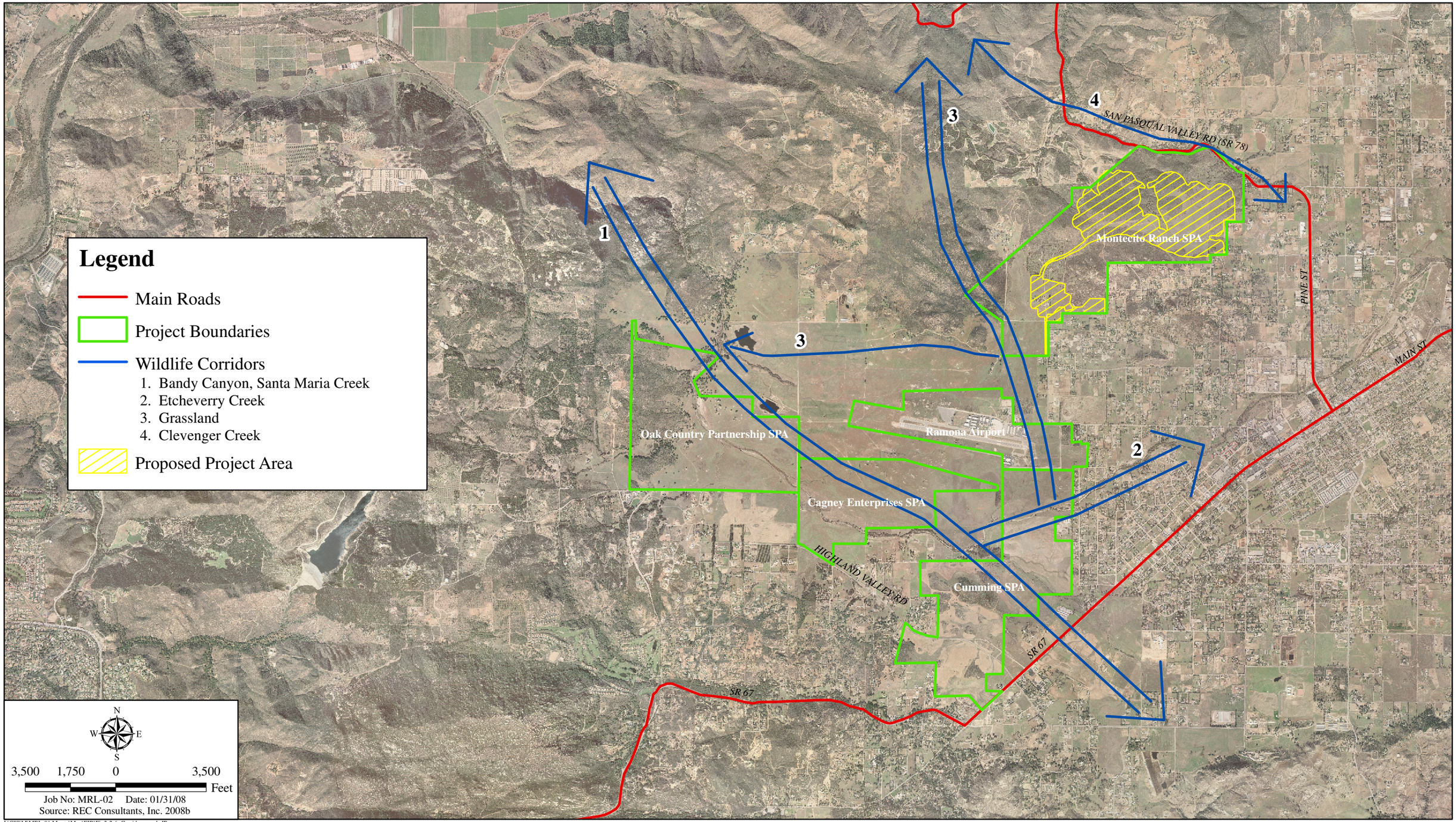
Figure 3.2-5



I:\GIS\M\MRL-01 Monte\Map\EIR\Fig3-2-6_Corridors.mxd -JP

Regional Wildlife Corridors

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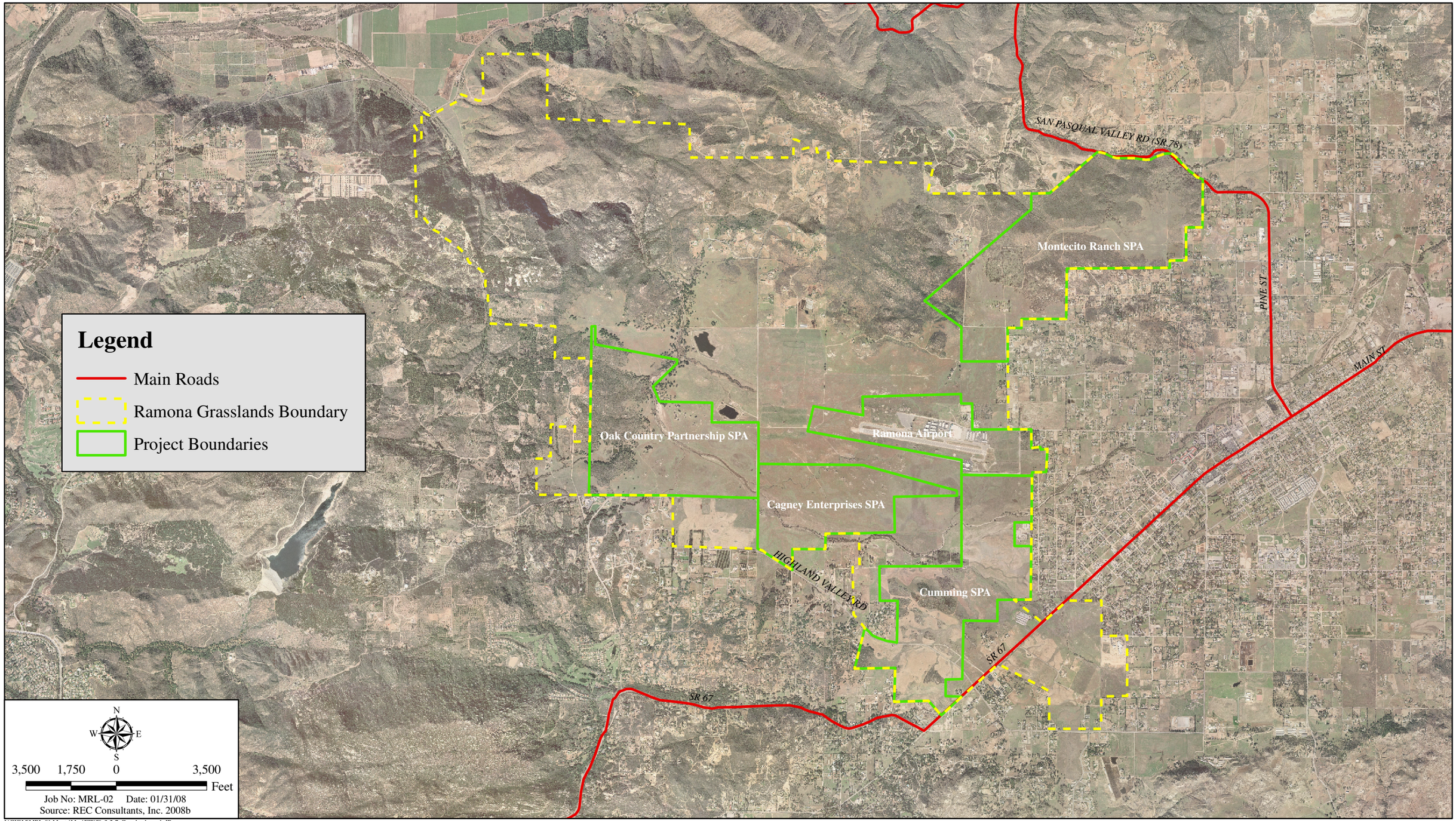
Figure 3.2-6

HELIX



I:\GIS\M\MRL-01 Monte\Map\EIR\Fig3-2-7_Grasslands.mxd -JP

Major Projects Within the Ramona Grasslands

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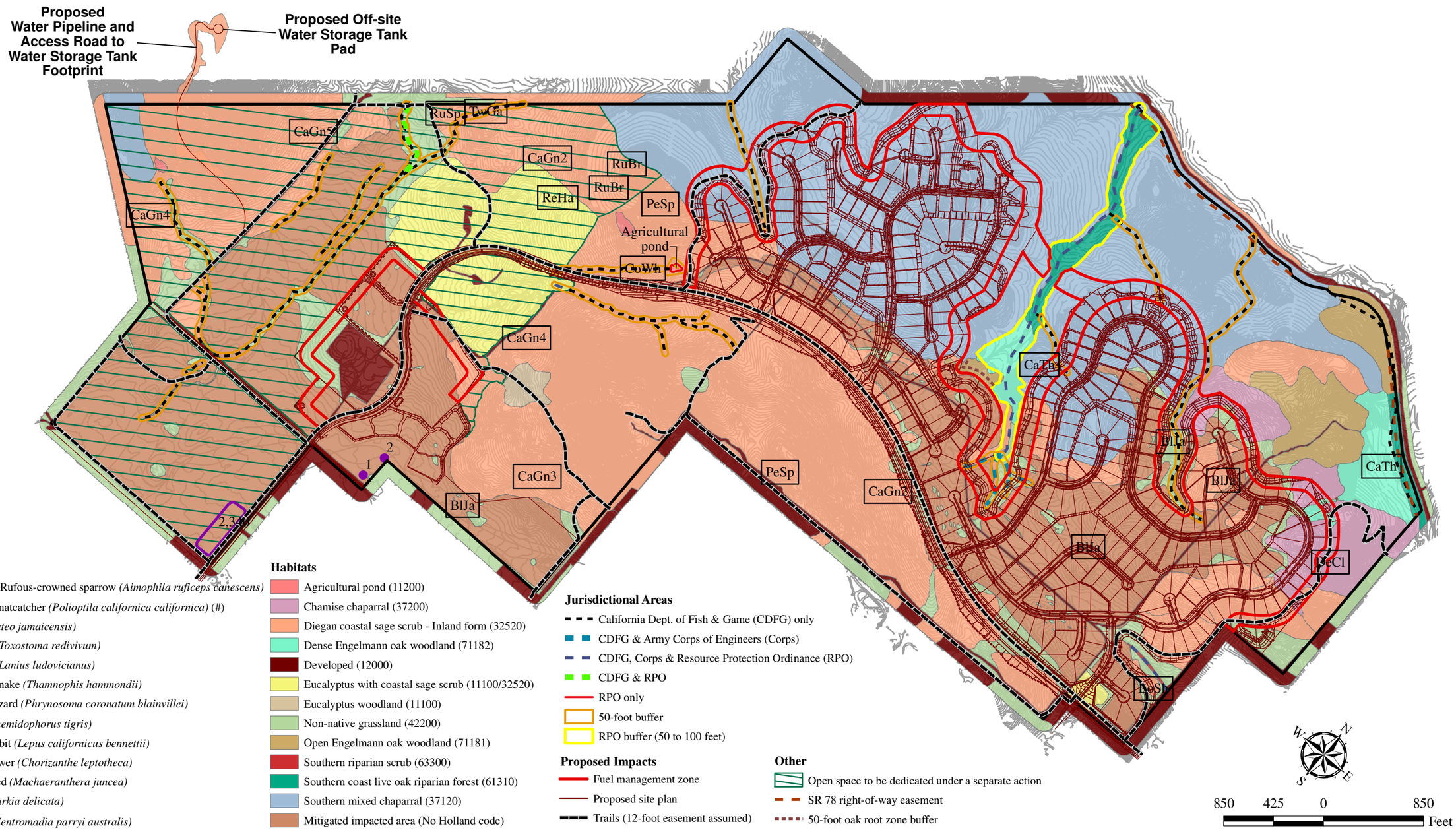
Figure 3.2-7



Note: Other sensitive animals observed overhead within the Project site by REC included two red-shouldered hawks *(Buteo lineatus)*, two white-tailed kites *(Elanus leucurus)*, and nine turkey vultures *(Cathartes aura)*. In addition, 15 American kestrels *(Falco sparverius)* were observed within on-site non-native grassland and mitigated impacted. Woodrat nests were observed on site during recent surveys; however, it wast not determined if the nests belonged to the San Diego desert woodrat *(Neotoma lepida* spp. *intermedia)* or another woodrat species.

Job No: MRL-02 Date: 01/03/08
Source: REC Consultants, Inc. 2008b

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On-site Biological Resources Map/Impacts

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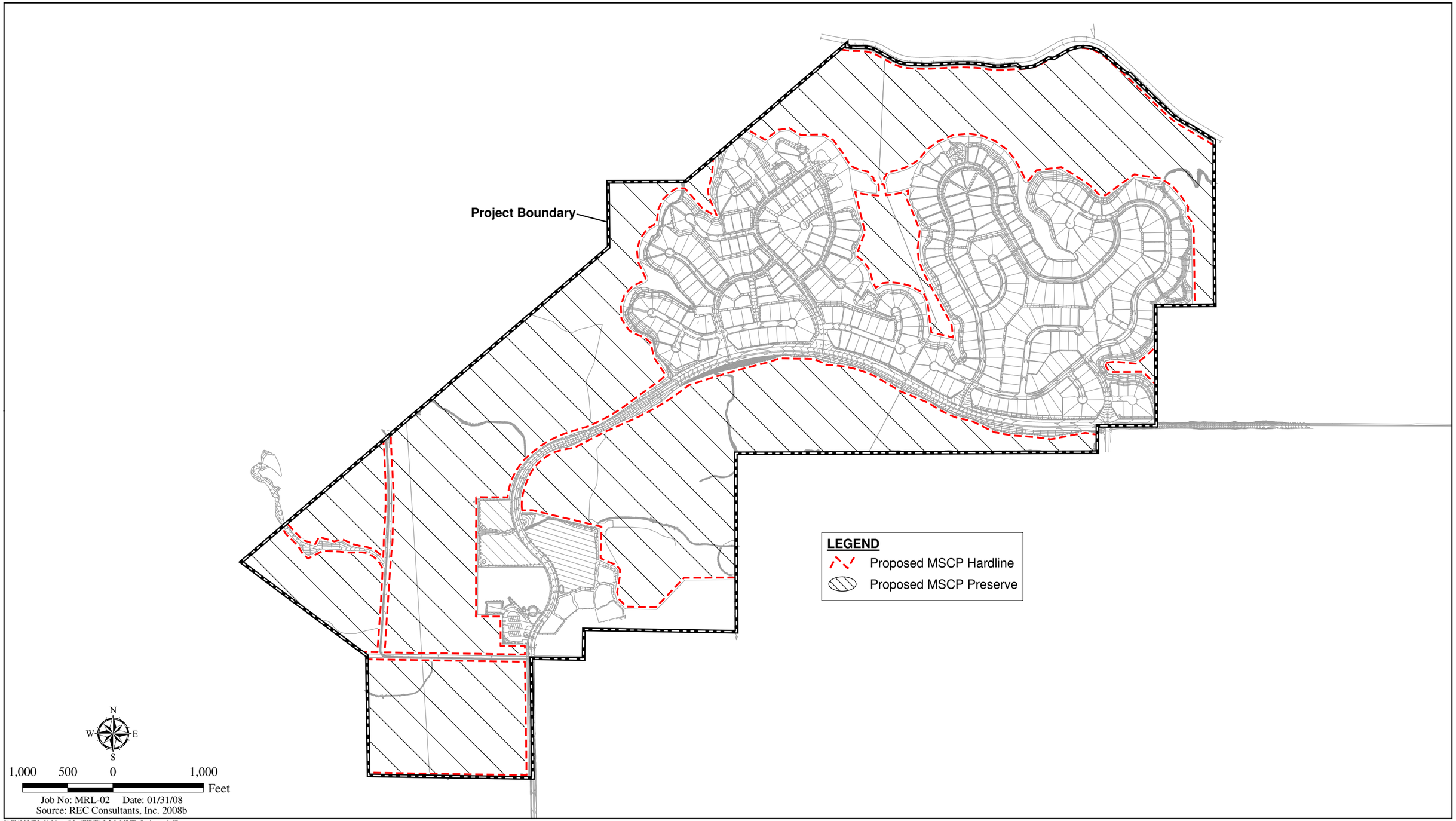
Figure 3.2-8



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Proposed MSCP Hardline Within Project Site

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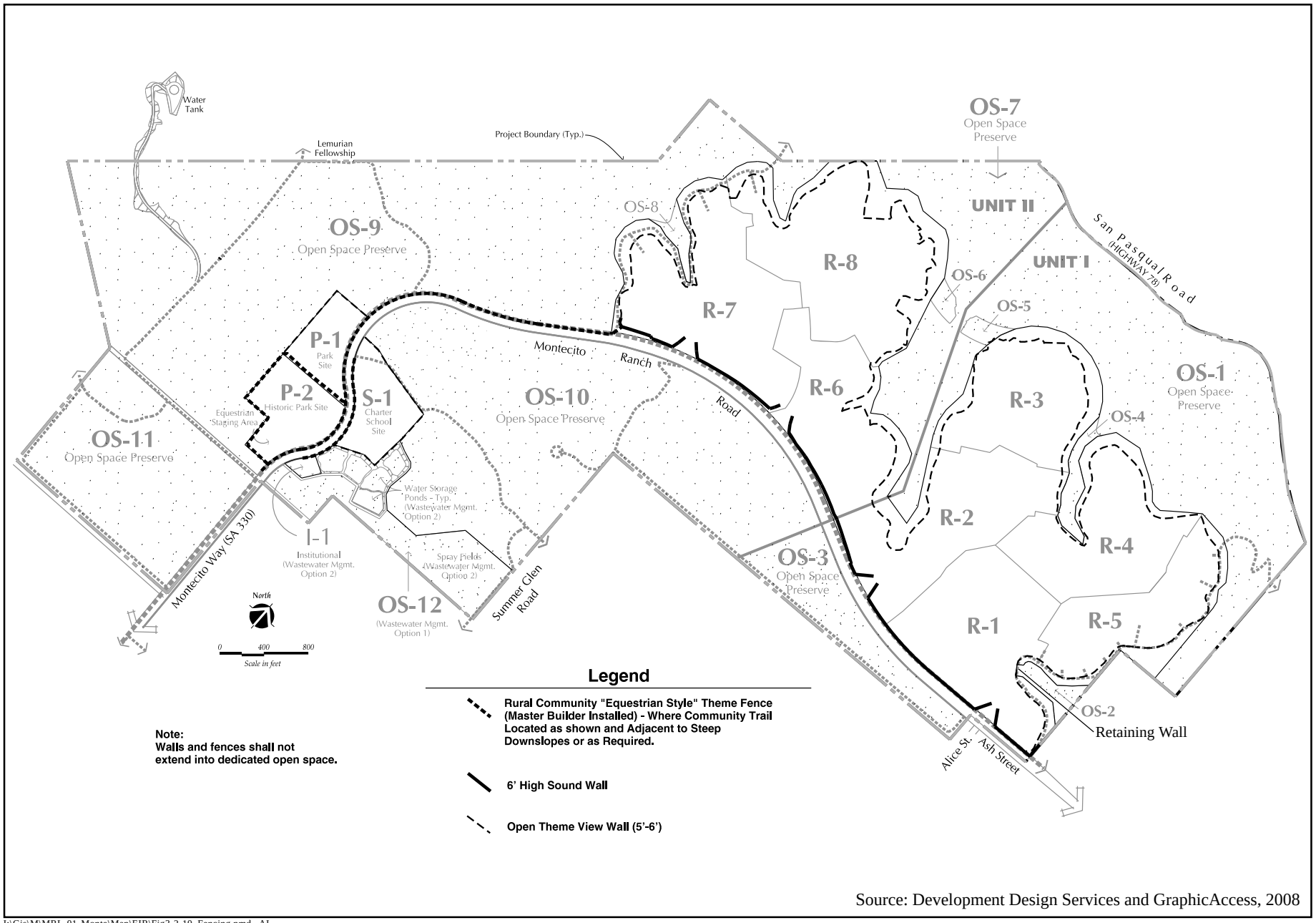
MONTECITO RANCH - EIR

Figure 3.2-9



Source: Development Design Services and GraphicAccess, 2008

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Fencing Plan

MONTECITO RANCH - EIR

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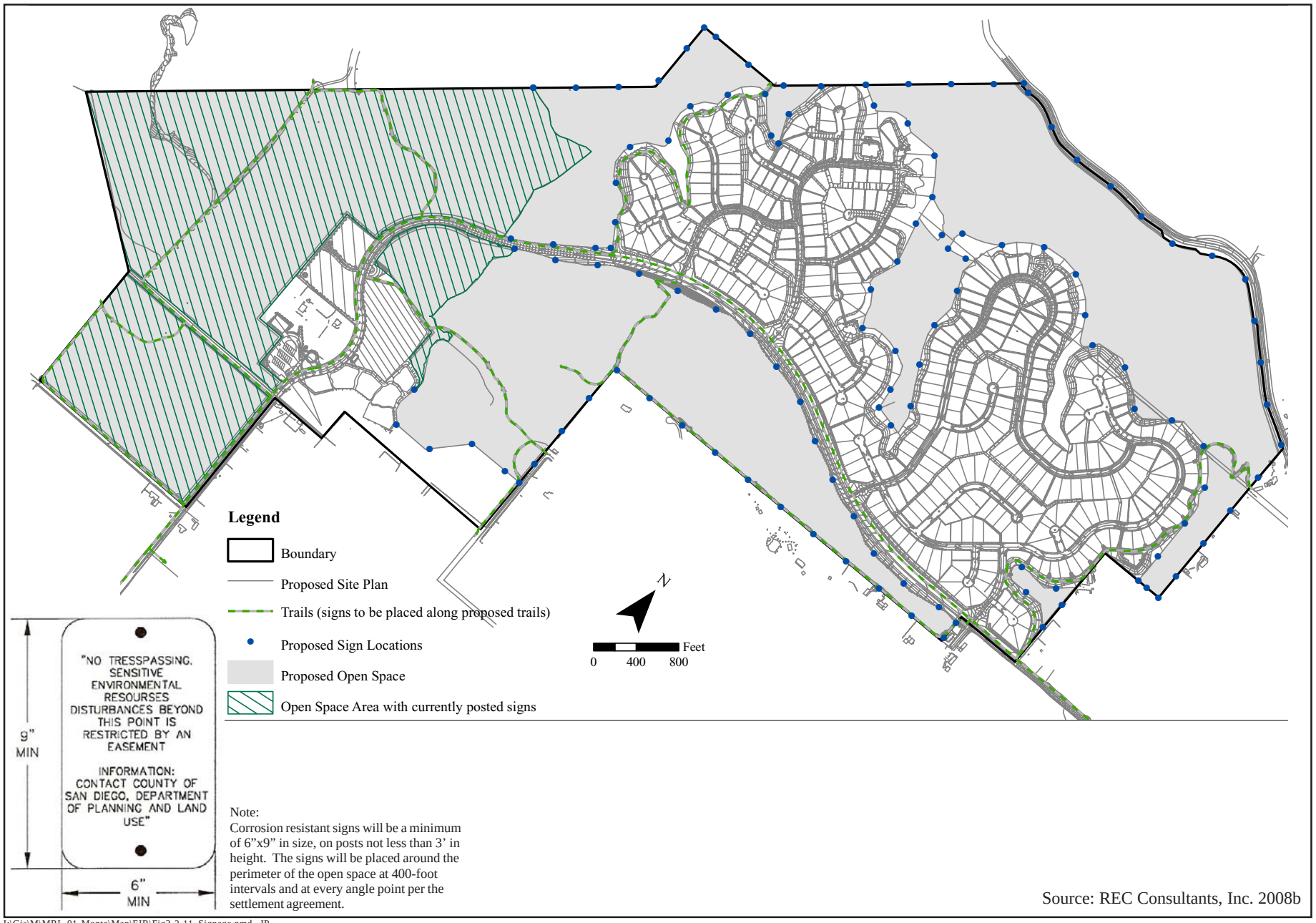
Figure 3.2-10



Note:
Corrosion resistant signs will be a minimum of 6"x9" in size, on posts not less than 3' in height. The signs will be placed around the perimeter of the open space at 400-foot intervals and at every angle point per the settlement agreement.

Source: REC Consultants, Inc. 2008b

I:\Gis\M\MRL-01 Monte\Map\EIR\Fig3-2-11_Signage.pmd -JP

Signage Plan

MONTECITO RANCH - EIR

Figure 3.2-11

HELIX