



Civil Engineering - Environmental - Land Surveying

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Consultants, Inc.

August 15, 2019

Jade Work  
Monserate Winery  
2757 Gird Road  
Fallbrook, CA 92028

Subject: **Biological Resources Letter Report for the Monserate Winery Project, Fallbrook, San Diego County, California; PDS2018MUP-74-165W1, APNs 107-420-16, 107-420-17, 124-330-04, 124-330-14, 124-330-15, 124-330-20; PDS2018-LDGRMJ-30122, APN 124-182-01**

**Prepared for the County of San Diego by  
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**SUMMARY**

The Monserate Winery project modifies an existing Major Use Permit (MUP) within an approximately 117-acre former golf course property located in the community of Fallbrook in unincorporated San Diego County. The MUP site (Site) covers 23.7 acres and the MUP project (Project) consists of constructing a winery and wedding venue. REC Consultants, Inc. conducted surveys to document biological resources on this property, including the Site. As a former a golf course, the property is already largely disturbed and developed. The property and Site also contain sensitive biological resources and jurisdictional wetlands/waters. The Project has been designed to avoid and minimize impacts to these resources, but grading will result in impacts to 0.10 acre of coast live oak woodland. The impact to coast live oak woodland will be mitigated at a 3:1 ratio, for a total of 0.27 acre. The coast live oak woodland mitigation will be provided within the 3.6-acre Biological Open Space, which includes 1.05 acres of coast live oak woodland on the Monserate Winery property. The Biological Open Space will be established and managed by Fallbrook Land Conservancy. The remainder of the property outside the MUP Project Site will be protected under a separate Open Space easement for conservation of agricultural land, also to be managed by Fallbrook Land Conservancy. Replacement of an existing bridge and installation of a new bridge spanning the drainage will not result in impacts to the drainage or sensitive habitat because the bridges will entire span the channel and all riparian or wetland vegetation. This report also addresses impacts from grading that occurred on the property outside the MUP Site.

**ENV. LOG NO. PDS 2018-ER-18-02-003**

## **INTRODUCTION, PROJECT DESCRIPTION, LOCATION, SETTING**

### **Project Description**

The Project will convert 23.7 acres of the former golf course into a winery and event facility with three venues. The main winery facility located adjacent to Venue 1 will include a wine tasting room, restaurant, and offices. Venue 1 will consist of a wine production area, offices, and bride/groom suites. Venue 2 will consist of a barn event facility, restrooms, and bride and groom suites. Venue 3 will consist of event building, restrooms, bride/groom suites. The Project will also include landscape features such as ornamental ponds. Separate gravel parking areas will accommodate each location. One existing unsafe bridge to Venue 2 will be replaced with a new span bridge. One new span bridge will be required to provide a second emergency access. Fuel management zones will be established around the structures according to the approved Project fire plan. There will be no offsite impacts. This Project is separate from agricultural activity on the property outside the MUP area. A 3.6-acre Biological Open Space easement that will include required project habitat mitigation will be established in the northern end of the property.

### **Project Location and Setting**

The property is located on Assessors' Parcel Numbers (APN) 107-240-51, 107-420-16, 107-420-17, 124-330-04, 124-330-14, 124-330-15, 124-330-20, 124-182-01, and 124-182-02, approximately 1.6 miles northwest of the intersection of California State Route 76 (SR-76) and Interstate 15 (I-15), at the southern edge of the community of Fallbrook in the County of San Diego (**Figures 1 and 2**). The property is divided by Gird Road into western and eastern sections, and surrounded by residential development except to the west of the western section of the property where undeveloped land remains. The Site is located in the section west of Gird Road. Project impacts will occur in APNs 107-420-16, 107-420-17, 124-330-04, 124-330-14, 124-330-15, 124-330-20. An aerial photograph of the property, Site, and vicinity is provided in **Figure 3**.

Property elevation ranges from approximately 430 feet (131 meters) above mean sea level (AMSL) in the northwestern corner to 305 feet (93 meters) AMSL at the southern tip of the Site. According to the Web Soil Survey (USDA 2018), soil on the property is comprised of Fallbrook-Vista sandy loams, 9 to 15 percent slopes (FvD); Ramona sandy loam, 5 to 9 percent slopes (RaC); Ramona sandy loam, 9 to 15 percent slopes, eroded (RaD2); Visalia sandy loam, 2 to 5 percent slopes (VaB); Vista coarse sandy loam, 15 to 30 percent slopes, and Vista coarse sandy loam, 30 to 65 percent slopes (VsE). The Fallbrook series consists of well-drained, moderately deep to deep sandy loams that formed in material weathered in place from granodiorite. (USDA 1973) Soils on most of the property have been altered through development of the golf course and historical alterations to the drainage and floodplain, and are unlikely to match the mapped soil units. Soils did not appear to contain any uncommon soil inclusions such as clay or gabbro that would support rare soil-endemic plants.

## **REGIONAL CONTEXT**

The property is located in the community of Fallbrook, which covers 36,000 acres and is located south of Riverside County and east of Camp Pendleton (**Figure 2**). Its neighboring communities are Winterwarm to the east, Bonsall to the south, Pala Mesa to the east, and Rainbow to the northeast.

Most of the area is characterized by rolling hills in which avocado and citrus orchards are common. The San Luis Rey River is approximately 1.5 miles (2.5 kilometers) to the south.

The property occurs within the draft North County Multiple Species Conservation Program (MSCP) boundary and is not within a proposed North County MSCP Pre-approved Mitigation Area.

## HABITATS / VEGETATION COMMUNITIES

Existing biological resources on the property were investigated through a field survey and records review. Records review included California Natural Diversity Data Base (CNDDDB) records of rare and special-status plant and animal species within the Project USGS 7.5' quadrangle (Bonsall) and surrounding quadrangles (Fallbrook, Temecula, Pechanga, Morro Hill, Pala, San Luis Rey, San Marcos, and Valley Center); San Diego County Plant Atlas (SDNHM 2019), Consortium of California Herbaria (Jepson eFlora 2018-2019), San Diego County Bird Atlas (Unitt 2004, SDNHM 2019), Amphibian and Reptile Atlas of Peninsular California (SDNHM 2019), San Diego County Mammal Atlas (Tremor et al. 2017), recent and historical satellite imagery and aerial photography of the Site and surrounding areas (NETR 2018), and soil maps and descriptions from the Soil Survey, San Diego Area, California (USDA 1973, USDA 2018).

One biological survey for the Project, summarized in Table 1, was conducted by REC Field Biologist Lee BenVau. Two additional site visits were conducted to complete the jurisdictional delineation and bridge impact analysis.

**Table 1. Biological Survey Summary**

Date	Time	Temp (°F)	Sky	Wind (MPH)	Survey Type	Personnel
3/16/18	8:30 AM - 3:00 PM	55 - 61	Cumulus clouds	1 to 3-5	General	Lee BenVau
2/28/19	11:40 AM - 12:45 PM	70s	Clear	1-3	Delineation	Lee BenVau and Catherine MacGregor
4/25/19	9:30 AM - 1:00 PM	70s	Clear	0-1	Delineation	Lee BenVau

The western section of the property was also previously surveyed for an unrelated project by REC Senior Biologist Catherine MacGregor and Mr. BenVau on August 27 and 28, 2015. Plant species were identified in the field or collected for later identification, and wildlife species were identified directly by sight or vocalizations and indirectly by scat, tracks, or burrows. Field notes were maintained throughout the survey; all observed plant and animal species were recorded, and habitats and special-status species were mapped. Habitats within a 100-foot perimeter around the property were observed from the property or public roadways and included in mapping. Mapping of biological resources on the property was conducted on aerial images scaled at approximately 1 inch = 240 feet and imported to ArcGIS. Jurisdictional delineation was based on these combined surveys. Jurisdictional features were mapped in Google Earth Pro and imported to ArcGIS. County staff provided guidance on mapping of County Resource Protection Ordinance (RPO) wetlands.

Vegetation and land cover classification in this report follow Holland (1986) as updated by Oberbauer et al. (2008). Plant taxonomy and nomenclature in this report follow the Jepson eFlora (Jepson 2019) for taxonomy and scientific names, and Rebman and Simpson (2014) for common names, with some

rare plant common names from the California Native Plant Society (CNPS) Rare Plant Inventory (CNPS 2018). Wildlife taxonomy and nomenclature in this report follow *San Diego County Mammal Atlas* (Tremor et al. 2017) for mammals, Avibase (Lepage 2015) for birds, California Herps (Nafis 2015) for reptiles and amphibians, Butterflies of America (Warren et al. 2015) for butterflies, BugGuide (ISUDE 2015) for other insects and arachnids, and the Integrated Taxonomic Information System (ITIS 2015) for other invertebrates, as well as the San Diego Natural History Museum spider, butterfly, bird, reptile, and amphibian checklists for localized subspecies information (SDNHM 2005, 2002, and undated).

## General Survey Results

During REC’s surveys, twelve habitats/land cover categories were observed the property: coast live oak woodland, Diegan coastal sage scrub, developed land, disturbed land, disturbed wetland, eucalyptus woodland, fresh water, freshwater marsh, non-wetland Waters of the U.S., orchard/vineyard, southern coast live oak riparian forest, and southern riparian woodland. The MUP Site supports eight habitat/land cover categories: coast live oak woodland, Diegan coastal sage scrub, developed land, disturbed land, disturbed wetland, eucalyptus woodland, orchard/vineyard, and southern riparian forest. These are shown in **Figure 4** and discussed below. In total, 100 plant taxa and 28 animal taxa were detected on the property. Complete lists of plants and animals observed are provided in **Attachments A** and **B**, respectively. Photographs of the property and Site are provided in **Attachment C**.

**Table 2. Habitat/Land Cover on the Property and MUP Site**

Habitat/Land Cover Category	Existing On the Property (acres)	Existing on the MUP Site (acres)
Coast Live Oak Woodland (71160)	4.08	0.78
Diegan Coastal Sage Scrub (32500)	0.21	0.00
Urban/Developed Land (12000)	8.97	5.13
Disturbed Land (11300)	49.71	16.14
Disturbed Wetland (11200)	1.91	0.01
Eucalyptus Woodland (79100)	0.78	0.01
Fresh Water (64140)	0.40	0.00
Freshwater Marsh (52400)	0.14	0.00
Non-wetland Waters of the U.S. (No Habitat Code)	0.84	0.00
Orchard/Vineyard (18100)	47.72	1.60
Southern Coast Live Oak Riparian Forest (61310)	0.44	0.00
Southern Riparian Woodland (62500)	2.42	0.02
<b>TOTAL</b>	<b>117.6</b>	<b>23.7</b>

Coast Live Oak Woodland (Habitat Code 71160) occupies approximately 0.78 acre on the MUP Site and 4.08 acres on the entire property. This habitat category is generally dominated by coast live oak (*Quercus agrifolia*), an evergreen oak that reaches 10-25 m in height. The shrub layer is poorly developed, but may include toyon (*Heteromeles arbutifolia*), currants (*Ribes* spp.), laurel sumac

(*Malosma laurina*), or dominated by blue elderberry (*Sambucus nigra* subsp. *caerulea*). The herb component is often dominated by ripgut brome (*Bromus diandrus*) and several other introduced species. (Oberbauer et al. 2008)

Coast live oak woodland on the property is dominated by coast live oak. Other native species occurring in this habitat consist of toyon, lemonadeberry (*Rhus integrifolia*), annual non-native grasses such as oats (*Avena* spp.) or bromes (*Bromus* spp.), and Bermuda-buttercup (*Oxalis pes-caprae*). In some areas the understory is absent or, as on the Site, has historically been disturbed or partially developed as part of the former golf course (e.g. maintenance yard).

Wildlife detected in coast live oak woodland include acorn woodpecker (*Melanerpes formicivorus*), Nuttall's woodpecker (*Picoides nuttallii*), and yellow-rumped warbler (*Setophaga coronata*).

Coast live oak woodland generally has high conservation value at both the regional and local scales because it provides food, shelter, and nesting substrate for many types of wildlife, and its distribution is limited in southern California. Within the property and Site, the conservation value of the oak woodland is lower due to past impacts to the habitat as part of the former golf course. The proposed development areas are located at the edges of oak woodland, where the understory was been removed in many areas and replaced with compacted bare ground, grass, landscape waste, and/or landscape maintenance facilities. Coast live oak woodland at the northern end of the property value has higher value than elsewhere on the property because the understory is less disturbed. The coast live oak woodland on the Site has moderate conservation value.

Diegan Coastal Sage Scrub (Habitat Code 32500) does not occur on the MUP Site and occupies approximately 0.21 acre on the entire property. This habitat category generally consists of low, soft-woody subshrubs that are most active in winter and early spring. Many taxa are facultatively drought-deciduous. Dominant species are coastal sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*), with laurel sumac (*Malosma laurina*), black sage (*Salvia apiana*) and white sage (*Salvia mellifera*). (Oberbauer et al. 2008)

Diegan coastal sage scrub on the property is limited to the slopes on the western edge of the western section of the property and only occurs in small patches between coast live oak woodland. It is dominated by coastal sagebrush and includes other native species such as coyote brush (*Baccharis pilularis* subsp. *consanguinea*), California buckwheat, laurel sumac, and blue elderberry. Non-native annual grasses dominate groundcover wherever shrub cover is sparse.

No wildlife species were observed in Diegan coastal sage scrub.

Coastal sage scrub habitat generally has high value conservation value at both the regional and local scales. It supports a large number of plant and wildlife species, including the federal Threatened coastal California gnatcatcher (*Polioptila c. californica*). However, coastal sage scrub on the property is limited to a narrow fringe along the western edge of the former golf course that has been degraded through past edge effects. Native shrub cover is relatively low and non-native herb cover is high. Due to its degraded condition, the onsite coastal sage scrub has low to moderate conservation value at the regional scale, and low conservation at the local scale because it is only the disturbed fringe of extensive higher quality coastal sage scrub to the west of the property.

Urban/Developed Land (Habitat Code 12000) (in this case developed) occupies approximately 5.13 acres on the MUP Site and 8.97 acres on the entire property. This land cover category consists of areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Developed land is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation. Areas where no natural land is evident due to a large amount of debris or other materials being placed upon it may also be considered urban/developed (e.g. car recycling plant, quarry). Developed land is typically unvegetated or landscaped with a variety of ornamental (usually non-native) plants. (Oberbauer et al. 2008)

Developed land on the MUP Site and property consists of the former golf course parking lot and clubhouse location and bridges. Vegetation is limited to ruderal non-native species including Bermuda grass (*Cynodon dactylon*), filaree (*Erodium* spp.), and ornamentals such as showy dewflower (*Drosanthemum floribundum*), bush-daisy (*Euryops* sp.), and sea-fig (*Carpobrotus* sp.).

The only wildlife species detected on developed land were American crow (*Corvus brachyrhynchos*) and mourning dove (*Zenaida macroura*).

Developed land has low conservation value at the regional and local scales because it lacks native habitat. The developed land onsite also lacks artificial water resources that could support wildlife.

Disturbed Land (Habitat Code 11300) occupies approximately 16.14 acres on the MUP Site and 49.71 acres on the entire property. This land cover category consists of areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association, but continue to retain a soil substrate. Typically vegetation, if present, is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance, or shows signs of past or present animal usage that removes any capability of providing viable natural habitat for uses other than dispersal. Examples of disturbed habitat include areas that have been graded, repeatedly cleared for fuel management purposes and/or experienced repeated use that prevents natural revegetation (i.e. dirt parking lots, trails that have been present for several decades), recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, and old homesites. Characteristic species are typically invasive, non-native forb species such as Italian thistle (*Carduus pycnocephalus* subsp. *pycnocephalus*), sea-figs (*Carpobrotus* spp.), star-thistles (*Centaurea* spp.), sweet fennel (*Foeniculum vulgare*), horehound (*Marrubium vulgare*), Russian-thistles (*Salsola* spp.), London rocket (*Sisymbrium irio*), sow-thistles (*Sonchus* spp.) and wild radish (*Raphanus sativus*). Perennial grasses such as pampas grass (*Cortaderia selloana*) and African fountain grass (*Pennisetum setaceum*) are also commonly found in this land cover category. (Oberbauer et al. 2008)

Disturbed land on the MUP Site and property consists of remaining golf course and bare ground where non-native trees were removed. The golf course is predominantly turf grass with scattered ornamental trees and shrubs such as oleander (*Nerium oleander*), Indian hawthorn (*Rhaphiolepis indica*), and non-native pines (*Pinus* spp.). Mature western sycamores (*Platanus racemosa*) and coast live oak individuals are scattered across the former golf course. (Individual coast live oaks occur more than 100 feet from oak woodlands.) In the golf course maintenance facilities area, the substrate is compacted soil and patches of gravel, with some native and non-native trees such as coast live oaks, eucalyptus,

and pines. County habitat mapping, as provided through SanGIS, shows the golf course as developed land. For this report it has been classified as disturbed because the golf course retains a soil/vegetation substrate.

Wildlife species detected on disturbed land include funnel weaver spider (Family Agelenidae) webs, convergent lady beetle (*Hippodamia convergens*), California towhee (*Kieneria crissalis*) and Botta's pocket gopher (*Thomomys bottae*).

Disturbed land onsite currently has low conservation value at the regional and local scales because it lacks native habitat. Wildlife in disturbed habitat is generally limited to species that are adapted to anthropogenic disturbance. However, portions of the disturbed land on the property could increase in value if protected and managed. Former golf course areas could develop into non-native grassland, and the former golf course contains some native trees such as coast live oaks and western sycamores.

Disturbed Wetland (Habitat Code 11200) occupies approximately 0.01 acre on the MUP Site and 1.91 acres on the entire property. This habitat category consists of areas permanently or periodically inundated by water, which have been significantly modified by human activity. This includes portions of wetlands with obvious artificial structures such as concrete lining, barricades, rip-rap, piers, or gates. They are often unvegetated, but may contain scattered native or non-native vegetation. Examples include lined channels, Arizona crossings, detention basins, culverts, and ditches. (Oberbauer et al. 2008)

Disturbed wetlands on the property consist primarily of the concrete-lined portions of the north-south drainage in the western section of the property and Site, and those portions with rip-rap banks and an earthen bottom but vegetated with invasive non-native species. Where vegetation occurs, disturbed wetland is dominated by non-natives such as dog-fennel (*Anthemis cotula*), African umbrella plant (*Cyperus involucratus*), castor bean (*Ricinus communis*), and Himalayan blackberry (*Rubus armeniacus*). Limited native species in disturbed wetland include western ragweed (*Ambrosia psilostachya*), Douglas mugwort (*Artemisia douglasiana*), hoary nettle (*Urtica dioica* subsp. *holosericea*), and cocklebur (*Xanthium strumarium*). The drainage channel was historically altered for flood control. Dredged material from the channel was used to create a low berm on either side of the channel. Within the MUP Site, disturbed wetlands are limited to the locations of the southern bridge crossing.

Wildlife species detected in disturbed wetland consist of western honey bee (*Apis mellifera*), unidentified frog or toad, Anna's hummingbird (*Calypte anna*), and black phoebe (*Sayornis nigricans*).

Conservation value of the disturbed wetland areas is moderate at the regional and local scales. Although it lacks native habitat, it provides a water source for wildlife.

Eucalyptus Woodland (Habitat Code 79100) occupies approximately 0.01 acre on the MUP Site and 0.78 acre on the entire property. This habitat category ranges from single-species eucalyptus (*Eucalyptus* sp.) thickets with little or no understory to scattered trees over a well-developed herbaceous and shrubby understory. In most cases, eucalyptus forms a dense stand with a closed canopy. Eucalyptus species produce a large amount of leaf and bark litter, the chemical and physical characteristics of which limit the ability of other species to grow in the understory, decreasing floristic

diversity. Overstory composition is typically limited to one species of the genus, or mixed stands composed of several eucalyptus species; few native overstory species are present within eucalyptus planted areas, except in small cleared pockets. (Oberbauer et al. 2008)

Eucalyptus woodland occurs near the middle of the western section of the parcel along the disturbed wetland. Understory is minimal and almost entirely non-native species such as German-ivy (*Delairea odorata*).

Wildlife detected in eucalyptus woodland consisted of anise swallowtail (*Papilio zelicaon*) and red-tailed hawk (*Buteo jamaicensis*).

Conservation value of the eucalyptus woodland is moderate at the regional scale because it provides nesting substrate for raptors. However, at the local scale its value is low because the area supports a large number of mature native trees that can be used for nesting.

Fresh Water (Habitat Code 64140) does not occur on the MUP Site but occupies approximately 0.40 acre on the entire property. This habitat category is comprised of year-round bodies of fresh water (with extremely low salinity) in the form of lakes, streams, ponds or rivers. This includes those portions of water bodies that are usually covered by water and contain less than 10% vegetative cover (Oberbauer et al. 2008).

Fresh water is present on the property in a shallow artificial golf course pond. The pond is east of, and separated from, the north-south drainage and the water level is maintained by a well pump. It would likely dry if not irrigated.

Wildlife detected in open water consisted of western mosquitofish (*Gambusia affinis*), painted turtle (*Chrysemys picta*), and American coot (*Fulica americana*).

Conservation value of fresh water is high at the regional scale because it provides water and aquatic food sources for wildlife; however, the freshwater pond on the property has low conservation value at the local scale because it is very small and areas of natural aquatic resources occur nearby within the drainage.

Freshwater Marsh (Habitat Code 52400) does not occur on the MUP Site but covers approximately 0.14 acre on the entire property. This habitat category is generally dominated by tall perennial, emergent monocots such as bulrushes (*Schoenoplectus* spp.) and cattails (*Typha* spp.) that often form a dense closed canopy, and typically occurs around calm permanent fresh water. Other characteristic species include sedges (*Carex* spp., *Cyperus* spp.), spike-sedges (*Eleocharis* spp.), and some broad-leaf aquatic plants such as marsh-pennywort (*Hydrocotyle* spp.). (Oberbauer et al. 2008)

Freshwater marsh occurs at the edges of the fresh water artificial golf course pond. Vegetation includes bulrush, cattail, and curly dock (*Rumex crispus*).

A great egret (*Ardea alba*) was observed in the patch of freshwater marsh.

Conservation value of fresh water marsh is high at the regional scale because it provides water and semi-aquatic food sources and nesting substrate for wildlife; however, the freshwater marsh on the property has low conservation value at the local scale because it is very small and areas of natural freshwater wetland occur nearby within the drainage.

Non-wetland Waters of the U.S. (No Habitat Code) does not occur on the MUP Site but occupies approximately 0.84 acre on the entire property. This habitat category does not have a Holland/Oberbauer code, but is included in Table 5 “Habitat Mitigation Ratios” of the Guidelines for Determining Significance (County of San Diego 2010a), which is used for parts of the County that are not yet covered by an approved subarea plan. This category was applied to three unvegetated partially concrete-lined swales that transport runoff across the former golf course to the creek drainage channel. No plants or wildlife were observed in this land cover category.

Conservation value of non-wetland Waters is moderate to high at the regional scale because they provide an ephemeral water source for wildlife, and contribute to downstream aquatic resources; however, the non-wetland Waters on the property have low conservation value at the local scale because they are small concrete swales and higher quality water resources occur nearby within the drainage.

Orchard/Vineyard (Habitat Code 18100) occupies approximately 1.60 acres on the MUP Site and 47.72 acres on the entire property. The orchard/vineyard habitat category includes orchards of artificially irrigated tree or shrub species and vineyards with single-species crops planted in and supported by wood and wire trellises. Understory growth of both orchard and vineyard crops often include short grasses and other herbaceous plants between rows. (Oberbauer et al. 2008)

Orchard/vineyard on the property and Site is characterized by wine grape (*Vitis vinifera*) vineyard supported by wires and drip irrigation, with cultivated barley (*Hordeum vulgare*) sown between the rows. Other ruderal non-native species consist of common weeds such as filaree, cheeseweed (*Malva parviflora*), and prickly sow-thistle (*Sonchus asper* subsp. *asper*). The vineyards also contain scattered western sycamores (both large individuals from the former golf course and smaller individuals planted more recently) and coast live oaks. Based on a review of satellite imagery, all vineyard acreage was golf course (disturbed land) prior to conversion to vineyard. Conversion of golf course to vineyard on the eastern section of the property, the subject of a grading violation (PDS2018-LDGRMJ-30122), is addressed in the Other Property Impacts section of this report.

Wildlife species detected in the vineyards consist of song sparrow (*Melospiza melodia*), western bluebird (*Sialia mexicana*), western kingbird (*Tyrannus verticalis*), domestic dog (*Canis lupus familiaris*) scat and tracks, California ground squirrel (*Otospermophilus beecheyi*), and Botta’s pocket gopher (*Thomomys bottae*) mounds.

Conservation value of vineyards is generally low at the regional scale due to the lack of native habitat and ongoing agricultural disturbance. At the local scale, the vineyards on the property may have slightly higher value because they appear to be attracting western bluebirds, a County Group 2 species; and because the numerous gophers present in the vineyard provide a prey source for local raptors.

Southern Coast Live Oak Riparian Forest (Habitat Code 61310) does not occur on the MUP Site but occupies approximately 0.44 acre on the entire property. This habitat category is generally a dense riparian forest dominated by coast live oak with a closed or nearly closed canopy, and is richer in herbs and poorer in understory shrubs than other riparian communities. It also includes riparian trees such as western sycamore, cottonwood (*Populus* spp.), willows (*Salix* spp.), and Mexican elderberry. Understory species can include Douglas mugwort (*Artemisia californica*), toyon, heart-leaf penstemon (*Keckiella cordifolia*), California rose (*Rosa californica*), and western poison-oak (*Toxicodendron diversilobum*).

This habitat occurs along the drainage in the western section of the property where a mix of coast live oaks, sycamores and willows grow along the channel. It supports little understory, but includes native western poison oak as well as non-natives German-ivy, castor bean, and smilo grass (*Stipa miliacea* var. *miliacea*).

Wildlife detected in southern coast live oak riparian forest included red-shouldered hawk (*Buteo lineatus*), common yellowthroat (*Geothlypis trichas*), acorn woodpecker, and Nuttall's woodpecker.

Southern coast live oak riparian forest generally has high conservation value at the regional and local scales. It provides food, shelter, and nesting substrate for many types of wildlife, has higher plant species diversity than coast live oak woodland, and its distribution is limited in southern California. Within the property, the conservation value of the southern coast live oak riparian forest is lower due to past impacts to the habitat as part of the former golf course. The understory has been disturbed and contains abundant invasive plant species. The drainage that flows through it has been lined with concrete. However, due to the presence of a mixed native tree canopy, other remaining native species, and the water source, the southern coast live oak riparian forest on the property retains moderate conservation value at the regional and local scales.

Southern Riparian Woodland (Habitat Code 62500) occupies approximately 0.02 acre on the MUP site and 2.42 acres on the entire property. This habitat category generally consists of moderate-density riparian woodlands dominated by small trees or shrubs, with scattered taller riparian trees. Characteristic species include western sycamore, cottonwood, willows, Mexican elderberry, and broom baccharis (*Baccharis sarothroides*). (Oberbauer et al. 2008)

Southern riparian woodland on the property is characterized by patches of black willow (*Salix gooddingii*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), and sycamore, with mule-fat (*Baccharis salicifolia* subsp. *salicifolia*) and narrow-leaf willow (*Salix exigua*). These habitat patches along the drainage are highly disturbed due to historical impacts to the drainage. Non-native species observed include dog-fennel, German-ivy, and Himalayan blackberry. The drainage channel was historically altered for flood control. Dredged material from the channel was used to create a low berm on either side of the channel. Within the MUP Site, southern riparian woodland is limited to the location of one proposed bridge crossing.

Wildlife detected in southern riparian woodland consists of unidentified frog or toad and western kingbird.

Southern riparian woodland generally has high conservation value at both regional and local scales. It provides food, shelter, and nesting substrate for many types of wildlife, has higher plant species diversity than most other types of woodland or forest in San Diego County, and its distribution is limited in southern California. Willows and sycamores provide value bird nesting material. When in adequate condition, this habitat type can support special-status birds such as the federal and State endangered least Bell's vireo (*Vireo bellii pusillus*) and State Species of Special Concern yellow warbler (*Setophaga petechia*). Within the property, the conservation value of the southern riparian woodland has been significantly reduced due to historic flood-control dredging of the drainage channel, creation of berms along the channel, and past conversion of adjacent land to golf course. The band of riparian woodland is thin and exposed to substantial edge effects. However, due to the presence of a mixed native tree canopy, other remaining native species, and the water source, the southern riparian woodland on the property retains moderate conservation value at the regional and local scales.

## **SPECIAL-STATUS SPECIES**

For the purposes of this report, a sensitive or special-status plant or animal is any taxon (species, subspecies, or variety) that is officially listed by the State of California or the federal government as Endangered, Threatened, or Rare, or a candidate for one of those listings; classified as Fully Protected, Watch List, or Species of Special Concern by the California Department of Fish and Wildlife (CDFW); included in California Rare Plant Ranks (CRPR) 1 through 4; or included in the County of San Diego Sensitive Plant Lists A through D or Sensitive Animal Groups 1 or 2.

Lists of special-status plants and animals with potential to occur on the Site and property were generated from the CNDDDB RareFind5 and BIOS databases, as well as a list provided by the County of San Diego. The resulting lists include any special-status species documented within the Site's USGS 7.5' quadrangle or surrounding quadrangles within a suitable elevation range, and species requested by the County. **Attachment D** provides information on these special-status plant species, as well as an evaluation of the potential for each species to occur onsite, based on CNDDDB, the CNPS Inventory of Rare and Endangered Plants (on-line version, 2018), Reiser's *Rare Plants of San Diego County* (2001), SDNHM's county plant checklist herbarium collection map (SDNHM 2017), professional experience, and field observations. **Attachment E** provides information on these animal species, and an evaluation of the potential for each species to occur onsite, based on species requirements, CNDDDB search results, *San Diego County Mammal Atlas* (Tremor et al. 2017), *San Diego County Bird Atlas* (Unitt 2004) and Google Earth Bird Atlas (SDNHM 2018), Amphibian and Reptile Atlas of Peninsular California (SDNHM 2018), professional experience, and field observations.

### **Special-status Species Observed**

No special-status plants were found on the MUP Site or property. Three County of San Diego special-status animal species were found outside the Site but within the property: great blue heron, red-shouldered hawk and western bluebird.

Great blue heron (*Ardea herodias*) is a County Group 2 species. This bird is often found near fresh, brackish, and saline water and nests high in nearby trees. One immature individual was observed onsite at the freshwater marsh, as shown in **Figure 4**.

Red-shouldered hawk (*Buteo lineatus*) is a County Group 1 species, with no State or federal listing. This raptor is widespread over the coastal slope and typically nests in well-forested areas with mature trees and well-developed canopy near water. However, red-shouldered hawk has expanded into various woodlands, including stands of palms and eucalyptus trees in urban and suburban settings. Non-breeding habitat can include lowland areas near water, and open land with scattered large trees. One individual was observed perched in an oak tree near the drainage on the eastern section of the property, at the location shown in **Figure 4**, and another was heard calling in the southern coast live oak riparian forest at the southern end of the western section of the property.

Western bluebird (*Sialia mexicana*) is a County Group 2 species, with no State or federal listing. This bird occupies woodlands, farmlands, orchards, and also deserts in winter. It nests in natural tree cavities, abandoned woodpecker holes, and nest boxes. One individual was observed in a western sycamore in disturbed land in the northwestern section of the property and four were observed in the vineyard on the eastern section of the property.

### **Special-status Species with High Potential to Occur on the Property and Site**

No special-status plant species have high potential to occur onsite. The Site and property have been developed as a golf course since at least 1964 (NETR 2018), and the small areas of native habitat and soils that remain are in disturbed condition. No special-status plants or habitat patches likely to support them were observed during site surveys. Details are provided in **Attachment D**.

One reptile, four birds, and one mammal special-status species have high potential to occur on the property, and one has high potential to occur on the MUP Site:

San Diego ringneck snake (*Diadophis punctatus similis*) is a County Group 2 species with no State or federal listing. This snake inhabits moist habitats including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forest, and woodlands, along the coast into the Peninsular Ranges. San Diego ringneck snakes prefer areas with surface litter or herbaceous vegetation and are often found near abandoned buildings and junk piles in wooded areas. They are generally hidden during the day. Woodland habitats on the property and Site would be suitable for this species, it would not have been detectable during the survey, and it is distributed throughout the County according to the Amphibian and Reptile Atlas of Peninsular California (SDNHM 2018). Based on these factors, San Diego ringneck snake has high potential to occur on the property and moderate potential to occur in coast live oak woodland on the MUP Site.

Cooper's hawk (*Accipiter cooperii*) is a County Group 1 and CDFW Watch List species. This raptor occupies open riparian cottonwood, sycamore, oak, and eucalyptus woodlands and other open forested areas. Cooper's hawks nest in second-growth conifer stands, live oaks or deciduous riparian areas and forage in openings near forested areas. In winter they have similar habitat preferences, but open woodlands and fields may be used more. The SDNHM's Google Earth Bird Atlas documents this species year-round in the area, and the coast live oak woodland, eucalyptus woodland, southern riparian woodland, and scattered western sycamores throughout the property, including coast live oak and woodland on the MUP Site, would be suitable for this species. The golf course provided suitable

foraging habitat and the vineyard is expected to maintain that foraging habitat. Therefore, Cooper's hawk has high potential to occur on the property and moderate potential to occur on the MUP Site.

Sharp-shinned hawk (*Accipiter striatus*) is a County Group 1 and CDFW Watch List species. This raptor is a widespread but uncommon winter visitor on the coastal slope of San Diego County. Sharp-shinned hawks utilize a variety of habitats where small prey birds gather, but prefer riparian areas with trees or tall shrubs. The Bird Atlas documents this species in the area and the habitats discussed above for Cooper's hawk would also be suitable for this species. Therefore, sharp-shinned hawk has high potential to occur on the property, and moderate potential to occur on the MUP Site (which supports less suitable habitat than the rest of the property).

Green heron (*Butorides virescens*) is a County Group 2 species. This bird inhabits swamps, marshes, and the margins of ponds, rivers, lakes and lagoons. Green herons forage in shallow water and nest in trees or shrubs near fresh or brackish water. The Bird Atlas documents this species year-round near the Site and the onsite southern riparian woodland, freshwater marsh, and southern coast live oak riparian forest are suitable habitat. Therefore, green heron has high potential to occur on the property and moderate potential to occur on the MUP Site (which supports less suitable habitat than the rest of the property).

Turkey vulture (*Cathartes aura*) is a County Group 1 species. This raptor is often found soaring above dry, open country or along roadsides, as well as a variety of habitats including coastal sage scrub, grassland, riparian, and forest. Nesting occurs in caves or trees, on cliffs, or on the ground in dense shrubbery. The property supports land such as disturbed land, orchard/vineyard, and roadside along Gird road, which would be suitable for scavenging for carrion, and this species is relatively common. Therefore, turkey vulture has high potential to occur on the property and on the MUP Site.

Yuma myotis (*Myotis yumanensis*) is a County Group 2 species. This bat occupies diverse vegetation and habitat types but is most closely associated with rivers, creeks, ponds, and reservoirs. Yuma myotis bats roost in crevices, cavities, and buildings, especially those associated with water such as bridges and dams. They will also roost in live trees in suburban landscapes. They forage over open water, rivers and streams, as well as oak woodlands and native scrublands. This is the most common bat species in San Diego County. There is suitable habitat on the property and Site for at least foraging and this bat would not have been detectable during the survey. Based on these factors, Yuma myotis has high potential to occur on the property and MUP Site.

### **Other Special-Status Species Considerations**

The County of San Diego Planning and Development Services Biological Resources Review Memo for PDS2018-LDGRMJ-30122, APN 124-182-01-00, which addressed the eastern section of the Site, requested focused surveys or site assessments, if applicable, for the following special-status species: arroyo toad, least Bell's vireo, Stephens' kangaroo rat, and rare plants. The entire property was assessed for potential to support special-status species, including these three animals and any rare plants, during biological surveys. **Attachment E** includes summaries of why potential for these species was determined to be low and focused surveys are not warranted.

## **Raptor Foraging, Nesting Birds, and Migratory Birds**

Raptors are protected under California Fish and Game Code Section 3503.5, which specifically protects all birds in the orders Falconiformes or Strigiformes (raptors, including owls and turkey vultures). It is unlawful to take, possess or destroy any such raptors or their nests and eggs except as otherwise provided in the Fish and Game Code. The County of San Diego (2010) defines raptor foraging habitat as “land that is a minimum of 5 acres (not limited to project boundaries) of fallow or open areas with any evidence of foraging potential (i.e., burrows, raptor nests, etc.)” The property and Site serve as raptor foraging habitat because they contain open areas greater than five acres; support suitable prey species (e.g. Botta’s pocket gopher, California ground squirrel); red-tailed hawk and red-shouldered hawk were observed on the property; and two raptor nests were observed in trees on the property. Nest locations and raptor detections are shown in **Figure 4**.

California Fish and Game Code Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Fish and Game Code or any regulation made pursuant to the Code. The federal Migratory Bird Treaty Act prohibits the killing or transport of native migratory birds, or any part, nest, or egg or any such bird unless allowed by another regulation (such as for “game” birds). Therefore, all native, non-game birds on the Site and property, and the nests and eggs of all native non-game birds, are protected during the nesting season even if these birds are not special-status or otherwise protected.

## **Large Mammal Use**

No evidence of property use by large mammals such as mule deer (*Odocoileus hemionus*) or mountain lion (*Puma concolor*) was found during REC’s surveys.

## **Nursery Site**

As defined in the Guidelines for Determining Significance (County of San Diego 2010a), native wildlife nursery sites are “sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas and bat colonies.” While a number of species may breed on the property and Site, the disturbed condition and proximity to development make the property and Site poor candidates as a wildlife nursery site and they are very unlikely to be necessary habitat for these species’ reproduction.

## **JURISDICTIONAL WETLANDS AND WATERWAYS**

In addition to wetland habitats afforded protection by the County of San Diego (see **Figure 5**), the property supports wetlands/waters and riparian areas subject to jurisdiction of CDFW, U.S. Army Corps of Engineers (USACE), and the State Water Resources Control Board. Field work included assessment and mapping of potentially jurisdictional wetlands/waters. Delineation results are provided in **Figure 5**. This Project has undergone multiple redesigns in order to avoid impacts to jurisdictional wetlands/waters.

## USACE Waters of the U.S.

The United States federal government claims jurisdiction over wetlands and other waters pursuant to Section 404 of the 1972 Clean Water Act (CWA). The Environmental Protection Agency (EPA) enforces CWA requirements and regulates discharge of dredged or fill material into wetlands and other Waters of the U.S. through a permitting process administered by the U.S. Army Corps of Engineers.

On the property, Waters of the U.S. (Waters) are those drainages that convey surface water within banks with Ordinary High Water Marks, as well as areas that support the hydrophytes, hydric soil, and hydrology of jurisdictional wetlands and have a significant nexus to those drainages. The extent of non-wetland Waters of the U.S. jurisdiction is typically smaller than the County habitat polygon in which it occurs (e.g. the central portion of a drainage channel). This includes portions of the drainages and tributaries in the western and eastern sections of the property in areas mapped as disturbed wetland, southern riparian woodland, and non-wetland Waters (see **Figure 5**). The artificial golf course pond and fringing marsh vegetation could be jurisdictional if there is a significant nexus to the nearby drainage; however, none was observed. On the MUP Site, USACE-jurisdictional Waters of the U.S. occur within the concrete-lined drainage channel at the southern and northern bridge crossings, and within the southern riparian woodland at the central bridge crossing, with a total acreage of approximately 0.02 acre. In Figure 5, these portions of non-wetland and/or wetland Waters are in the interior of the larger CDFW-jurisdictional area (see below). Wetland Waters of the U.S. are only present within the MUP Site at the location of the new central bridge crossing, occupying approximately 0.01 acre of the 0.02 acre total Waters.

These areas consist of existing crossings and concrete-lined channel at the northern and southern crossings (non-wetland Waters), and the drainage channel within southern riparian woodland at the new central bridge crossing (wetland Waters). The northern and southern crossings are highly disturbed and lack habitat. Although they are hydrologically connected to downstream jurisdictional areas, including the San Luis Rey River, these two sections of the drainage are not locally or regionally important beyond their water conveyance role because of their condition. The wetland in the new crossing has been historically disturbed by dredging, but contains a natural substrate and small amounts of native riparian vegetation. Although the very small size (0.01 acre) of USACE-jurisdictional wetland at this location in the MUP limits its relative value at the regional and local scales, it has moderate conservation value because it contains natural habitat and conveys water flow to downstream jurisdictional areas such as the San Luis Rey River.

The Section 404 permitting program for impacts to wetlands and other Waters of the U.S. is based on the premise that no discharge of dredged or fill material may be permitted if (1) a practicable alternative exists that is less damaging to the aquatic environment or (2) the nation's Waters would be significantly degraded. If steps have been taken to avoid and minimize impacts to wetlands, streams and other aquatic resources, and compensatory mitigation will be provided for all remaining unavoidable impacts, a 404 permit may be obtained.

This Project has been designed to avoid impacts to Waters of the U.S. An existing unsafe southern bridge will be replaced with a wider bridge over the concrete-line channel, and a new bridge crossing must be installed to provide a second emergency access. The southern replacement bridge will be a span bridge over the concrete-lined channel and footings will be built outside the jurisdictional banks.

It is the minimum required width. No riparian vegetation will be impacted. The new required crossing will also be a span bridge with footings outside the drainage banks, of the minimum required width, and has been located such that no riparian trees or shrubs will be impacted. As stated by the Regulatory Agencies at the Project's pre-application meeting, shading by these bridges is not considered an impact. Because these bridges will not impact jurisdictional Waters, the applicant is in the process of obtaining a "No Permit Required" letter as directed by USACE staff.

### **CDFW Streambed and Riparian Habitat**

Pursuant to Division 2, Chapter 6, Sections 1600-1616 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. Section 1602 requires an entity to notify CDFW prior to beginning any activity that may (a) substantially divert or obstruct the natural flow of any river, stream or lake; (b) substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or (c) deposit debris, waste or other materials that could pass into any river, stream or lake. CDFW jurisdiction typically includes a streambed between to tops of banks, as well as riparian habitat outside the streambed. Small isolated features are generally excluded.

All areas mapped as disturbed wetland, southern riparian woodland, and southern coast live oak riparian forest habitat along the main north-south channel fall under jurisdiction of CDFW (see **Figure 5**). CDFW-jurisdictional streambed and riparian habitat occur within the disturbed wetland drainage channel at the southern and northern bridge crossings, and within the southern riparian woodland at the central bridge crossing, with a total acreage of approximately 0.05 acre based on the delineation prepared for CDFW.

These areas consist of existing crossings and concrete-lined channel at the northern and southern crossings, and southern riparian woodland at the new central bridge crossing. The northern and southern crossings are highly disturbed and lack habitat. Although they are hydrologically connected to downstream jurisdictional areas, including the San Luis Rey River, these two sections of the drainage are not locally or regionally important beyond their water conveyance role because of their condition. The new central crossing has been historically disturbed by dredging, but contains a natural substrate and small amounts of native riparian vegetation. Although the very small size (0.02 acre) of CDFW-jurisdictional streambed and riparian habitat at this location in the MUP limits its relative value at the regional and local scales, it has moderate conservation value because it contains natural habitat and conveys water flow to downstream jurisdictional areas such as the San Luis Rey River.

As determined at the regulatory agency pre-application meeting, the linear features mapped as non-wetland Waters are not considered CDFW-jurisdictional. The artificial golf course pond (fresh water) is not considered CDFW-jurisdictional because it is man-made and outside the nearby drainage channel.

If a project will impact a streambed or lake and associated riparian/wetland habitat, CDFW must be notified and a Streambed Alteration Agreement (SAA) is required. The SAA typically includes measures necessary to protect fish and wildlife resources, including habitat mitigation.

This Project has been designed to avoid impacts to CDFW streambeds and riparian habitat. As stated by the Regulatory Agencies at the Project's pre-application meeting, shading by these bridges is not considered an impact. Because these bridges will not impact jurisdictional streambeds or riparian habitat, the applicant will coordinate with CDFW to obtain documentation that a SAA agreement is not needed.

## **Waters of the State**

Waters of the State, defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" are also regulated by the State of California through Regional Water Quality Control Boards (RWQCBs) under the State Water Resources Control Board.

Waters of the State generally correspond to Waters of the U.S. and on the Site would include the jurisdictional Waters of the U.S. Isolated waters such as the golf course artificial pond (fresh water), are also included. Waters of the State on the MUP Site are the same as the Waters of the U.S.; please refer to that section above.

Impacts to Waters of the State must be processed to obtain either a 401 certification tied to the USACE 404 permit, or a Waste Discharge Requirement document. Required mitigation may be the same as required for the 404 permit, or in some cases may be greater.

This Project has been designed to avoid impacts to Waters of the State, as described above.

## **County Wetland Habitats and RPO Wetlands**

The following onsite habitat/land cover categories are County wetland *habitat*: disturbed wetland, fresh water, freshwater marsh, southern coast live oak riparian forest, and southern riparian woodland. County wetland habitats may also be Resource Protection Ordinance (RPO) wetlands as defined by the County of San Diego (County of San Diego 2012). RPO wetlands are defined as follows:

1. Lands having one or more of the following attributes are "wetlands":
  - a. At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
  - b. The substratum is predominantly undrained hydric soil; or
  - c. An ephemeral or perennial stream is present, whose substratum is predominantly non-soil and such lands contribute substantially to the biological functions or values or wetlands in the drainage system.
2. Notwithstanding paragraph (1) above, the following shall not be considered "Wetlands":
  - a. Lands which have attribute(s) specified in paragraph (1) solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of Planning and Land Use determines that they:
    - (i) Have negligible biological function or value as wetlands;
    - (ii) Are small and geographically isolated from other wetland systems;
    - (iii) Are not vernal pools; and,
    - (iv) Do not have substantial or locally important populations of wetland dependent sensitive species.

- b. Lands that have been degraded by past legal land disturbance activities, to the point that they meet the following criteria as determined by the Director of Planning and Land Use:
  - (i) Have negligible biological function or value as wetlands even if restored to the extent feasible, and;
  - (ii) Do not have substantial or locally important populations of wetland dependent sensitive species.

(Note: Activities on lands not constituting “wetlands” because of this paragraph (2) may still be subject to mitigation, avoidance and permitting requirements pursuant to the California Environmental Quality act or other applicable County, state and federal regulations.)

Based on this definition, southern riparian woodland on the MUP Site is RPO wetland because it is wetland habitat with hydrophytes, along the intermittent to perennial drainage. The concrete-lined drainage channel is not RPO wetland because it lacks vegetation. The RPO wetland and wetland buffer in or adjacent to the MUP are shown on **Figure 5**. No other RPO wetland types are within the MUP Site.

This Project has been designed to completely avoid impacts to RPO wetlands.

The southern replacement bridge crosses over the non-RPO concrete-lined drainage channel. It will be within the 50-foot RPO buffer for the upstream southern riparian woodland. The new bridge will cross through southern riparian woodland, which is RPO wetland, and the wetland buffer on either side of the drainage channel. The replacement bridge and new bridge are permitted uses within the RPO buffer for two reasons. Under RPO Section 86.604 (a)(5)(aa-ff) and (b)(2), they are allowed because they comply with items (aa) through (ff): they are road crossings necessary to access the adjacent land (west side of the drainage); there is no feasible alternative to crossing the drainage to reach the west section of the Site other than crossing the drainage; road crossings have been limited to the minimum number required and feasible; they have been located in such a way as to minimize impacts to the drainage and RPO wetland and wetland buffer (the replacement bridge has been placed over the non-RPO wetland concrete drainage channel, shifted away from the offsite upstream southern riparian woodland by about 10 feet, and will completely span the channel, and the new bridge has been placed where no riparian trees or shrubs will be removed and will completely span the channel); they have been designed with the least-damaging construction method (span bridge and see other avoidance measures); the applicant has determined that the crossings will also be used by Fallbrook Land Conservancy to access land held by conservation easement(s); there will be no loss of RPO wetlands; and any mitigation required by the County would be provided. Because the Project has been designated by the County as a recreational use and will not harm the natural environment due to its design and placement, the bridge replacement and new bridge are also permitted under Section 86.604 (a)(2) as a recreational use. The replacement bridge will not be any closer to the upstream RPO wetland than the existing bridge and will not result in any impact to the RPO wetland.

## **Wetland Buffers**

RPO wetlands must be protected with a buffer of surrounding upland vegetation. The buffer width depends on the size, condition, and ecological value of the wetlands/waters. Existing Site constraints and development must also be considered in determining the proper buffer width. In this case, a buffer

width of 50 feet around all RPO wetlands is appropriate because the Site and property have historically been impacted and developed up to the edge of the drainages, and almost all surrounding habitat is already disturbed. The proposed buffer within the MUP Site is shown on **Figure 5**. The Project also includes a set-back of 50 feet from potential RPO wetlands (southern riparian woodland and southern coast live oak riparian forest) outside but in proximity to the MUP, and approximately 27 to 119 feet between Project development and the non-RPO disturbed wetland drainage channel.

## **OTHER UNIQUE FEATURES/RESOURCES**

The Site contains a small hill of Ramona sandy loam south of the former golf course parking lot. Hilltops can be important resources for butterflies and other insects that engage in hilltopping behavior, even if the hill itself appears to be insignificant. Hilltopping occurs when males congregate on the tops of hills and compete for mating opportunities. This small hill is the former location of the golf course club house and is unlikely to have high value for hilltopping.

The property has potential to serve as a wildlife corridor or linkage because, although development surrounds it on three sides, the drainage that runs through the Site is a tributary to the San Luis Rey River, and wildlife could use it for dispersal. Birds could use the patches of riparian habitat onsite as “stepping stones” to higher-quality habitat. The Site itself has little potential to serve as a wildlife corridor because it is predominantly developed or disturbed land, coast live oak woodland on the Site is in a disturbed condition, and the drainage is only within the MUP at the locations of the bridge crossings. Wildlife corridor function and habitat linkage on the Site and property would not be considered unique resources.

Other features such as topography, connectivity, regional/local setting, foraging capacity, roosting potential, or soil types are not unique.

## **SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION**

Direct impacts are generally obvious, absolute, or quantifiable, such as direct destruction of vegetation, sensitive habitats, and plant and animal populations; loss of foraging, nesting, breeding, or burrowing habitat; clearing of a particular species’ required habitat (directly impacting that species), or blocking a wildlife corridor. Direct impacts may occur as a result of Project itself, or activities necessary for implementation of the Project such as construction of staging areas. **Figure 6a** depicts the Project’s direct impacts to biological resources. Direct impacts include grading, landscaping, parking areas, and most fuel management zones (FMZs). Wetlands in the MUP Site that are avoided as required are considered impact neutral. All land that is on the property but outside the MUP Site is “Not a Part” (NAP) (see **Figure 6a**) and excluded from direct impacts.

Indirect impacts may be the result of secondary effects from direct impacts, or those impacts that over time cause degradation of a resource by changing its function, health, or quality. Unlike direct impacts that are typically one-time effects, indirect impacts often continue in the long term and may actually increase. Indirect impacts commonly result from a project’s “edge effects.” Edge effects from development can extend several hundred feet into adjacent open space areas, causing significant changes in species composition, diversity and abundance in those nearby lands. Projects may result in a wide variety of indirect impacts depending on project context. Examples of indirect impacts include

edge effects such as increase in human encroachment into the natural environment, particularly through off-road vehicle use; harassment and/or collection of wildlife species by people; predation upon wildlife by domestic animals that intrude into open space areas; and increased wildlife mortality along roads. Other less visible indirect impacts include decline in the availability of a resource such as water or prey, reduction in habitat viability as a result of altering moisture regime or vegetation, habitat fragmentation, and damage to or loss of ecosystem and/or watershed integrity.

Direct and indirect Project impacts to biological resources are discussed in the following sections.

### MUP Project Direct Impacts and Mitigation

The entire MUP Project footprint is considered directly impacted (**Figure 6a**) even if portions of it such as existing vineyard will be retained in their current condition. Two exceptions were made, based on project-specific conditions: portions of coast live oak woodland, disturbed wetland, and southern riparian woodland are impact neutral (**Figure 6b**). These exceptions are discussed following Table 3. The FMZ, show in **Figure 6a**, is a minimum of 75 feet where surrounding vegetation or structural mitigation measures make that width appropriate, and 100 feet or more elsewhere (see the “Fire Protection Plan, Monserate Winery, North County Fire Protection District” prepared by Santa Margarita Consulting, LLC). Implementation of the Project would directly impact 23.0 acres of MUP onsite habitat/land cover. Habitat/land cover impacts are summarized in Table 3, below.

**Table 3. MUP Project Habitat/Land Cover Impacts**

Habitat/Land Cover Category	Existing on Entire Property (acres)	Existing on MUP Site (acres)	Impacts on MUP Site <sup>1</sup> (acres)	Total Impacts (acres)	Mitigation Ratio	Mitigation Required (acres)	Impact Neutral (acres)	Preserved on the Property <sup>4</sup> (acres)
Coast Live Oak Woodland (71160)	4.08	0.78	0.09	0.09	3:1	0.27	0.69 <sup>2</sup>	1.05
Diegan Coastal Sage Scrub (32500)	0.21	0.00	0.00	0.00	1:1 to 3:1	0.00		
Developed Land (12000)	8.97	5.13	5.13	5.13	None	0.00		
Disturbed Land (11300)	49.71	16.14	16.14	16.14	None	0.00		2.47
Disturbed Wetland (11200)	1.91	0.01	0.00	0.00	3:1	0.00	0.01 <sup>3</sup>	
Eucalyptus Woodland (79100)	0.78	0.01	0.01	0.01	None	0.00		
Fresh Water (64140)	0.40	0.00	0.00	0.00	3:1	0.00		
Freshwater Marsh (52400)	0.14	0.00	0.00	0.00	3:1	0.00		
Non-wetland Waters of the U.S. (No Habitat Code)	0.84	0.00	0.00	0.00	1:1	0.00		

Habitat/Land Cover Category	Existing on Entire Property (acres)	Existing on MUP Site (acres)	Impacts on MUP Site <sup>1</sup> (acres)	Total Impacts (acres)	Mitigation Ratio	Mitigation Required (acres)	Impact Neutral (acres)	Preserved on the Property <sup>4</sup> (acres)
Orchard/Vineyard (18100)	47.72	1.60	1.60	1.60	None	0.00		
Southern Coast Live Oak Riparian Forest (61310)	0.44	0.00	0.00	0.00	3:1	0.00		
Southern Riparian Woodland (62500)	2.42	0.02	0.00	0.00	3:1	0.00	0.02 <sup>4</sup>	0.05
<b>TOTAL</b>	<b>117.6</b>	<b>23.7</b>	<b>23.0</b>	<b>23.0</b>		<b>0.3</b>	<b>0.7</b>	<b>3.6</b>

<sup>1</sup> All impacts on the property are within the MUP Site.

<sup>2</sup> Coast live oak woodland that will be retained in the MUP is considered impact neutral for this Project (see below).

<sup>3</sup> Because the only potential wetland habitat impacts are from bridges that will completely span the channel and avoid impacts to any wetland vegetation, the bridge crossings are considered impact neutral for this Project (see below).

<sup>4</sup> Preserved in Biological Open Space.

Mitigation ratios are based on Table 5, “Habitat Mitigation Ratios” from the County’s Guidelines for Determining Significance, which applies to mitigation for impacts outside of approved MSCP Plan areas (County of San Diego 2010a).

Direct impacts to the 0.09 acre of coast live oak woodland that will be removed through clearing and grading are considered significant and would require mitigation. The Project has been designed to retain existing mature native trees as part of the local landscape setting. Potential impacts to coast live oak woodland within the MUP boundary but outside the clearing/grading footprint and the fuel management zones (FMZs) are treated as Impact Neutral because the oaks will be retained as part of the landscape setting. Coast live oak woodland within the MUP boundary and within the FMZ is also treated as Impact Neutral because fuel management in the coast live oak woodland will only consist of keeping the understory clear and the oaks will be retained as part of the landscape setting. These Impact Neutral areas are shown in **Figure 6b**.

Impacts to coast live oak woodland will be mitigated at a 3:1 ratio. For impacts to 0.09 acre, required mitigation is 0.27 acre. Proposed mitigation consists of preserving 0.27 acre of coast live oak woodland in the 3.6-acre Biological Open Space easement at the northern end of the property, as shown in **Figure 7**. These 3.6 acres contain 1.05 acres of coast live oak woodland, 0.05 acre of southern riparian woodland, and 2.47 acres of former golf course. The Biological Open Space would be managed by Fallbrook Land Conservancy, which has already entered into negotiations with the Project owner. A letter of interest and draft Property Analysis Record (PAR) from Fallbrook Land Conservancy are provided in **Attachment F**. The remainder of the property outside the MUP Site will also be preserved with an Open Space easement (see **Figure 7**), unrelated to mitigation and intended to conserve agricultural land, by Fallbrook Land Conservancy. Other easements that overlap or abut the property are also shown in **Figure 7**.

Potential impacts to disturbed wetland and southern riparian woodland are treated as Impact Neutral (**Figure 6b**) because the replacement bridge and new bridge will completely span the channel and

avoid any impacts to the channel and wetland vegetation, the two bridges are treated as impact neutral. The southern bridge is a replacement bridge over the concrete-lined channel, and will completely span the channel. The new bridge has been intentionally placed at a location where it can completely span the channel in the southern riparian woodland without removal of any native riparian trees or shrubs or wetland vegetation. As stated by the Regulatory Agencies at the Project's pre-application meeting, shading by these bridges is not considered an impact. Because these bridges will not impact jurisdictional Waters, the applicant is in the process of obtaining a "No Permit Required" letter as directed by USACE staff and will obtain equivalent documentation from CDFW and the RWQCB.

Impacts to developed land, disturbed land, eucalyptus woodland, and orchard/vineyard are not significant and do not require mitigation.

Western bluebird will not be directly impacted because the areas of the property where it was observed are outside the MUP Site. It is also adapted to conditions on the property, as demonstrated by its use of the vineyard.

Loss of onsite habitat could be a potentially significant direct impact to red-shouldered hawk and other raptors observed near the Site via loss of foraging area. However, proposed mitigation for habitat impacts and conservation of all of the property outside the MUP Site under an Open Space easement for conservation of agricultural land (see **Figure 7**) would reduce this impact to less than significant.

The most likely area to serve as a wildlife corridor is the drainage that runs north to south through the Site, and the only impacts will be improvement of an existing bridge and construction of a new minimum-width bridge. The Project will not result in a significant direct impact to a wildlife corridor.

No other direct impacts to biological resources require mitigation.

### **Potentially Significant Indirect Impacts and Proposed Mitigation**

The Site has low vulnerability to indirect impacts due to its past use as a golf course. It is also already subject to indirect impacts from nearby roads and residential development. Potential indirect impacts to remaining habitat and jurisdictional wetlands/waters will be avoided and/or mitigated through installation of temporary construction/silt fencing between these areas and locations of clearing and grading; education of workers about the need to avoid impacts outside the approved work area; monitoring of any pre-construction activities such as clearing and grubbing by a qualified biologist (with notification to the County if any encroachments occur); prohibition of invasive species in Project landscaping; and use of approved shielded outdoor lighting. A 50-foot buffer will be established between Project activities and all RPO wetlands, and development will also be set back from non-RPO wetlands/waters. These avoidance and mitigation measures would reduce potential indirect impacts to nearby sensitive biological resources to below a level of significance.

Another potential indirect impact is interference with nesting birds protected by the MBTA and Fish and Game Code. The required avoidance/mitigation measures, based on either avoidance of work during the avian breeding season or use of focused nest surveys and nest buffers (see summary of mitigation and avoidance measures below for details), would reduce this potential impact to below a level of significance.

If control measures for potential pest species such as Botta's pocket gopher and California ground squirrel include use of toxic substances, these substances could leach into the water table or indirectly impact predators such as raptors that may feed on the poisoned animals. Therefore, only methods of control that do not include the use of these substances should be used onsite, or if they must be used, then to the minimum extent practicable and with all appropriate Best Management Practices utilized to reduce or eliminate indirect impacts.

### **Other Non-MUP Property Impacts Reviewed**

Conversion of golf course to vineyard on the eastern section of the property, outside the MUP Site, is the subject of a grading violation (PDS2018-LDGRMJ-30122). Current habitat mapping for this area is included in **Figure 4**. In conjunction with analysis of biological impacts for the MUP Project, REC analyzed potential impacts to biological resources in the grading violation area. Forensic analysis was conducted utilizing available resources, which included Google Earth satellite imagery and historical aerial photography. This analysis consisted of reviewing 2016 "before" and 2018 "after" Google Earth satellite imagery, reviewing past golf course activities on the historical aerial photographs, and gathering information on vineyard establishment activities. **Attachment G** contains a series of images from November 2016 prior to the conversion, and August 2018 after the conversion. Pre-grading Google Maps "Street View" images and tree aerial signatures visible in Google Earth were used to identify visible recognizable trees in the 2016 "before" and 2018 "after" images to assess whether only non-native trees were removed along the creek and elsewhere; these images are provided in **Attachment H**.

The first and second pages of **Attachment G** show the northernmost portion of eastern section of the property in 2016 and 2018. In the 2016 image, this area was dry, unmaintained golf course. A former artificial golf course pond that was present prior to grading is visible but contains no water. Review of historical aerial photographs indicates that the pond was created for the golf course: in the 1953 photograph, neither the golf course nor the pond was present at this location, and in the next photograph (1964) both the golf course and the pond are present (NETR 2019). According to the Project applicant, this former pond feature naturally drained and dried after the artificial water source was removed, and was no longer a water feature. In the 2018 image, the former pond is gone, replaced by vineyards. The concrete-lined drainage swale is visible in both the 2016 and 2018 images, and was not impacted. Grading in this area did not impact native habitats.

The third and fourth pages of **Attachment G** show the central eastern arm of the golf course. In the 2016 image, the golf course includes a drainage swale entering the golf course at the northeastern end, with a row of primarily non-native ornamental trees along the swale. The northeastern-most end of the swale is concrete-lined. In the 2018 image, the northeastern section of the swale has been undergrounded, while the southwestern end has not. Ornamental trees were removed, but the native sycamores and coast live oak were not. Grading in this area did not impact native habitats.

The fifth and sixth pages of **Attachment G** show the southern end of the golf course. The creek enters the area under Gird Road and flows south along the western edge. In the 2016 image, trees are visible along the creek. The lower end of the northern concrete-lined swale and the lower end of the eastern unlined swale join the creek. A paved walkway is located in the middle of the southern eastern arm of

the golf course, lined with primarily non-native ornamental trees. In the 2018 image, the northern concrete-lined swale remains, and the eastern swale has been lined. The former paved walkway has been removed in the northeastern portion, and re-paved in the southeastern portion. Tree cover along the creek has been reduced. According to the applicant, only non-native trees were removed, after consultation with USACE and CDFW. Further analysis of tree removal is provided in **Attachment H** supports this. Grading in this area did not impact native habitats.

**Attachment H** contains Google Maps Street View images from six locations along Gird Road on the west side and Oak Cliff Drive on the south side prior to grading of the golf course. Each Street View image is accompanied by 2016 “before” and 2018 “after” Google Earth images of those tree locations. Many of the trees were identifiable in Street View, and were labeled on the 2016 image in Google Earth. The Google Earth imagery was then shifted to 2018, and labeled trees were compared to see if native trees had been removed. This series of images indicates that no identifiable native coast live oaks, willows, sycamores, and cottonwood were removed during grading of the golf course.

In conclusion, conversion of the golf course to vineyard on the east side of Gird Road did not impact native habitat or other sensitive biological resources, and no mitigation is required.

### **MUP Project Avoidance/Mitigation Measures**

The MUP Project will incorporate the following avoidance/mitigation measures to reduce potentially significant impacts to a level below significant:

1. The Project applicant shall mitigate for impacts to 0.09 acre of coast live oak woodland by establishing a Biological Open Space Easement over 3.6 acres (containing 1.05 acres of coast live oak woodland, 0.05 acre of southern riparian woodland, and 2.47 acres of former golf course turf), with management of the Biological Open Space to be undertaken by Fallbrook Land Conservancy.
2. All coast live oak woodland that is considered Impact Neutral within the MUP shall be labeled on Project plans and shall not be removed unless recommended by an arborist for a specific reason such as disease.
3. The Project applicant shall provide documentation that the USACE, CDFW, and RWQCB do not require a permit, Streambed Alteration Agreement, certification, or mitigation for the replacement bridge or new bridge. If such documentation cannot be provided, and permitting and/or mitigation should be required by any of those Resource Agencies, the Project must comply with those Resource Agency requirements.
4. A 50-foot upland buffer for RPO wetlands shall be established and protected from future impacts.
5. The Project applicant shall ensure that bridge replacement and bridge installation completely span the drainage, do not impact the channel bed or banks, do not impact the drainage channel beyond the minimum necessary, and do not result in removal of or impacts to existing riparian trees, shrubs, or wetland vegetation.
6. Staging areas for bridge replacement and installation shall be located outside of sensitive areas; bridge work shall not be performed during the sensitive avian breeding season except as permitted by measure 7, below; noise attenuation measures shall be used if necessary based on

the avian breeding season; and hours of bridge work shall be limited so as to comply with all applicable ordinances and to avoid impacts to sensitive resources.

7. Prior to vegetation clearing, grubbing, and/or grading, a qualified biologist shall supervise the placement of temporary construction fencing, silt fencing, or flagging at the limits of disturbance adjacent to sensitive habitats or jurisdictional wetlands/waters. The biologist shall attend the pre-construction meeting, educate workers about the need to avoid impacts outside of the approved area, be present during pre-construction activities such as clearing and grubbing to ensure there is no encroachment into the biologically sensitive areas, and notify the County if any such encroachment should occur.
8. The Project applicant shall ensure that no active bird nests are adversely affected by vegetation clearing, grubbing, and grading, in compliance with the Migratory Bird Treaty Act and California Fish and Game Code. These activities shall be scheduled to avoid the County's raptor and general bird breeding season (February 1 – August 31). Alternatively, these activities may occur during the bird breeding season if a qualified, County-approved biologist conducts a survey for active bird nests within three days prior to the work in the area, confirms no active nests are present within 300 feet of activity (or 500 feet for raptor and special-status species nests), and submits the nesting bird survey results to the County for review and approval prior to construction activities occurring during the bird breeding season. The biologist shall then monitor vegetation removal to ensure no nesting birds/raptors are impacted by the Project. If an active nest is identified, the following active nest protection mitigation measures shall be applied:
  - a. A buffer shall be established between the clearing, grubbing, and grading activities and the active nest so that nesting activities are not interrupted. The buffer shall be a minimum width of 300 feet (500 feet for raptors and special-status species), shall be delineated by temporary fencing, and shall remain in effect as long as construction is occurring or until the nest is no longer active. The biologist shall monitor the nest during Project activities until nesting is complete. This buffer may be reduced if it can be demonstrated to the satisfaction of the County of San Diego and Wildlife Agencies that the reduction does not represent a threat to nesting activities.
  - b. Normal clearing, grubbing, and grading without nest buffer(s) may resume once the biologist demonstrates to the satisfaction of the County of San Diego and Wildlife Agencies that all nesting is complete. Nesting would be considered complete if no active nests are observed during a focused nesting bird survey conducted within three days prior to resumption of such activities.
9. Project-related landscaping shall not include non-native plant species that may be invasive to native habitats. Invasive non-native plant species to be avoided include those listed on the California Invasive Plant Council's Invasive Plant Inventory. Prior to approval of grading plans, the Project applicant shall submit and obtain County approval of a Landscape Plan. Any planting stock to be brought onto the Site for landscaping shall be first inspected by a qualified pest inspector to ensure it is free of pest species that could invade natural areas, including, but not limited to, Argentine ants (*Linepithema humile*), imported fire ants (*Solenopsis invicta*), and other insect pests.
10. The Project shall use approved shielded outdoor lighting to prevent indirect light impacts to native habitat.

11. Best Management Practices and the Storm Water Pollution Prevention Plan will specifically include mandatory measures to prevent any movement of water, soils, or any material from the Site into offsite areas.

## **CUMULATIVE IMPACTS**

Cumulative impacts occur as a result of the additive effect of multiple or ongoing direct and indirect impacts to a biological resource over time. A project's direct and indirect impacts may not be individually significant, but the additive effect when viewed in relation to the impacts of past, present and probable future projects may cause the significant loss or degradation of a resource.

The Project will result in significant direct impacts to coast live oak woodland, disturbed wetland habitat, and southern riparian woodland habitat. A potential cumulative impact would be offset by the proposed avoidance and mitigation measures, as well as regional preservation of habitat associated with projects in conformance with the Multiple Species Conservation Program (MSCP). As described by the 1998 MSCP implementing agreement, "the MSCP is a comprehensive, long-term habitat conservation plan for the Covered Species which addresses the needs of multiple species and the preservation of natural vegetation communities. The MSCP addresses the potential impacts of urban growth, natural habitat loss and species endangerment and creates a plan to mitigate for the potential loss of Covered Species and their habitat due to the direct and indirect impacts of future development of both private and public lands within the MSCP Area."

A project can still have significant cumulative effects even if it complies with the MSCP. However, in this case, the Project is not expected to result in the substantial loss of special-status habitat, plants, or wildlife. Because the Project proposes re-conversion of a golf course to a winery and wedding venue, potential cumulative impacts will be below a level of significance. Furthermore, because the Site is not in a proposed North County MSCP Pre-Approved Mitigation Area, the Project will not interfere with successful implementation of the North County MSCP.

## **CONCLUSION**

After implementation of proposed avoidance/mitigation measures, Monserate Winery Project impacts to biological resources including jurisdictional wetlands/waters will be less than significant. This concludes REC's biological resources letter report. Please do not hesitate to contact REC with any questions or comments. Thank you.

Sincerely,



Elyssa Robertson  
Principal Biologist, County QCL

## **PREPARERS**

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3. Aerial Photograph of Site and Vicinity
4. Biological Resources
5. Jurisdictional Wetlands/Waters Areas
- 6a. MUP Impact Area
- 6b. Impact-Neutral Areas in the MUP
7. Onsite Easements

## ATTACHMENTS

- A. Plants Observed on the Monserate Winery Property
- B. Animals Observed on the Monserate Winery Property
- C. Monserate Winery Property Photographs
- D. Special-status Plants with the Potential to Occur on the Monserate Winery Property
- E. Special-status Animals with the Potential to Occur on the Monserate Winery Property
- F. Fallbrook Land Conservancy Letter of Interest and Draft PAR
- G. Grading Violation Area Forensic Biological Resources Review
- H. Grading Violation Area Forensic Tree Review

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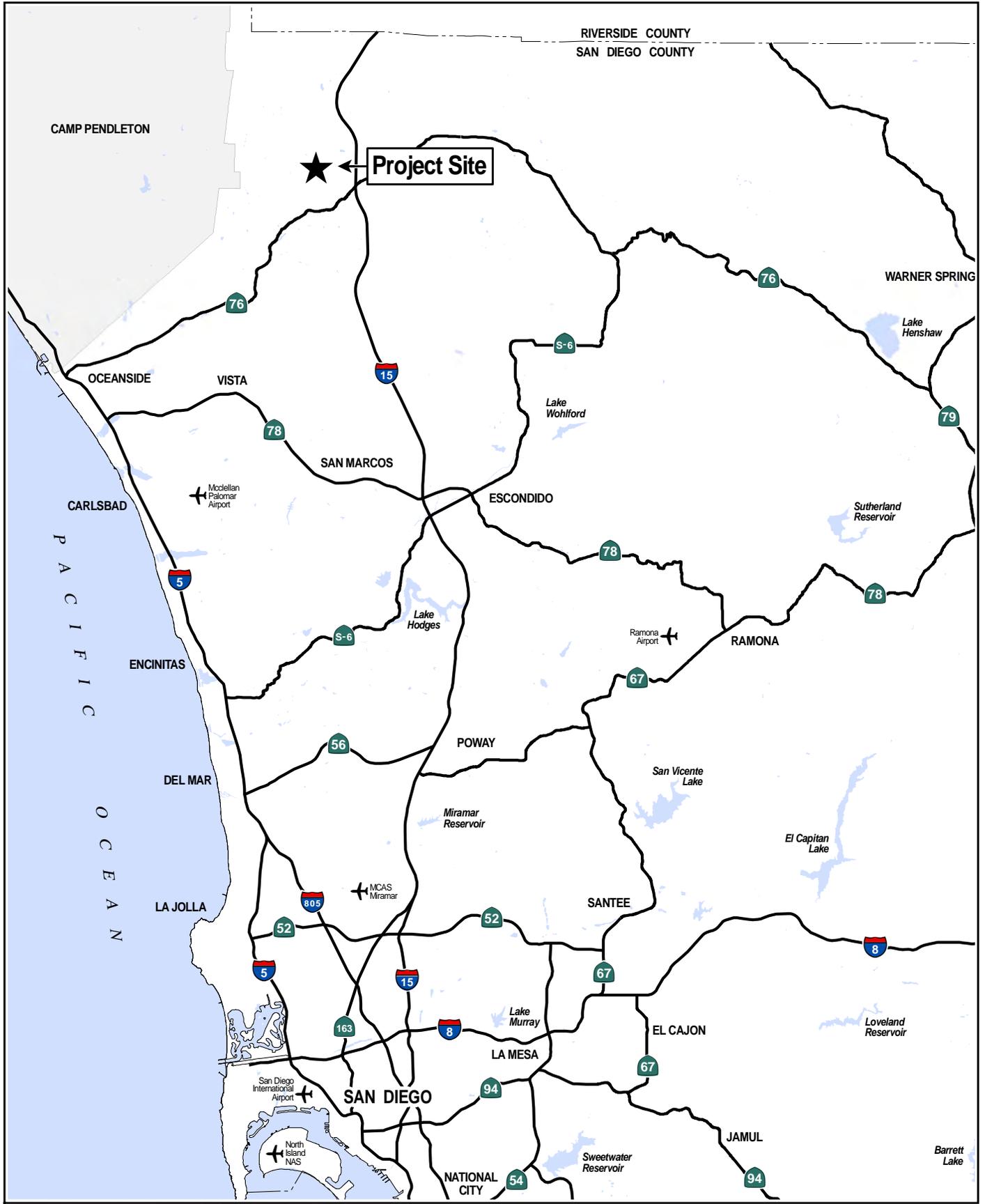
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# FIGURES





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# R·E·C Regional Location

Consultants, Inc. | MONSERATE WINERY

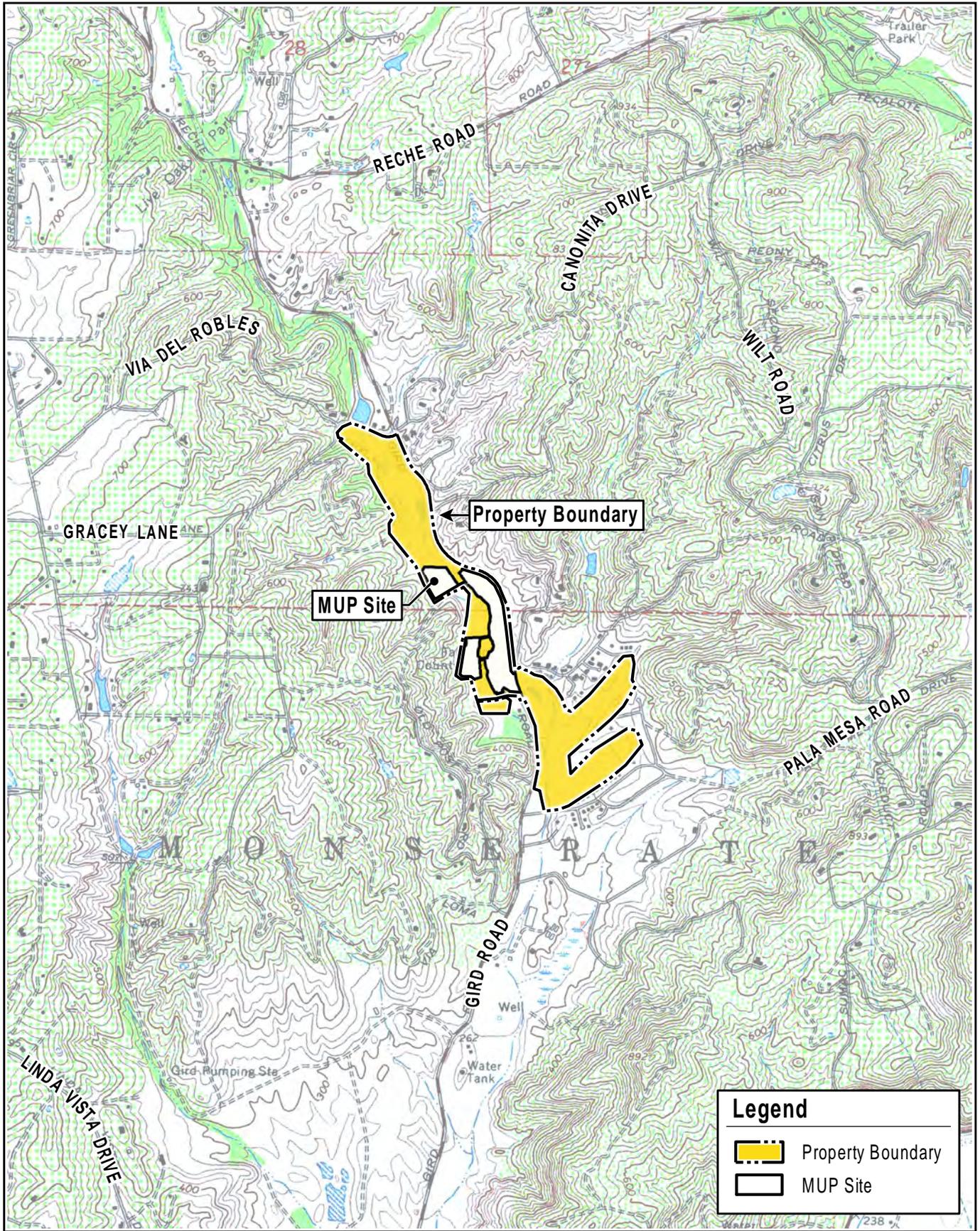


FIGURE 1

Source: County of San Diego SanGIS Database, 2018.

August 2019

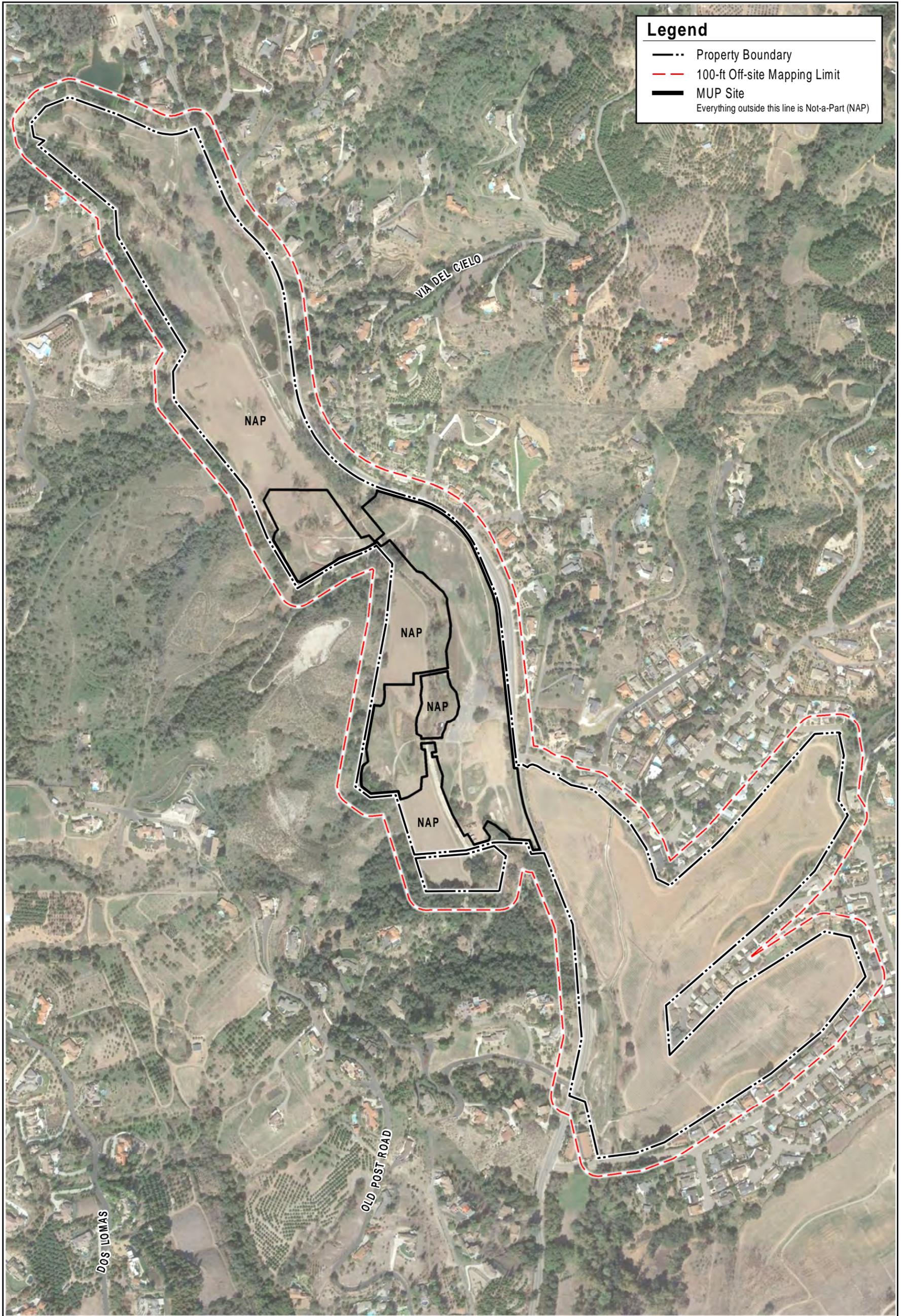




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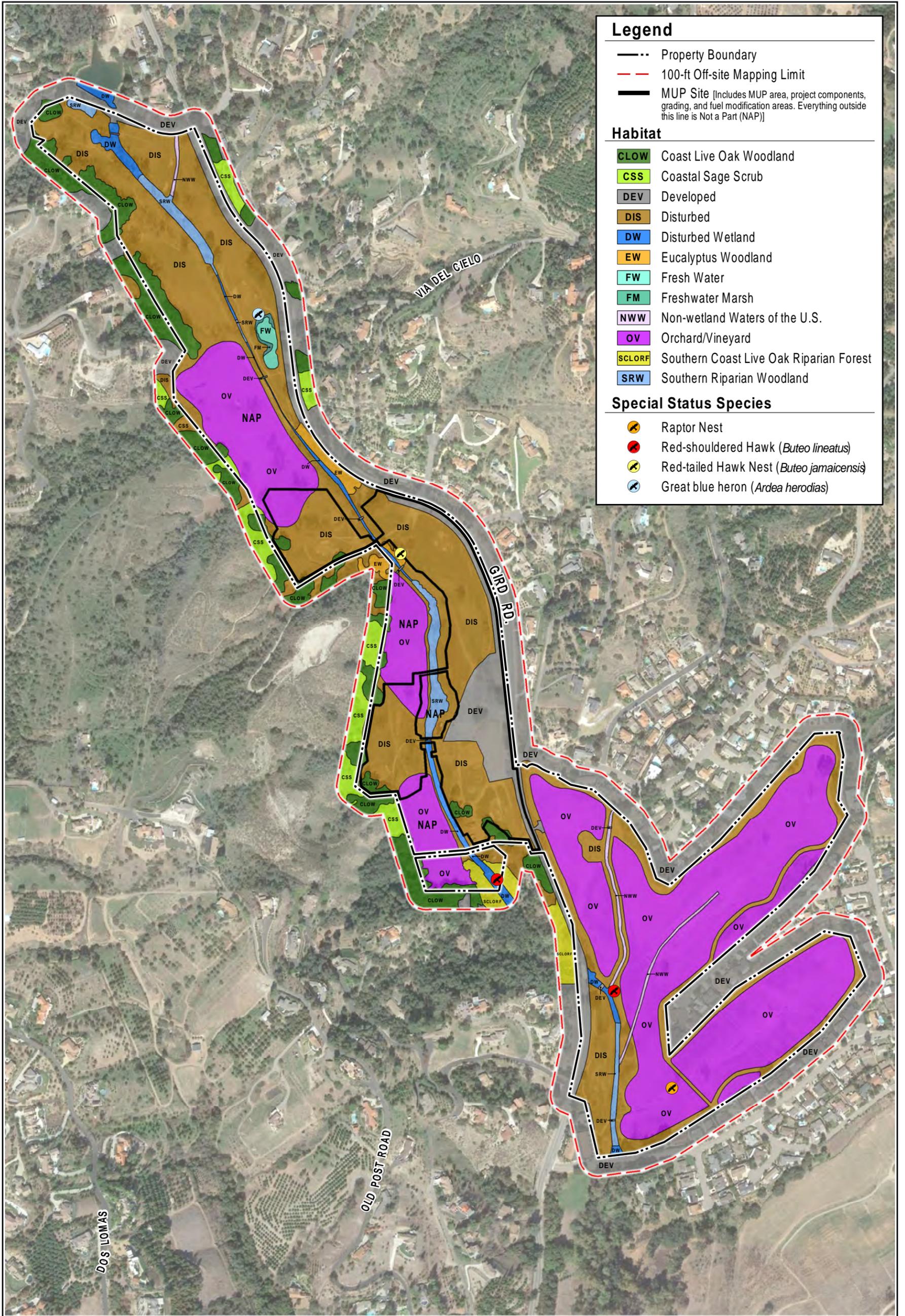


**Legend**

- Property Boundary
- - - 100-ft Off-site Mapping Limit
- MUP Site
- Everything outside this line is Not-a-Part (NAP)

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**Legend**

- Property Boundary
- - - 100-ft Off-site Mapping Limit
- MUP Site [Includes MUP area, project components, grading, and fuel modification areas. Everything outside this line is Not a Part (NAP)]

**Habitat**

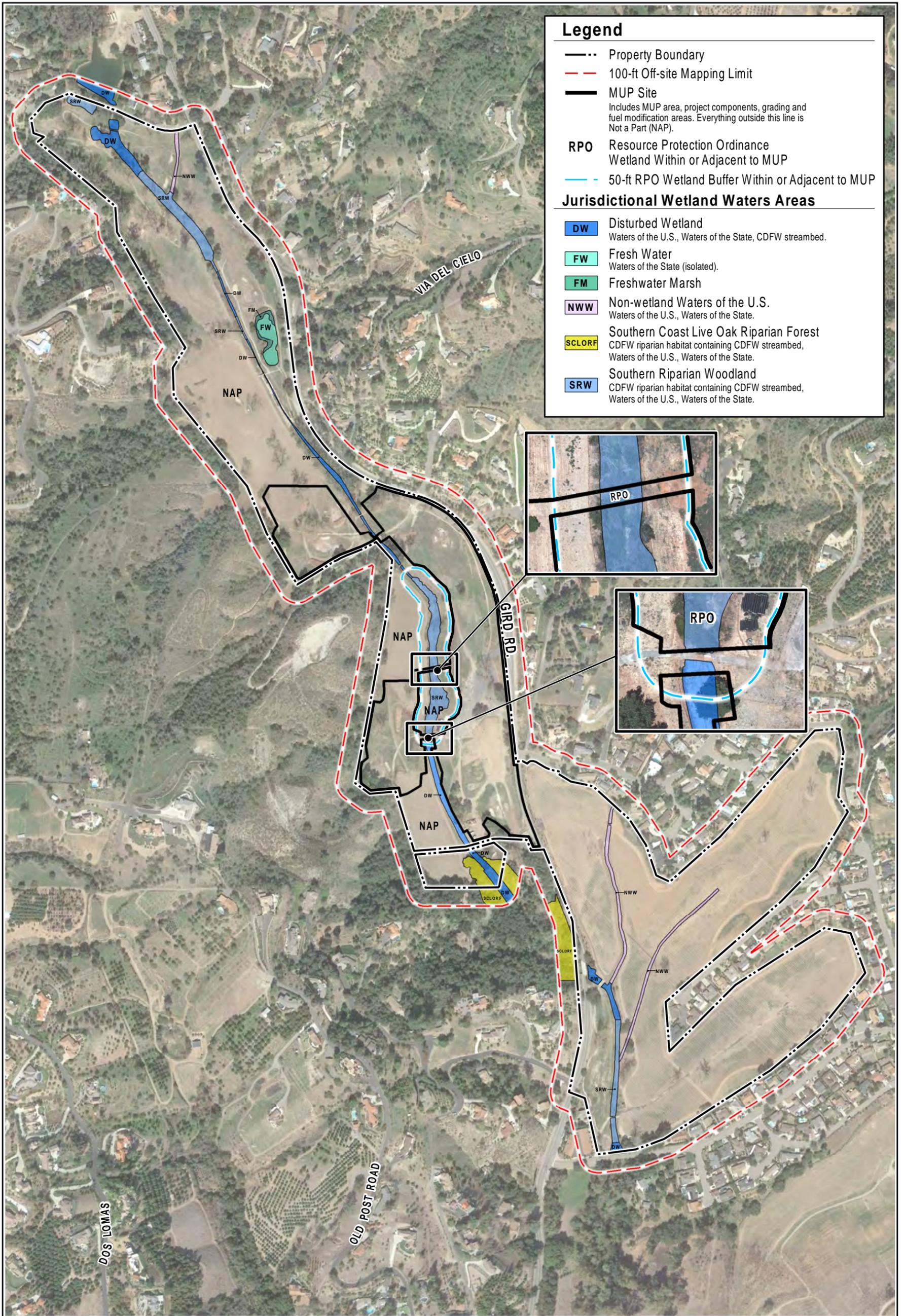
- CLOW** Coast Live Oak Woodland
- CSS** Coastal Sage Scrub
- DEV** Developed
- DIS** Disturbed
- DW** Disturbed Wetland
- EW** Eucalyptus Woodland
- FW** Fresh Water
- FM** Freshwater Marsh
- NWW** Non-wetland Waters of the U.S.
- OV** Orchard/Vineyard
- SCLORF** Southern Coast Live Oak Riparian Forest
- SRW** Southern Riparian Woodland

**Special Status Species**

- Raptor Nest
- Red-shouldered Hawk (*Buteo lineatus*)
- Red-tailed Hawk Nest (*Buteo jamaicensis*)
- Great blue heron (*Ardea herodias*)

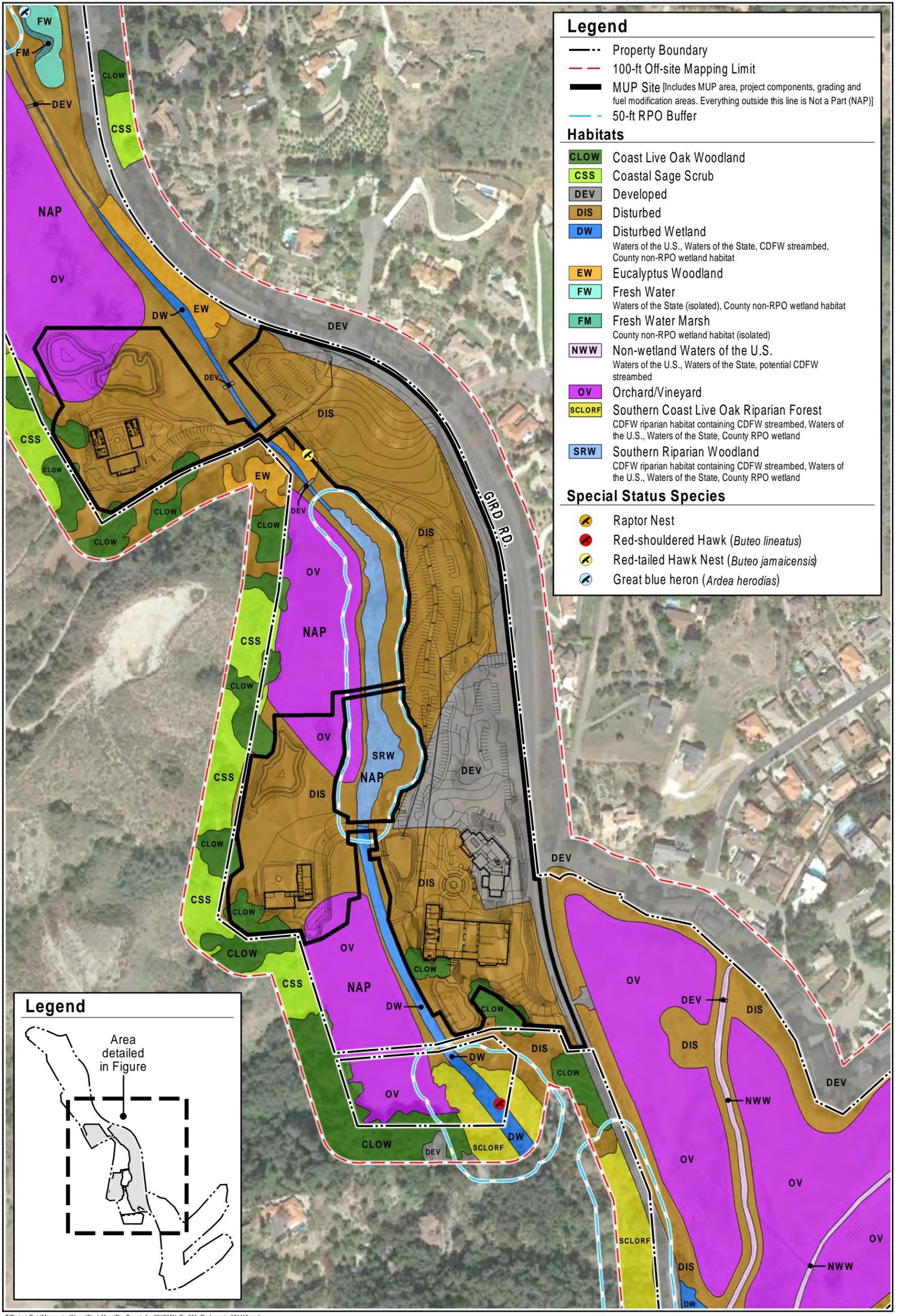
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### Legend

- Property Boundary
- 100-ft Off-site Mapping Limit
- MUP Site [Includes MUP area, project components, grading and fuel modification areas. Everything outside this line is Not a Part (NAP)]
- 50-ft RPO Buffer

### Habitats

- CLOW Coast Live Oak Woodland
- CSS Coastal Sage Scrub
- DEV Developed
- DIS Disturbed
- DW Disturbed Wetland  
Waters of the U.S., Waters of the State, CDFW streambed, County non-RPO wetland habitat
- EW Eucalyptus Woodland
- FW Fresh Water  
Waters of the State (isolated), County non-RPO wetland habitat
- FM Fresh Water Marsh  
County non-RPO wetland habitat (isolated)
- NWW Non-wetland Waters of the U.S.  
Waters of the U.S., Waters of the State, potential CDFW streambed
- OV Orchard/Vineyard
- SCLORF Southern Coast Live Oak Riparian Forest  
CDFW riparian habitat containing CDFW streambed, Waters of the U.S., Waters of the State, County RPO wetland
- SRW Southern Riparian Woodland  
CDFW riparian habitat containing CDFW streambed, Waters of the U.S., Waters of the State, County RPO wetland

### Special Status Species

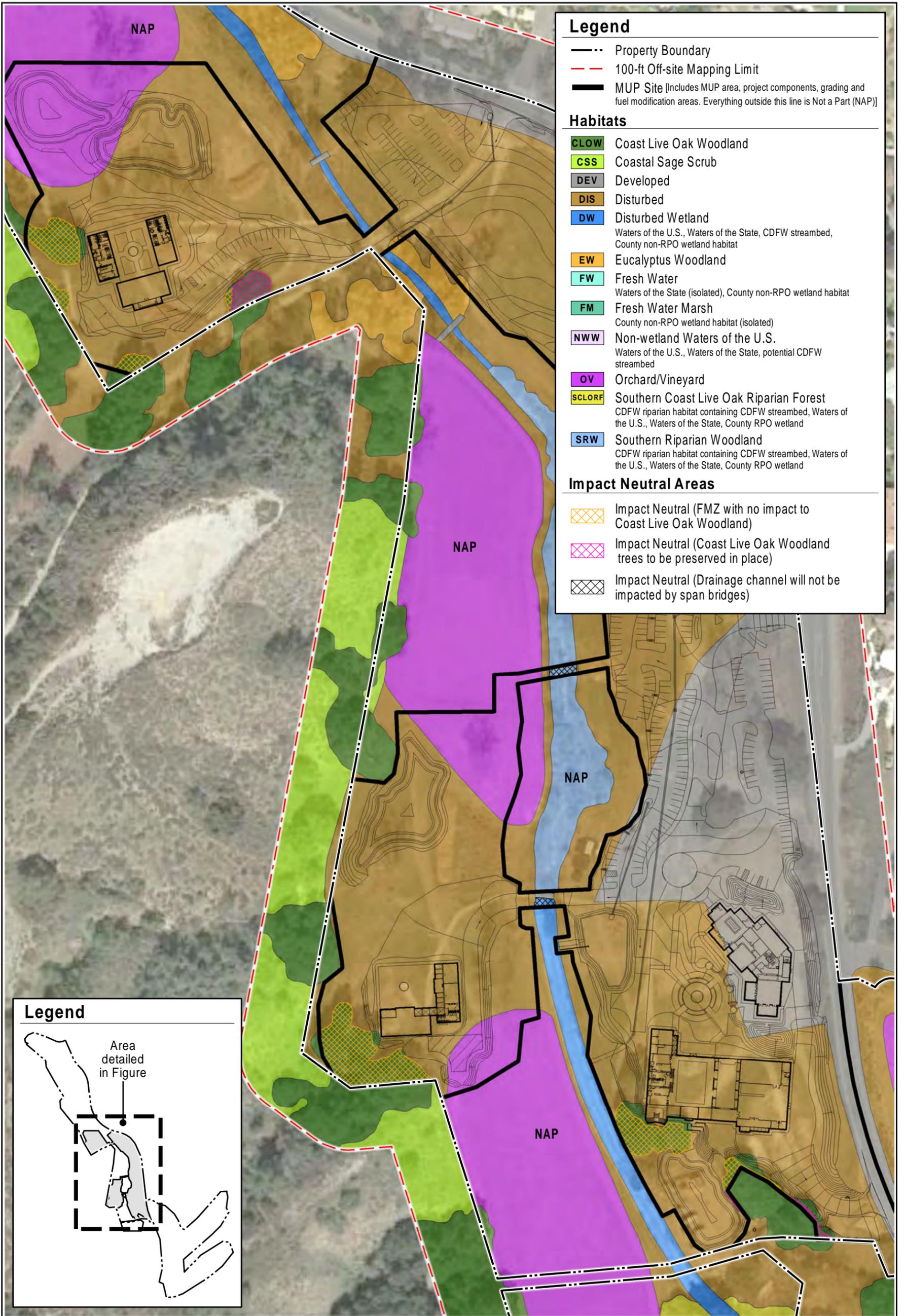
- Raptor Nest
- Red-shouldered Hawk (*Buteo lineatus*)
- Red-tailed Hawk Nest (*Buteo jamaicensis*)
- Great blue heron (*Ardea herodias*)

### Legend

Area detailed in Figure

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### Legend

- Property Boundary
- 100-ft Off-site Mapping Limit
- MUP Site [Includes MUP area, project components, grading and fuel modification areas. Everything outside this line is Not a Part (NAP)]

### Habitats

- CLOW** Coast Live Oak Woodland
- CSS** Coastal Sage Scrub
- DEV** Developed
- DIS** Disturbed
- DW** Disturbed Wetland  
Waters of the U.S., Waters of the State, CDFW streambed, County non-RPO wetland habitat
- EW** Eucalyptus Woodland
- FW** Fresh Water  
Waters of the State (isolated), County non-RPO wetland habitat
- FM** Fresh Water Marsh  
County non-RPO wetland habitat (isolated)
- NWW** Non-wetland Waters of the U.S.  
Waters of the U.S., Waters of the State, potential CDFW streambed
- OV** Orchard/Vineyard
- SCLORF** Southern Coast Live Oak Riparian Forest  
CDFW riparian habitat containing CDFW streambed, Waters of the U.S., Waters of the State, County RPO wetland
- SRW** Southern Riparian Woodland  
CDFW riparian habitat containing CDFW streambed, Waters of the U.S., Waters of the State, County RPO wetland

### Impact Neutral Areas

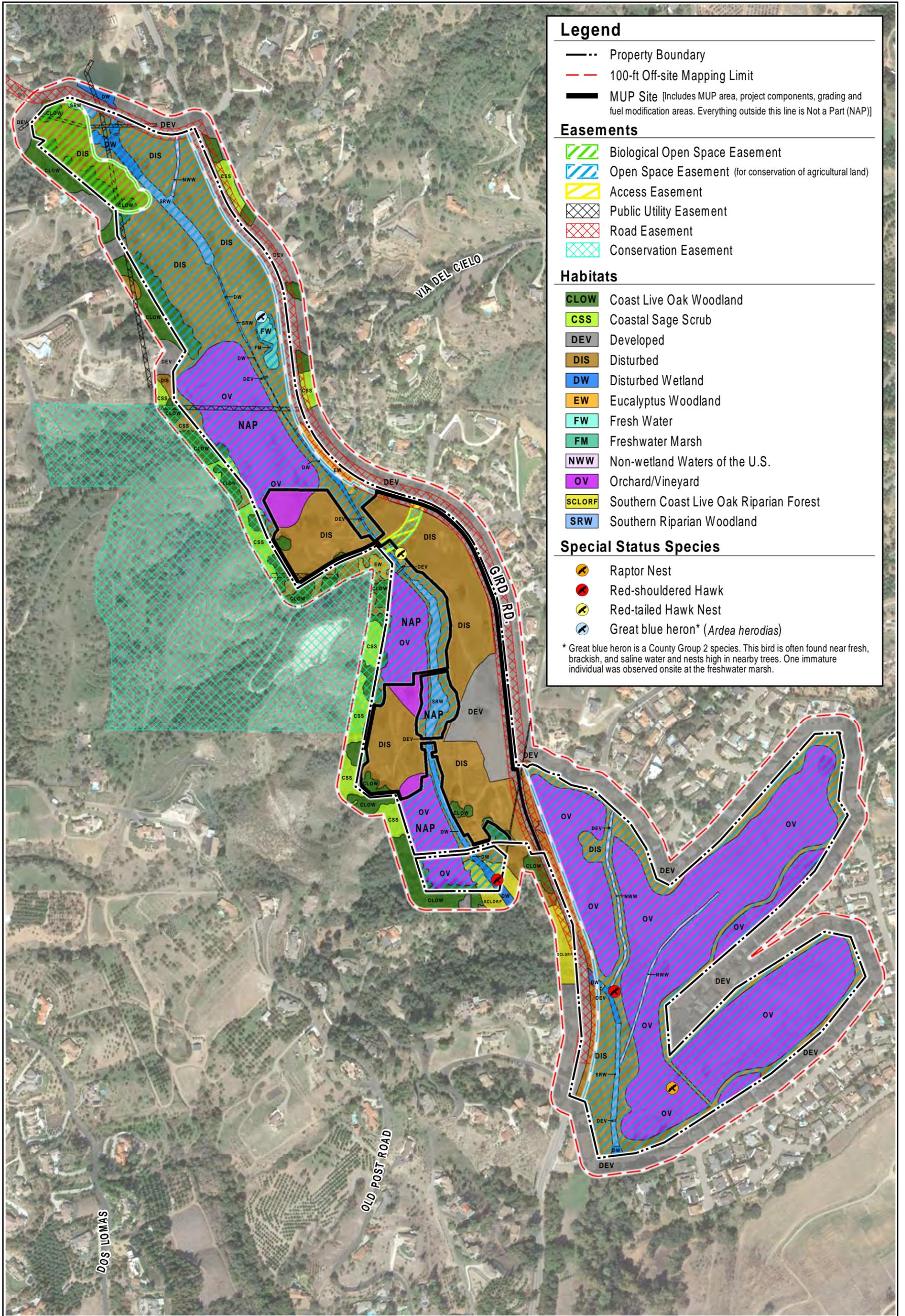
- Impact Neutral (FMZ with no impact to Coast Live Oak Woodland)
- Impact Neutral (Coast Live Oak Woodland trees to be preserved in place)
- Impact Neutral (Drainage channel will not be impacted by span bridges)

### Legend

Area detailed in Figure

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### Legend

- Property Boundary
- 100-ft Off-site Mapping Limit
- MUP Site [Includes MUP area, project components, grading and fuel modification areas. Everything outside this line is Not a Part (NAP)]

### Easements

- Biological Open Space Easement
- Open Space Easement (for conservation of agricultural land)
- Access Easement
- Public Utility Easement
- Road Easement
- Conservation Easement

### Habitats

- CLOW Coast Live Oak Woodland
- CSS Coastal Sage Scrub
- DEV Developed
- DIS Disturbed
- DW Disturbed Wetland
- EW Eucalyptus Woodland
- FW Fresh Water
- FM Freshwater Marsh
- NWW Non-wetland Waters of the U.S.
- OV Orchard/Vineyard
- SCLORF Southern Coast Live Oak Riparian Forest
- SRW Southern Riparian Woodland

### Special Status Species

- Raptor Nest
- Red-shouldered Hawk
- Red-tailed Hawk Nest
- Great blue heron\* (*Ardea herodias*)

\* Great blue heron is a County Group 2 species. This bird is often found near fresh, brackish, and saline water and nests high in nearby trees. One immature individual was observed onsite at the freshwater marsh.

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# **ATTACHMENTS**



**ATTACHMENT A**

<b>PLANTS OBSERVED ON THE MONSERATE WINERY PROPERTY</b>			
<b>Species Name</b>	<b>Common Name</b>	<b>Family</b>	<b>Habitat</b>
<i>Acacia cyclops</i> *	western coastal wattle	Fabaceae	DIS
<i>Aloe</i> sp.*	aloe	Asphodelaceae	DIS
<i>Amaranthus</i> sp.*	amaranth	Amaranthaceae	DIS
<i>Ambrosia psilostachya</i>	western ragweed	Asteraceae	DW
<i>Anthemis cotula</i> *	mayweed, stinkweed, dog-fennel	Asteraceae	DW, SRW
<i>Aptenia cordifolia</i> *	baby sun rose, shrubby dewplant	Aizoaceae	DEV, DIS
<i>Artemisia douglasiana</i>	Douglas mugwort	Asteraceae	DW
<i>Artemisia californica</i>	coastal sagebrush	Asteraceae	CSS
<i>Arundo donax</i> *	giant reed	Poaceae	DW, SCLORF
<i>Atriplex semibaccata</i> *	Australian saltbush	Chenopodiaceae	DIS
<i>Baccharis pilularis</i> subsp. <i>consanguinea</i>	chaparral broom, coyote brush	Asteraceae	CSS, DW
<i>Baccharis salicifolia</i> subsp. <i>salicifolia</i>	mule-fat, seep-willow	Asteraceae	DW, SRW
<i>Brachypodium distachyon</i> *	purple falsebrome	Poaceae	DIS
<i>Calystegia macrostegia</i>	morning-glory	Convolvulaceae	DIS
<i>Capsella bursa-pastoris</i> *	shepherd's purse	Brassicaceae	DIS
<i>Carpobrotus</i> sp.*	sea-fig/hottentot-fig	Aizoaceae	DEV, DW
<i>Chenopodium murale</i> *	nettle-leaf goosefoot	Chenopodiaceae	DIS
<i>Cynodon dactylon</i> *	Bermuda grass	Poaceae	DEV, DIS, DW
<i>Cyperus involucratus</i> *	African umbrella plant	Cyperaceae	DW
<i>Datura wrightii</i>	western jimson weed	Solanaceae	CSS
<i>Delairea odorata</i> *	German-ivy	Asteraceae	DW, EW, SCLORF, SRW
<i>Drosanthemum floribundum</i> *	showy dewflower	Aizoaceae	DEV, DIS
<i>Ehrharta erecta</i> *	panic veldt grass	Poaceae	DW
<i>Erigeron sumatrensis</i> *	asthmaweed	Asteraceae	DIS
<i>Eriogonum fasciculatum</i>	California buckwheat	Polygonaceae	CSS
<i>Erodium cicutarium</i> *	red-stem filaree/storksbill	Geraniaceae	DEV, DIS
<i>Erodium</i> sp.*	filaree/storksbill	Geraniaceae	OV
<i>Eschscholzia californica</i>	California poppy	Papaveraceae	DIS
<i>Eucalyptus</i> sp.*	eucalyptus	Myrtaceae	EW
<i>Euryops</i> sp.*	bush-daisy	Asteraceae	DEV, DIS
<i>Ficus carica</i> *	edible fig	Moraceae	DIS
<i>Foeniculum vulgare</i> *	sweet fennel	Apiaceae	DW
<i>Helminthotheca echioides</i> *	bristly ox-tongue	Asteraceae	DIS
<i>Heteromeles arbutifolia</i>	toyon, Christmas berry	Rosaceae	CLOW
<i>Hirschfeldia incana</i> *	short-pod mustard	Brassicaceae	CSS, DIS
<i>Hordeum vulgare</i> *	cultivated barley	Poaceae	OV
<i>Juniperus</i> sp.*	juniper (ornamental)	Cupressaceae	DEV, DIS
<i>Lactuca serriola</i> *	prickly lettuce	Asteraceae	DIS
<i>Lamium amplexicaule</i> *	henbit	Lamiaceae	DIS
<i>Leonotis leonurus</i> *	lion's ear	Lamiaceae	DEV
<i>Lepidium didymum</i> *	lesser wart-cress	Brassicaceae	DEV, DIS
<i>Lobularia maritima</i> *	sweet alyssum	Brassicaceae	DW
<i>Magnolia</i> sp.*	magnolia	Magnoliaceae	DEV
<i>Malosma laurina</i>	laurel sumac	Anacardiaceae	CSS
<i>Malva parviflora</i> *	cheeseweed	Malvaceae	DEV, DIS, OV
<i>Medicago polymorpha</i> *	California burclover	Fabaceae	DIS
<i>Melaleuca citrina</i> *	lemon bottlebrush	Myrtaceae	DIS
<i>Myoporum laetum</i> *	ngaio, mousehole tree	Scrophulariaceae	DW

**ATTACHMENT A**

<b>Species Name</b>	<b>Common Name</b>	<b>Family</b>	<b>Habitat</b>
<i>Nasturtium officinale</i>	water-cress	Brassicaceae	DW
<i>Nerium oleander</i> *	oleander	Apocynaceae	DEV, DIS
<i>Nicotiana glauca</i> *	tree tobacco	Solanaceae	CSS, DIS, DW
<i>Oenothera elata</i>	marsh evening-primrose	Onagraceae	DW
<i>Olea europaea</i> *	olive	Oleaceae	DEV, DIS
<i>Opuntia sp.</i>	prickly-pear	Cactaceae	CSS
<i>Oxalis pes-caprae</i> *	Bermuda-buttercup	Oxalidaceae	CLOW, DEV, SCLORF
<i>Pennisetum clandestinum</i> *	kikuyu grass	Poaceae	DEV
<i>Phoenix canariensis</i> *	Canary Island date palm	Arecaceae	SCLORF
<i>Phoradendron leucarpum subsp. macrophyllum</i>	big-leaf mistletoe	Viscaceae	DIS, OV, SRW, SCLORF
<i>Pinus sp.</i> *	pine (ornamental)	Pinaceae	DEV, DIS
<i>Plantago erecta</i>	dot-seed plantain	Plantaginaceae	DIS
<i>Platanus racemosa</i>	western sycamore	Platanaceae	DIS, DW, OV, SRW, SCLORF
<i>Plumbago auriculata</i> *	cape leadwort	Plumbaginaceae	DEV, DIS
Poaceae	non-native annual grasses	Poaceae	CLOW, CSS, DEV, DIS, DW, SCLORF
<i>Pseudognaphalium beneolens</i>	fragrant everlasting	Asteraceae	DIS
<i>Pseudognaphalium californicum</i>	California everlasting	Asteraceae	DIS
<i>Punica granatum</i> *	pomegranate	Lythraceae	DIS
<i>Quercus agrifolia var. agrifolia</i>	coast live oak, encina	Fagaceae	CLOW, CSS, DEV, DIS, DW, OV, SCLORF
<i>Raphanus sativus</i> *	wild radish	Brassicaceae	DW
<i>Rhaphiolepis indica</i> *	Indian hawthorn	Rosaceae	DEV, DIS
<i>Rhus integrifolia</i>	lemonadeberry	Anacardiaceae	CLOW
<i>Ricinus communis</i> *	castor bean	Euphorbiaceae	DW, SCLORF
<i>Romneya sp.</i>	Matilija poppy	Papaveraceae	DIS
<i>Rubus armeniacus</i> *	Himalayan blackberry	Rosaceae	DW, SRW
<i>Rumex crispus</i> *	curly dock	Polygonaceae	DW, FM
<i>Salix exigua</i>	narrow-leaf willow	Salicaceae	SRW
<i>Salix gooddingii</i>	Goodding's black willow	Salicaceae	SCLORF, SRW
<i>Salix laevigata</i>	red willow	Salicaceae	SCLORF, SRW
<i>Salix lasiolepis</i>	arroyo willow	Salicaceae	DW, EW, SRW
<i>Salsola sp.</i> *	Russian-thistle	Chenopodiaceae	DIS
<i>Salvia apiana</i>	white sage	Lamiaceae	CSS
<i>Sambucus nigra subsp. caerulea</i>	blue elderberry	Adoxaceae	CLOW, CSS, SCLORF
<i>Schinus terebinthifolius</i> *	Brazilian pepper tree	Anacardiaceae	DEV, DIS, DW
<i>Schoenoplectus/Scirpus sp.</i>	bulrush	Cyperaceae	FM
<i>Sisymbrium irio</i> *	London rocket	Brassicaceae	DIS
<i>Sonchus asper subsp. asper</i> *	prickly sow-thistle	Asteraceae	OV
<i>Sonchus oleraceus</i> *	common sow-thistle	Asteraceae	DIS
<i>Stellaria media</i> *	common chickweed	Caryophyllaceae	DIS
<i>Stipa miliacea var. miliacea</i> *	smilo grass	Poaceae	CLOW, DIS, SCLORF
<i>Stipa sp.</i>	needle grass	Poaceae	DIS
<i>Syagrus romanzoffiana</i> *	queen palm	Arecaceae	DEV, DIS
<i>Tamarix sp.</i> *	tamarisk/saltcedar	Tamaricaceae	DW
<i>Toxicodendron diversilobum</i>	western poison-oak	Anacardiaceae	SCLORF

**ATTACHMENT A**

<b>Species Name</b>	<b>Common Name</b>	<b>Family</b>	<b>Habitat</b>
<i>Typha sp.</i>	cattail	Typhaceae	DW, FM
<i>Urtica dioica subsp. holosericea</i>	hoary nettle	Urticaceae	DW
<i>Vinca major*</i>	greater periwinkle	Apocynaceae	DEV, DIS, DW
<i>Vitis girdiana</i>	Southern California wild grape	Vitaceae	SRW
<i>Vitis vinifera*</i>	cultivated grape, wine grape	Vitaceae	OV
<i>Washingtonia robusta*</i>	Mexican fan palm	Arecaceae	DIS, DW
<i>Xanthium strumarium</i>	cocklebur	Asteraceae	DW, SRW
<i>Yucca gloriosa*</i>	Spanish dagger	Agavaceae	CSS

\* non-native

**Habitat Abbreviations**

CLOW - Coast Live Oak Woodland

DEV - Developed

CSS - Diegan Coastal Sage Scrub

DW - Disturbed Wetland

FW - Fresh Water

FM - Freshwater Marsh

OV - Orchards/Vineyards

SCLORF - Southern Coast Live Oak Riparian Forest

SRW - Southern Riparian Woodland



**ATTACHMENT B**

<b>ANIMALS OBSERVED ON THE MONSERATE WINERY PROPERTY</b>			
<b>Species Name</b>	<b>Common Name</b>	<b>Habitat</b>	<b>Number</b>
<b>Invertebrates</b>			
<i>Apis mellifera</i> *	western honey bee	DW	many
Family Agelenidae	funnel weaver spider	DIS	web
<i>Hippodamia convergens</i>	convergent lady beetle	DIS	5
<i>Papilio zelicaon</i>	anise swallowtail	EW	1
<b>Fish</b>			
<i>Gambusia affinis</i> *	western mosquitofish	FW	many
<b>Amphibians</b>			
Order Anura	frog/toad (unidentified)	DW, SRW, SCLORF	calls
<b>Reptiles</b>			
<i>Chrysemys picta</i> *	painter turtle	FW	1
<b>Birds</b>			
<i>Ardea alba</i>	great egret	DW, FW, FO	2
<i>Ardea herodias</i>	great blue heron	DW	1
<i>Buteo jamaicensis</i>	red-tailed hawk	CLOW, EW	2
<i>Buteo lineatus</i>	red-shouldered hawk	SCLORF	2
<i>Calypte anna</i>	Anna's hummingbird	DW	1
<i>Corvus brachyrhynchos</i>	American crow	CLOW, DEV	8
<i>Fulica americana</i>	American coot	FW	1
<i>Geothlypis trichas</i>	common yellowthroat	SCLORF	calls
<i>Kieneria crissalis</i>	California towhee	DIS	1
<i>Melanerpes formicivorus</i>	acorn woodpecker	CLOW	several
<i>Melospiza melodia</i>	song sparrow	OV	several
<i>Picoides nuttalli</i>	Nuttall's woodpecker	CLOW	1
<i>Sayornis nigricans</i>	black phoebe	DW	2
<i>Setophaga coronata</i>	yellow-rumped warbler	CLOW	several
<i>Sialia mexicana</i>	western bluebird	DIS, OV	5
<i>Sturnus vulgaris</i> *	European starling	DIS	5
<i>Tyrannus verticalis</i>	western kingbird	OV, SRW	4
<i>Zenaida macroura</i>	mourning dove	DEV, DIS, FO	~80 (large flocks)
<b>Mammals</b>			
<i>Canis lupus familiaris</i> *	dog (domestic)	OV	scat, tracks
<i>Otospermophilus beecheyi</i>	California ground squirrel	DW, OV	2+
<i>Thomomys bottae</i>	Botta's pocket gopher	DIS, OV	many (mounds)

\* non-native

**Habitat Abbreviations**

CLOW - Coast Live Oak Woodland  
 DEV - Developed  
 DW - Disturbed Wetland  
 FW - Fresh Water  
 OV - Orchards/Vineyards  
 SRW - Southern Riparian Woodland  
 SCLORF - Southern Coast Live Oak Riparian Forest



**ATTACHMENT C**  
**Monserate Winery Property Photographs, March 2018**



**View north of developed and disturbed land on southern end of western section of site**



**View northwest of golf course land with non-native groundcover and scattered native trees**



**ATTACHMENT C**  
**Monserate Winery Property Photographs, March 2018**



**View west of coast live oak woodland at south end of western section of site**



**View west of coastal sage scrub on hill at west edge of western section of property**



**ATTACHMENT C**  
**Monserate Winery Property Photographs, March 2018**



**View south of eucalyptus woodland on eastern side of western section of property**



**Bridge of disturbed wetland drainage infested with invasive species, northwestern section**



**ATTACHMENT C**  
**Monserate Winery Property Photographs, March 2018**



**View southeast of disturbed wetland on eastern section of site**



**View south of southern riparian woodland in eastern section of site**



**ATTACHMENT C**  
**Monserate Winery Property Photographs, March 2018**



**View south of vineyard**



**View south of concrete-lined drainage in vineyard on eastern section of site**



**ATTACHMENT D**

SPECIAL-STATUS PLANTS WITH THE POTENTIAL TO OCCUR ON THE MONSERATE WINERY PROPERTY (USGS BONSALL QUAD, 93 - 111 METERS [305 - 365 FT] AMSL)										
Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
<i>Abronia villosa var. aurita</i>	chaparral sand-verbena	Nyctaginaceae	1B.1	-/-	-	-	A	Annual herb, (Jan) Mar-Sep	Sandy chaparral, coastal scrub, desert dunes. -60-1570 m.	Very low; not observed; the patches of coastal sage scrub at the edge of the Site lack suitably sandy soil; outside of geographic range (CNDDDB and Plant Atlas).
<i>Acanthomintha ilicifolia</i>	San Diego thorn-mint	Lamiaceae	1B.1	SE/FT	X	X	A	Annual herb, Apr-Jun	Chaparral, coastal scrub, valley and foothill grassland, vernal pools. Endemic to active vertisol clay soils of mesas & valleys. Usually on clay lenses within grassland or chaparral communities. 10-960 m.	Very low; not observed; no suitable habitat with clay soils onsite.
<i>Adolphia californica</i>	California adolphia	Rhamnaceae	2B.1	-/-	-	X	B	Shrub (deciduous), Dec-May	From sandy/gravelly to clay soils within grassland, coastal sage scrub, or chaparral; various exposures. 45-740 m.	Very low; potentially suitable patches of coastal sage scrub are present but would have been detectable and was not observed.
<i>Ambrosia pumila</i>	San Diego ambrosia	Asteraceae	1B.1	-/FE	X	X	A	Perennial herb (rhizomatous), Apr-Oct	Sandy loam or clay soil, sometimes alkaline, in chaparral, coastal scrub, valley and foothill grassland. Sometimes on margins or near vernal pools. 3-580 m.	Low; not observed; suitable soils within drainage floodplain occur onsite, but drainage was historically dredged and bermed to isolate flow, bordering land was developed and landscaped for golf course.
<i>Arctostaphylos rainbowensis</i>	Rainbow manzanita	Ericaceae	1B.1	-/-	-	X	A	Shrub (evergreen), Dec-Mar	Gabbro soils in chaparral; 270- 790 m	Very low; no suitable habitat or soils onsite; would have been detectable and was not observed.

**ATTACHMENT D**

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
<i>Artemisia palmeri</i>	San Diego sagewort	Asteraceae	4.2	-/-	-	-	D	Biennial to perennial herb to subshrub, (Feb) May-Sep	Drainages and riparian areas in sandy soil within chaparral, coastal scrub, riparian forest, riparian woodland and riparian scrub. 15-915 m.	Low; disturbed but marginally suitable habitat occurs onsite, but would have been detectable and was not observed.
<i>Asplenium vespertinum</i>	western spleenwort	Aspleniaceae	4.2	-/-	-	-	D	Perennial herb (rhizomatous), Feb-Jun	Under overhanging rocks in rocky chaparral, cismontane woodland, coastal scrub. 180-1000 m.	Very low; patches of coastal sage scrub at edge of Site lack adequate rocks.
<i>Atriplex coulteri</i>	Coulter's saltbush	Chenopodiaceae	1B.2	-/-	-	X	A	Perennial herb, Mar-Oct	Alkaline or clay soils in coastal bluff scrub, coastal dunes, coastal scrub, valley & foothill grassland, also ridgetops and alkaline low places. 2-460 m.	Very low; not observed, no suitable soils onsite.
<i>Azolla microphylla</i> ( <i>A. mexicana</i> )	Mexican mosquito fern	Azollaceae	4.2	-/-	-	-	D	Annual / perennial herb, Aug	Marshes and swamps (ponds, still water). 30-100 m.	Low; onsite pond is suitable but species not documented in San Diego (Jepson eFlora, Plant Atlas).
<i>Baccharis vanessae</i>	Encinitas baccharis	Asteraceae	1B.1	SE/FT	X	X	A	Shrub (deciduous), Aug-Nov	Steep, open, rocky areas with sandstone soils in maritime chaparral, cismontane woodland. 40-855 m.	Very low; no suitable soils onsite; would have been detectable and was not observed.
<i>Bahiopsis laciniata</i> ( <i>Viguiera l.</i> )	San Diego sunflower (San Diego County viguiera)	Asteraceae	4.3	-/-	-	-	D	Shrub, Feb-Jun (Aug)	Slopes and ridges in chaparral and coastal scrub. 60-750 m.	Low; not observed in the patches of coastal sage scrub onsite.
<i>Bloomeria clevelandii</i> ( <i>Muilla c.</i> )	San Diego goldenstar	Themidaceae	1B.1	-/-	-	X	A	Perennial herb (bulbiferous), Apr-May	Clay soil in chaparral, coastal scrub, valley & foothill grassland. Often on mounds between vernal pools in fine, sandy loam. 50-465 m.	Very low; not observed, no clay soils onsite, potentially suitable sandy loams are within golf course area.

**ATTACHMENT D**

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
<i>Brodiaea filifolia</i>	thread-leaf brodiaea	Themidaceae	1B.1	SE/FT	X	X	A	Perennial herb (bulbiferous), Mar-Jun	Dense Auld and Bosanko clay soils, most often associated with grassland but may occur within openings of other vegetation communities such as coastal sage scrub. 10-1020 m.	Very low; not observed, no suitable soils in suitable habitat onsite.
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	Themidaceae	1B.1	-/-	-	X	A	Perennial herb (bulbiferous), May-Jul	Mesic, clay, sometimes serpentine soils in closed-cone coniferous forest, chaparral, cismontane woodland, meadows & seeps, valley & foothill grassland. Usually in vernal pools and small drainages. 30-1695 m.	Very low; not observed, no suitable mesic soils in suitable habitat onsite.
<i>Calandrinia breweri</i>	Brewer's calandrinia	Montiaceae	4.2	-/-	-	-	D	Annual herb, (Jan) Mar-Jun	Sandy or loamy disturbed or burned areas in chaparral, coastal scrub. 10-1220 m.	Moderate; no <i>Calandrinia</i> observed, but somewhat widespread species, and small patches of disturbed coastal sage scrub occur at edge of Site.
<i>Camissoniopsis lewisii</i> ( <i>Camissonia</i> L.)	Lewis's evening-primrose	Onagraceae	3	-/-	-	-	C	Annual herb, Mar-May (Jun)	Sandy or clay soil in cismontane woodland, coastal bluff scrub, coastal dunes, coastal scrub, valley & foothill grassland. 0-300 m.	Moderate; no <i>Camissoniopsis</i> observed, but somewhat widespread species, and small patches of disturbed coastal sage scrub occur at edge of Site.
<i>Caulanthus simulans</i>	Payson's jewelflower	Brassicaceae	4.2	-/-	-	-	D	Annual herb, (Feb) Mar-May (Jun)	Sandy, granitic soils in chaparral, coastal scrub, burned or disturbed areas such as streambeds; steep, rocky slopes. 90-2200 m.	Low; patches of coastal sage scrub lack suitable sandy soil.

**ATTACHMENT D**

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
<i>Ceanothus verrucosus</i>	wart-stemmed ceanothus	Rhamnaceae	2B.2	-/-	-	X	B	Shrub (evergreen), Dec-May	Southern maritime chaparral and nearby chaparral, rocky slopes. 1-380 m.	Very low; no suitable habitat; would have been detectable and was not observed.
<i>Centromadia parryi subsp. australis</i>	southern tarplant	Asteraceae	1B.1	-/-	-	X	A	Annual herb, May-Nov	Marshes and swamps (margins), valley & foothill grassland (vernally mesic), vernal pools, disturbed areas. 0- 975 m.	Very low; potentially historically suitable habitat has been too heavily impacted by golf course.
<i>Centromadia pungens subsp. laevis</i>	smooth tarplant	Asteraceae	1B.1	-/-	-	-	A	Annual herb, Apr-Sep	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley & foothill grassland, disturbed areas. 5-1170 m.	Very low; potentially historically suitable habitat has been too heavily impacted by golf course.
<i>Chorizanthe leptotheca</i>	Ramona spineflower	Polygonaceae	4.2	-/-	-	-	D	Annual herb, May-Aug	Alluvial fans and granitic soil in chaparral, coastal scrub, lower montane coniferous forest. 300-1900 m.	Low; no <i>Chorizanthe</i> observed onsite; patches of coastal sage scrub likely too disturbed.
<i>Chorizanthe polygonoides var. longispina</i>	long-spined spineflower	Polygonaceae	1B.2	-/-	-	-	A	Annual herb, Apr-Jul	Gabbroic clay soils in chaparral, coastal scrub, meadows & seeps, valley & foothill grassland, near vernal pools. 30-1530 m.	Very low; no <i>Chorizanthe</i> observed onsite; no suitable soils onsite; potentially historically suitable habitat has been too heavily impacted by golf course.
<i>Chorizanthe procumbens</i>	prostrate spineflower	Polygonaceae	CBR	-/-	-	-	-	Annual herb, Apr-Jun	Common on sandy or gravelly soils. (0)10-1300 m. (Jepson)	Low; no <i>Chorizanthe</i> observed onsite; patches of coastal sage scrub likely too disturbed, soil too loamy.

**ATTACHMENT D**

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
<i>Clarkia delicata</i>	delicate clarkia, Campo clarkia	Onagraceae	1B.2	-/-	-	-	A	Annual herb, Apr-Jun	Often gabbroic soil in chaparral, cismontane woodland. 95-1800 m.	Low; not observed, canopy of oak woodlands onsite too dense, soils only marginally suitable.
<i>Comarostaphylis diversifolia</i> <i>subsp. diversifolia</i>	summer-holly	Ericaceae	1B.2	-/-	-	X	A	Shrub (evergreen), Apr-Jun	Chaparral (often mixed, sometimes post-burn), cismontane woodland. 30-945 m.	Very low; no chaparral onsite, would have been detectable and was not observed.
<i>Convolvulus simulans</i>	small-flowered morning-glory	Convolvulaceae	4.2	-/-	-	-	D	Annual herb, Mar-Jul	Wet clay and serpentine ridges in chaparral openings, coastal scrub, valley & foothill grassland. 30-700 m.	Very low; no suitable soils in patches of coastal sage scrub onsite, potentially historically suitable habitat too heavily impacted by golf course.
<i>Cryptantha wigginsii</i>	Wiggin's cryptantha	Boraginaceae	1B.2	-/-	-	-	-	Annual herb, Feb-Jun	Coastal scrub, often on clay soils. 45-110 m.	Low; patches of coastal sage scrub too disturbed, no clay soils onsite.
<i>Deinandra paniculata</i> ( <i>Hemizonia p.</i> )	San Diego tarplant, paniculate tarplant	Asteraceae	4.2	-/-	-	-	D	Annual herb, (Mar) Apr-Nov	Usually vernal mesic sites in coastal scrub and valley and foothill grassland; sometimes vernal pools or nearby mima mounds. 25-940 m.	Low; not observed; no vernal mesic areas in patches of coastal sage scrub; no remaining natural grassland.
<i>Dichondra occidentalis</i>	western dichondra, western ponyfoot	Convolvulaceae	4.2	-/-	-	-	D	Perennial herb (rhizomatous), (Jan) Mar-Jul	Sandy loam, clay and rocky soils in chaparral, cismontane woodland, coastal scrub, valley & foothill grassland. 50-500 m.	Low to moderate; somewhat widespread and suitable habitat and soil present at west edge of Site, but habitat likely too disturbed, and not observed.
<i>Dudleya multicaulis</i>	many-stem dudleya	Crassulaceae	1B.2	-/-	-	-	A	Perennial herb, Apr-Jul	Heavy, often clay soils in chaparral, coastal scrub, valley & foothill grassland. 1-910 m.	Very low; no <i>Dudleya</i> observed onsite, no suitable soils onsite.

**ATTACHMENT D**

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
<i>Dudleya viscida</i>	sticky dudleya	Crassulaceae	1B.2	-/-	-	X	A	Perennial herb, May-Jun	North and south-facing cliffs and banks in coastal bluff scrub, chaparral, cismontane woodland, coastal scrub. 10-550 m.	Very low; no <i>Dudleya</i> observed onsite, no north or south-facing cliffs/banks in coastal sage scrub onsite, or in onsite woodlands with adequately open canopy.
<i>Ericameria palmeri</i> var. <i>palmeri</i>	Palmer's goldenbush	Asteraceae	1B.1	-/-	X	-	B	Shrub (evergreen), (Jul) Sep-Nov	Steep hillsides, granitic soils in mesic chaparral, coastal scrub. 5-625 m.	Very low; would have been detectable and was not observed; no mesic coastal sage scrub or chaparral onsite.
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	Apiaceae	1B.1	SE/FE	-	X	A	Biennial to perennial herb, Apr-Jun	San Diego mesa hardpan & claypan vernal pools & southern interior basalt flow vernal pools in coastal scrub or valley and foothill grassland. 15-880 m.	Very low; not observed; no suitable vernal pool or similar habitat onsite.
<i>Ferocactus viridescens</i>	coast barrel cactus, San Diego barrel cactus	Cactaceae	2B.1	-/-	-	X	B	Perennial (stem succulent), May-Jun	Chaparral, coastal scrub, valley & foothill grassland, near vernal pools; often exposed, level or south-sloping areas, near crest of slopes. 3-490 m.	Very low; would have been detectable and was not observed; patches of coastal sage scrub onsite are too disturbed.
<i>Harpagonella palmeri</i>	Palmer's grappling-hook	Boraginaceae	4.2	-/-	-	-	D	Annual herb, Mar-May	Clay soils in chaparral, coastal scrub, valley & foothill grassland. 20-955 m.	Very low; not observed; no suitable habitat with clay soils onsite.
<i>Hazardia orcuttii</i>	Orcutt's goldenbush, Orcutt's hazardia	Asteraceae	1B.1	ST/-	-	-	A	Shrub (evergreen), Aug-Oct	Grassy edges of maritime chaparral, coastal scrub, often clay soil. 80-85 m.	Very low; not observed, Site is outside its very restricted range (Jepson 2018, Plant Atlas 2018)

**ATTACHMENT D**

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
<i>Holocarpa virgata subsp. elongata</i>	graceful tarplant	Asteraceae	4.2	-/-	-	-	D	Annual herb, May-Nov	Chaparral, cismontane woodland, coastal scrub, valley & foothill grassland. 60-1100 m.	Low; not observed, patches of coastal sage scrub onsite likely too disturbed, no natural grassland onsite.
<i>Hordeum intercedens</i>	little barley, vernal barley	Poaceae	3.2	-/-	-	-	C	Annual herb, Mar-Jun	Dry, saline streambeds and alkaline flats in coastal dunes, coastal scrub, valley and foothill grassland; vernal pools. 5-1000 m.	Very low; onsite drainage too disturbed, potentially historically suitable habitat has been too heavily impacted by golf course.
<i>Horkelia cuneata var. puberula</i>	mesa horkelia	Rosaceae	1B.1	-/-	-	-	A	Perennial herb, Feb-July (Sep)	Sandy or gravelly chaparral, cismontane woodland, coastal scrub. 15-1645 m.	Very low; no Horkelia observed, coastal sage scrub patches onsite too disturbed and soil too loamy.
<i>Isocoma menziesii var. decumbens</i>	decumbent goldenbush	Asteraceae	1B.2	-/-	-	-	A	Shrub, Apr-Nov	Sandy, often disturbed areas in chaparral, coastal scrub. 1-915 m.	Low; would have been detectable and was not observed; patches of coastal sage scrub onsite too disturbed.
<i>Iva hayesiana</i>	San Diego marsh-elder	Asteraceae	2B.2	-/-	-	-	B	Perennial herb to subshrub, Apr-Oct	Marshes & swamps, playas, riverwashes. 1-430 m.	Low; would have been detectable and was not observed; patches of coastal sage scrub onsite too disturbed.
<i>Juglans californica (J. c. var. californica)</i>	Southern California black walnut	Juglandaceae	4.2	-/-	-	-	D	Tree (deciduous), Mar-Aug	Slopes, canyons, and alluvial habitats in chaparral, cismontane woodland, coastal scrub. 50-900 m.	Low; no <i>Juglans</i> observed.
<i>Juncus acutus subsp. leopoldii</i>	southwestern spiny rush	Juncaceae	4.2	-/-	-	-	D	Perennial herb, (Mar) May-Jun	Moist saline places such as mesic coastal dunes, alkaline seeps, salt marshes. 3-900 m.	Very low; not observed; potentially suitable moist areas onsite are highly disturbed.

**ATTACHMENT D**

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
<i>Lasthenia glabrata subsp. coulteri</i>	Coulter's salt-marsh daisy, Coulter's goldfields	Asteraceae	1B.1	-/-	-	-	A	Annual herb, Feb-Jun	Alkaline soils in coastal salt marshes & swamps, playas, vernal pools. 1-1375 m.	Very low; no suitable habitat onsite.
<i>Lepidium virginicum var. robinsonii</i> (not recognized in Jepson)	Robinson's peppergrass	Brassicaceae	4.3	-/-	-	-	A	Annual herb, Jan-Jul	Dry chaparral, coastal scrub. 4- 1435 m.	Low to moderate; somewhat widespread, potentially suitable patches of coastal sage scrub habitat at edge of Site, and can be difficult to detect because it leafs out early, but habitat is likely too disturbed.
<i>Lilium humboldtii subsp. ocellatum</i>	ocellated lily, ocellated Humboldt lily	Liliaceae	4.2	-/-	-	-	D	Perennial herb (bulbiferous), Mar-Jul (Aug)	Openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian forest. 30-1800 m.	Low; no <i>Lilium</i> observed, onsite habitat too disturbed.
<i>Microseris douglasii subsp. platycarpa</i>	small-flower microseris	Asteraceae	4.2	-/-	-	-	D	Annual herb, Mar-May	Alkaline clay soils in cismontane woodland, coastal scrub, valley & foothill grassland, vernal pools. 15- 1070 m.	Very low; no clay soils onsite, potentially historically suitable habitat impacted by golf course.
<i>Myosurus minimus</i> (includes <i>M. m. subsp. apus</i> )	little mousetail	Ranunculaceae	3.1	-/-	-	X	C	Annual herb, Mar-Jun	Valley & foothill grassland, vernal pools (alkaline). 20-640 m.	Very low; no vernal pool or similar habitat onsite.
<i>Nama stenocarpa</i>	mud nama	Boraginaceae	2B.2	-/-	-	-	B	Annual to perennial herb, Jan-Jul	Marshes & swamps (lake margins, riverbanks). 5-500 m.	Low; not observed, potential habitat is too disturbed.
<i>Navarretia fossalis</i>	spreading navarretia, Moran's navarretia	Polemoniaceae	1B.1	-/FT	-	X	A	Annual herb, Apr-Jun	Vernal pools, swales, and depressions surrounded by chaparral, grassland, or scrub. 15-850 m.	Very low; no vernal pool or similar habitat onsite.

**ATTACHMENT D**

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
<i>Nolina cismontana</i>	Peninsular bear-grass, chaparral nolina	Ruscaceae	1B.2	-/-	-	X	A	Shrub (evergreen), Mar-Jul	Sandstone, shale or gabbro soils in chaparral, coastal scrub. 140- 1275 m.	Very low; not observed, coastal scrub onsite lacks suitable soil types.
<i>Ophioglossum californicum</i>	California adder's tongue	Ophioglossaceae	4.2	-/-	-	-	D	Perennial herb (rhizomatous), (Dec) Jan-Jun	Mesic chaparral and valley & foothill grassland, vernal pools margins. 60-525 m.	Very low; not observed, no vernal pools or similar onsite, potentially historically suitable habitat impacted by golf course.
<i>Pentachaeta aurea subsp. aurea</i>	golden-ray pentachaeta	Asteraceae	4.2	-/-	-	-	D	Annual herb, Mar-Jul	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, valley & foothill grassland. 80-1850 m.	Moderate; not observed but somewhat widespread, patches of coastal sage scrub present onsite, and can be difficult to detect in dry years.
<i>Piperia cooperi</i>	Cooper's rein orchid	Orchidaceae	4.2	-/-	-	-	D	Perennial herb, Mar-Jun	Chaparral, cismontane woodland, valley & foothill grassland. 15-1585 m.	Low; not observed, woodland understories onsite are too disturbed, no natural grassland onsite.
<i>Piperia leptopetala</i>	narrow-petal rein orchid	Orchidaceae	4.3	-/-	-	-	D	Perennial herb, May-Jul	Cismontane woodland, lower montane coniferous forest, upper montane coniferous forest. 380-2225 m.	Very low; not observed, woodland understories onsite are too disturbed, no natural grassland onsite, usually occurs at higher elevations.
<i>Polygala cornuta var. fishiae</i>	Fish's milkwort	Polygalaceae	4.3	-/-	-	-	D	Shrub (deciduous), May-Aug	Chaparral, cismontane woodland, riparian woodland; scree slopes, brushy ridges, and along creeks, often with oaks. 100-1000 m.	Low; not observed, onsite woodlands and drainage too disturbed

**ATTACHMENT D**

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	Asteraceae	2B.2	-/-	-	-	-	Perennial herb, (Jul) Aug-Nov (Dec)	Sandy, gravelly sites in riparian woodland, cismontane woodland, coastal scrub, chaparral. 35-515 m.	Low; not observed, woodlands and coastal sage scrub onsite do not have sandy or gravelly substrate.
<i>Quercus dumosa</i>	Nuttall's scrub oak	Fagaceae	1B.1	-/-	-	X	A	Shrub (evergreen), Feb-Apr (May- Aug)	Sandy soil near coast, clay loam soils in closed-cone coniferous forest, chaparral, coastal scrub. 15-400 m.	Very low; suitable habitat does not occur onsite; would have been detectable and was not observed.
<i>Quercus engelmannii</i>	Engelmann/mesa blue oak	Fagaceae	4.2	-/-	-	X	D	Tree (deciduous), Mar-Jun	Chaparral, cismontane woodland, riparian woodland, valley & foothill grassland. 50-1300 m.	Very low; suitable habitat occurs onsite but would have been detectable and was not observed.
<i>Saltugilia latimeri</i>	Latimer's woodland-gilia	Polemoniaceae	1B.2	-/-	-	-	-	Annual herb, Mar-Jun	Rocky or sandy soil (sometimes in washes or limestone) in chaparral, Mojavean desert scrub, pinyon and juniper woodland. 120-2200 m.	Very low; suitable habitat does not occur onsite.
<i>Selaginella cinerascens</i>	ashy spike-moss	Selaginellaceae	4.1	-/-	-	-	D	Perennial herb (rhizomatous)	Chaparral and coastal scrub on undisturbed soil. 20-640 m.	Very low; patches of coastal sage scrub present onsite are too disturbed, with dense non-native annual grass cover between shrubs.
<i>Senecio aphanactis</i>	California groundsel, chaparral ragwort	Asteraceae	2B.2	-/-	-	-	B	Annual herb, Jan-Apr (May)	Chaparral, cismontane woodland, coastal scrub, sometimes alkaline flats. 20-855 m.	Low; patches of coastal sage scrub present onsite are too disturbed.
<i>Sidalcea neomexicana</i>	salt spring checker-bloom	Malvaceae	2B.2	-/-	-	-	-	Perennial herb, Mar-Jun	Alkali springs and marshes in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas. 3-2380 m.	Very low; suitable habitat does not occur onsite.

**ATTACHMENT D**

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
<i>Tetracoccus dioicus</i>	Parry's tetracoccus	Picrodendraceae	1B.2	-/-	-	X	A	Shrub, Apr-May	Rocky, decomposed gabbro soil in chaparral, coastal scrub. 135-705 m.	Very low; patches of coastal sage scrub onsite too disturbed, no suitable soil; would have been detectable and was not observed.
<i>Tortula californica</i>	California screw-moss	Pottiaceae	1B.2	-/-	-	-	-	Moss	Sandy soils in chenopod scrub, valley and foothill grassland. 10-1460 m.	Non-vascular plants were not evaluated for potential to occur but suitable habitat does not occur onsite and is outside known geographic range (CNDDDB and Plant Atlas).

**Listing Designations**

CRPR - California Rare Plant Rank (from Rare Plant Status Review Group, jointly managed by California Department of Fish and Wildlife [CDFW] and California Native Plant Society [CNPS])

- |   |  |
|---|--|
| 1A - Plants presumed extirpated in California and either rare or extinct elsewhere  | .1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)                       |
| 1B - Plants rare, threatened or endangered in California AND elsewhere              |  |
| 2A - Presumed extirpated or extinct in California, but more common elsewhere        | .2 - Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)                       |
| 2B - Plants rare, threatened or endangered in California, but more common elsewhere |  |
| 3 - Plants about which more information is needed - a review list                   | .3 - Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known) |
| 4 - Plants of limited distribution - a watch list                                   |  |
- CBR - Considered But Rejected

State of California species designations (CDFW April 2016)

- SE - State-listed Endangered
- ST - State-listed Threatened
- SR - State-listed Rare

Federal species designations (CDFW April 2016, USFWS 2016)

- FE - Federally-listed Endangered
- FT - Federally-listed Threatened
- FC - Federal candidate for listing

Cnty NE - an X in this column indicates the species is considered a Narrow Endemic by the County of San Diego (MSCP County of San Diego Subarea Plan 1997)

NCPC - an X in this column indicates the species is proposed covered under in-process North County Multiple Species Conservation Program

Cnty List - County Sensitive Plant List (County of San Diego 2010)

- A - County List A: plants rare, threatened or endangered in California and elsewhere
- B - County List B: plants rare, threatened or endangered in California but more common elsewhere
- C - County List C: plants which may be rare, but need more information to determine their true rarity status
- D - County List D: plants of limited distribution and are uncommon, but not presently rare or endangered



**ATTACHMENT E**

SPECIAL-STATUS ANIMALS WITH THE POTENTIAL TO OCCUR ON THE MONSERATE WINERY PROPERTY (USGS BONSALL QUAD, 93 - 111 METERS [305 - 365 FT] AMSL)							
Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<b>INVERTEBRATES</b>							
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	-/FT	-	-	-	Vernal pools; only one occurrence documented by CNDDDB in San Diego, a depression within coastal sage scrub in Oceanside.	None; suitable habitat does not occur onsite.
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	-/FE	X	X	1	Vernal pools and other unvegetated ephemeral basins in Orange and San Diego Counties and Baja California. Habitat is typically < 30 cm deep and within 64 km of the Pacific Ocean. < 701 m.	None; suitable habitat does not occur onsite.
<i>Danaus plexippus</i>	monarch butterfly	-/-	-	-	2	Land with larval host plant, milkweed ( <i>Asclepias</i> spp.), or nectar plants. Overwintering habitats limited to coastal conifer or eucalyptus groves.	Low; host plant not observed, limited nectar plants onsite.
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	-/FE	X	X	1	Sunny openings within chaparral and coastal sage shrublands on hills and mesas. Larval host plants are primarily <i>Plantago erecta</i> and <i>P. patagonica</i> , but <i>Antirrhinum coulterianum</i> , <i>Cordylanthus rigidus</i> , <i>Castilleja exserta</i> , and <i>Collinsia heterophylla</i> may also be used.	Low; very marginally suitable coastal sage scrub habitat with weed-filled openings between shrubs occurs in small patches along the central western border of the property, outside the MUP project footprint, but host plants were not observed in the sage scrub. The property is not in the Quino survey area.
<i>Lycaena hermes</i>	Hermes copper butterfly	-/FC	-	X	1	Southern mixed chaparral and coastal sage scrub; limited to western edge of Laguna Mountains. Host plant is <i>Rhamnus crocea</i> .	Low; host plant not observed in adjacent CSS and site beyond known geographic range.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	-/FE	X	X	1	Vernal pools in grassland and coastal sage scrub in western Riverside, Orange and San Diego Counties (Ramona area), and coastal SD County. Does not appear until later in the season; may require warmer water or longer inundation times than <i>Branchinecta sandiegonensis</i> .	None; suitable habitat does not occur onsite.
<i>Tryonia imitator</i>	mimic tryonia	-/-	-	-	2	Coastal lagoons, estuaries and salt marshes in permanently submerged areas, in a variety of sediment types, withstands wide range of salinity.	None; suitable habitat does not occur onsite.
<b>FISH</b>							
<i>Eucyclogobius kristinae</i> ( <i>E. newberryi</i> )	tidewater goby	SSC/FE	X	-	1	Coastal lagoons, lower reaches of streams (fresh or brackish), vegetated pools in slow (not stagnant) areas of streams, and uppermost portions of large bays. Generally occurs in well-oxygenated water 25-100 cm deep with mud substrate. Southern end of range is Agua Hedionda Lagoon in Carlsbad, San Diego.	None; suitable habitat does not occur onsite.
<i>Gila orcuttii</i>	arroyo chub	SSC/-	-	X	1	Slow moving sections of streams with sand or mud substrate; also in headwaters, creeks, small-medium rivers, often intermittent streams; tolerant of low oxygen and wide temperature fluctuations; midwater and benthic. Southern end of native range is San Luis Rey River basin; introduced to San Diego River.	None; suitable habitat does not occur onsite.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<b>AMPHIBIANS</b>							
<i>Anaxyrus californicus</i> ( <i>Bufo microscaphus c.</i> )	arroyo toad	SSC/FE	X	X	1	Washes, arroyos, sandy riverbanks, and riparian areas, especially with willows, cottonwoods and sycamores; needs exposed sandy streambanks with stable terraces for burrowing with scattered vegetation for shelter, and areas of quiet water or pools free of predatory fishes with sandy or gravel bottoms without silt for breeding. 0-900 m	Low; onsite drainage includes areas of riparian trees but lacks sandy streambanks with stable terraces and pools/quiet water for breeding. Because suitable breeding habitat is absent onsite, as well as upstream and downstream within the developed suburban environment, use of uplands for estivation is unlikely.
<i>Rana draytonii</i> ( <i>R. aurora d.</i> )	California red-legged frog	SSC/FT	X	-	1	Lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Only documented occurrence in San Diego was from San Felipe Creek in Anza-Borrego Desert and was extirpated.	Low; site far from last known occurrence of this species in San Diego.
<i>Spea hammondi</i>	western spadefoot	SSC/-	-	X	2	Grassland, also valley-foothill hardwood woodlands. Vernal pools essential for breeding and egg-laying. Activity limited to wet season, summer storms or during evenings with elevated substrate moisture levels; stays below ground in dry/cold weather. Nocturnal. Extirpated throughout much of lowland southern California.	Low; onsite wetlands too disturbed.
<i>Taricha torosa</i>	Coast Range newt	SSC/-	-	X	2	Various upland habitats such as grassland, woodland, and forest. Can migrate over 1 km to breed in ponds, reservoirs, and streams. In San Diego, only known from northwestern County (De Luz) and isolated populations in Cedar Creek and Boulder Creek (near El Capitan Reservoir).	Low; outside of known range (SDNHM and CNDDB) and onsite habitats only very marginally suitable.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<b>REPTILES</b>							
<i>Actinemys marmorata</i> ( <i>Emys m.</i> , <i>Clemmys m. p.</i> )	western pond turtle	SSC/-	X	X	1	Permanent waters with aquatic vegetation; can occur in urban conditions and brackish water. Nests in sand or grassy open fields up to 0.5 km from water. < 1850 m	Low; onsite pond could be suitable, but surrounding upland is unsuitable.
<i>Anniella stebbinsi</i> ( <i>A. p. pulchra</i> )	southern California legless lizard (silvery legless lizard)	SSC/-	-	-	2	Sandy or loose loamy soils under sparse vegetation or other cover. Occasionally found in suburban gardens. Mostly subterranean and strongly prefer soils with a high moisture content.	Moderate; could occur in loose soil at edges of golf course/vineyards.
<i>Arizona elegans occidentalis</i>	California glossy snake	SSC/-	-	-	-	Various scrub and grassland habitats, often with loose or sandy soils; Peninsular Ranges.	Low; remaining patches of coastal sage scrub at edge of site too disturbed.
<i>Aspidoscelis hyperythrus</i> ( <i>A. hyperythrus beldingii</i> )	orange-throated whiptail	WL/-	-	X	2	Low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats; prefers sandy areas with perennial plants that support termites.	Moderate; suitable habitat occurs on and adjacent to the site.
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	SSC/-	-	-	2	Found in hot, dry open areas with sparse vegetation; also woodland and riparian areas mostly west of the Peninsular Ranges; ground may be firm soil, sandy, or rocky.	Moderate; suitable habitat occurs on and adjacent to the site.
<i>Coleonyx variegatus abbotti</i>	San Diego banded gecko	-/-	-	-	1	Interior coastal region, west of Peninsular ranges, prefers rocky areas in coastal scrub and chaparral, nocturnal, hibernates in winter.	Low; suitable habitat does not occur onsite.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Crotalus ruber</i>	red-diamond rattlesnake	SSC/-	-	X	2	Coastal San Diego County to the eastern slopes of Peninsular Ranges in coastal sage scrub, mixed chaparral, open grassy areas and agricultural areas, chamise chaparral, pinon juniper and desert scrub. Most common in the western foothills of the Peninsular Ranges and in dry rocky inland valleys; associated with granite rock outcroppings, especially in winter. 0-1500 m (typically < 1200m)	Low; remaining patches of coastal sage scrub at edge of site too disturbed.
<i>Diadophis punctatus similis</i>	San Diego ringneck snake	-/-	-	-	2	Moist habitats including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodlands, along coast into Peninsular Ranges. Prefer areas with surface litter or herbaceous vegetation. Often found near abandoned buildings and junk piles in wooded areas. Generally hidden during the day. May not be distinct from San Bernardino subspecies ( <i>D. p. modestus</i> ), which is also special-status.	High; suitable habitat occurs onsite and likely would not have been detectable during survey.
<i>Lichanura orcuttii</i> ( <i>Charina trivirgata</i> , <i>C. t. ruseofusca</i> )	rosy boa	-/-	-	-	2	Desert, arid scrub, brushland, sandy plains, rocky slopes, and chaparral-covered foothills, particularly where moisture is available (not dependent on permanent water). Associated with rock outcrops; most active at night. 0-2070 m	Low; suitable habitat does not occur onsite and only historical records documented nearby.
<i>Phrynosoma blainvillii</i> ( <i>P. coronatum b.</i> )	coast horned lizard	SSC/-	-	X	2	Coastal scrub, chaparral, grassland, cismontane woodland, riparian scrub and woodland; most common in lowlands along sandy washes with scattered low shrubs. Prefers open areas for sunning with loose soil for burial and native harvester ant colonies (few or no Argentine ants).	Low; only small portions of very marginally suitable habitat occur onsite.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Plestiodon skiltonianus interparietalis</i> ( <i>Eumeces s. i.</i> )	Coronado skink	WL/-	-	-	2	Rocky areas and dry hillsides in coastal sage scrub, grassland, chaparral, pinyon-juniper woodland, open pine or oak woods, near streams; digs burrows in soil.	Moderate; suitable habitat occurs onsite and likely would not have been detectable during survey but intergrades with non-special-status subspecies, <i>P. s. skiltonianus</i> .
<i>Salvadora hexalepis virgulata</i>	coast patch-nosed snake	SSC/-	-	-	2	Chaparral, coastal sage scrub, and other brushy vegetation west of desert, near rock outcrops with adjacent seasonal drainages; require small mammal burrows for refuge and overwintering.	Low; only small portions of very marginally suitable habitat occur onsite.
<i>Thamnophis hammondi</i>	two-striped gartersnake	SSC/-	-	-	1	In or near permanent fresh water, often along streams with rocky beds bordered by willows and other riparian vegetation, also desert oases and sometimes vernal pools. 0-2100 m.	Low; only permanent water onsite is pond and likely would have been detectable but was not observed.
<i>Thamnophis sirtalis subsp. novum</i> (alternate classification for SD's <i>T. s. infernalis</i> )	south coast gartersnake	SSC/-	-	-	2	Marsh and upland habitats near permanent fresh water with good strips of riparian vegetation; currently only known in San Pasqual Valley in SD County.	Low; outside of current geographic range (CNDDDB and SDNHM) and only marginally suitable habitat occurs onsite.
<b>BIRDS</b>							
<i>Accipiter cooperii</i>	Cooper's hawk	WL/-	-	-	1	Open riparian cottonwood and sycamore, oak, and eucalyptus woodland and other open forested areas. Nests in second-growth conifer stands, live oaks or deciduous riparian areas. Forages in openings near forested areas. Similar winter habitat, but open woodlands and fields may be used more. 150-915 m	High; suitable foraging and nesting habitat occurs onsite and is documented as occurring year-round in Bird Atlas grids; golf course provided suitable foraging habitat and vineyard is expected to maintain that foraging habitat.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Accipiter striatus</i>	sharp-shinned hawk	WL/-	-	-	1	Widespread but uncommon winter visitor in SD County, especially coastal slope; variety of habitats but prefers riparian areas, preferably with trees or tall shrubs; attracted to any place that concentrates small prey birds. Tend to use younger, shorter, and more dense woodlots than <i>A. cooperii</i> .	High; suitable habitat occurs onsite and is documented nearby (Bird Atlas).
<i>Agelaius tricolor</i>	tricolored blackbird	SCE, SSC/-	-	X	1	Highly colonial; require open water, protected nesting substrate, and foraging area with insect prey within a few km of colony. Breed and nest in freshwater marshes with emergent vegetation but also in thickets of willow, blackberry, wild rose, tall herbs. In migration and winter inhabit open cultivated lands and pastures as well as marshes. 0-150 m and 300-915 m	Low; only low-quality winter habitat occurs onsite.
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow	WL/-	-	X	1	Steep, moderately vegetated slopes of coastal sage scrub dominated by <i>Artemisia californica</i> but also coastal bluff scrub and chaparral. Nest on the ground at the base of rocks, grass tufts, or saplings, or slightly above ground in the branches of shrubs or trees. 0-915 m	Low; suitable habitat only occurs adjacent to site.
<i>Ammodramus savannarum</i>	grasshopper sparrow	SSC/-	-	X	1	Dense grasslands on rolling hills, lowland plains, in valleys and hillsides on lower mountain slopes. Favors native grasslands with mix of grasses, forbs and scattered shrubs. Difficult to identify except when singing (Mar-Jul).	Low; suitable habitat does not occur onsite.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Aquila chrysaetos</i>	golden eagle	FP, WL/-	X	X	1	Rolling foothills, mountain areas, sage-juniper flats, desert with sufficient mammalian prey base and near suitable nesting sites. Nest on rock ledges of cliffs but sometimes in large trees (e.g., oak or eucalyptus), on steep hillsides, or on the ground. 0-915 m.	Low; only marginally suitable foraging habitat occurs onsite.
<i>Ardea herodias</i>	great blue heron	-/-	-	-	2	Near water (fresh, brackish or saline). Nests high in trees in swamps and forested areas, less commonly in bushes, or on ground, rock ledges, and coastal cliffs.	<b>Observed onsite; 1 immature individual at onsite freshwater marsh.</b>
<i>Artemisospiza belli belli</i> ( <i>Amphispiza b. b.</i> )	Bell's sage sparrow	WL/-	-	X	1	Year-round resident in open chamise chaparral and sage scrub, especially recently burned areas or on gabbro substrate; most common in central southern SD County; very sensitive to habitat fragmentation.	Low; only small portions of very marginally suitable habitat occur onsite.
<i>Asio otus</i>	long-eared owl	SSC/-	-	-	1	Wooded areas with dense vegetation needed for roosting and nesting, open areas for hunting. Often associated with riparian bottomlands containing tall willows, cottonwoods or coast live oaks. Requires mice as prey and old nests of crows, hawks, or magpies for breeding.	Low; suitable habitat occurs onsite but species is documented as migrant or in winter only in nearby areas (Bird Atlas).
<i>Athene cunicularia</i>	burrowing owl	SSC/-	X	X	1	Open, dry annual or perennial grasslands, deserts & scrublands with low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, especially California ground squirrel.	Low; marginally suitable habitat onsite but not documented by CNDDDB or Bird Atlas in area.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Buteo lineatus</i>	red-shouldered hawk	-/-	-	-	1	Widespread over coastal slope. Nests in well-forested areas with mature trees and well-developed canopy near water. Has expanded into various woodlands, including stands of palms and eucalyptus trees amid urban sprawl. Non-breeding habitat is less restricted; lowland areas near water, and level, open country with scattered large trees.	<b>Detected onsite; one individual observed in onsite oak woodland and another heard calling from oak woodland at a different location.</b>
<i>Buteo regalis</i>	ferruginous hawk	WL/-	-	-	1	Uncommon winter visitor to SD County, forages over larger tracts of grassland, especially those >12 miles inland, also desert and sparsely brushy land; avoids areas near human activity and areas without large open spaces with suitable prey (lagomorphs, ground squirrels, and mice).	Low; suitable foraging habitat occurs onsite but site likely too near human activity.
<i>Buteo swainsoni</i>	Swainson's hawk	ST/-	-	-	1	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. Relatively tolerant of human activity. 0-150 m	Low; suitable habitat onsite but rare and only documented as migrant/non-breeding visitor in area by Bird Atlas.
<i>Butorides virescens</i> ( <i>B. striatus</i> )	green heron	-/-	-	-	2	Swamps, marshes, and margins of ponds, rivers, lakes, and lagoons. Nests in tree, thicket, or bush over fresh or brackish water, sometimes in dry woodland or orchard. Usually forages in shallow water.	High; suitable foraging and nesting habitat occurs onsite and is documented as occurring year-round in Bird Atlas grids.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Campylorhynchus brunneicapillus sandiegensis</i>	coastal cactus wren	SSC/-	X	X	1	Open coastal sage scrub with thickets of chollas ( <i>Cylindropuntia</i> sp.), south- and west-facing slopes below 460 m, usually within 400 m of river valleys, also hillsides in tributary canyons, along washes, and in very open woodland of coast live oak and California sycamore.	Low; no cholla thickets on or adjacent to Site.
<i>Cathartes aura</i>	turkey vulture	-/-	-	-	1	Dry open country or along roadsides; coastal sage scrub, mixed and chamise chaparral, grassland, riparian, mixed conifer and closed cone forest. Nests in caves or trees, on cliffs, on ground in dense shrubbery. 0 to over 3000 ft.	High; species is widespread throughout County and could scavenge onsite and along Gird Road.
<i>Charadrius nivosus (C. alexandrinus n.)</i>	western snowy plover	SSC/FT	-	-	1	Immediate coast at scattered beach, bay and lagoon locations; nests on beaches, dunes and salt flats.	None; suitable habitat does not occur onsite.
<i>Circus hudsonius</i>	northern harrier	SSC/-	-	X	1	Marshes, grasslands, agricultural lands, sagebrush flats, and desert sinks. Nests on the ground, mostly within patches of dense, often tall, vegetation in undisturbed areas; forages over grasslands. Year-round resident but more common in winter.	Moderate; suitable foraging habitat occurs onsite and Bird Atlas documents breeding season and winter observations nearby.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	SE/FT	X	-	1	Forests, woodland, and scrub. Breeds in deciduous riparian woodland, especially dense stands of cottonwood and willow, sometimes mesquite and tamarisk. Dense riparian understory foliage important for nesting (e.g. blackberry, nettles, wild grape), and cottonwood important for foraging habitat.	Low; not documented in area by CNDDDB or Bird Atlas and onsite riparian woodlands do not support dense riparian understory

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Elanus leucurus</i> ( <i>E. caeruleus</i> )	white-tailed kite	FP/-	-	-	1	Widespread over coastal slope, prefers riparian woodlands, oak groves, or sycamore groves adjacent to grassland; feeds almost exclusively on California vole.	Moderate; observed year round in project area (Bird Atlas) and while California vole were not detected, suitable habitat occurs onsite.
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	SE/FE	X	X	1	Riparian and wetland thickets of willow or tamarisk, does not need to be extensive. Nests in trees or shrubs with dense vegetation. Forages within and occasionally above dense riparian vegetation. Present in California from late April to September.	Low; onsite willow thickets are sparse and disturbed.
<i>Eremophila alpestris actia</i>	California horned lark	WL/-	-	-	2	Open patches of bare land alternating with low vegetation in grasslands, montane meadows, sagebrush and open coastal plains, fallow grain fields, and alkali flats. Tolerant of disturbance, but sensitive to habitat fragmentation.	Moderate; not detected, but could use open disturbed areas onsite.
<i>Falco columbarius</i>	merlin	WL/-	-	-	2	Wide variety of winter habitats including grasslands, salt or alkali marshes, deserts, seacoasts, near coastal lakes and lagoons, open woodlands, fields, etc. May roost in conifers in winter. 0-500 ft	Low; only very marginally suitable habitat occurs onsite.
<i>Falco mexicanus</i>	prairie falcon	WL/-	-	-	1	Dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forage far afield, even to marshlands and ocean shores. Depend on horned larks and grassland species in general for prey. 0 to over 3000 ft	Low; suitable habitat does not occur onsite and is only documented in winter in a few areas nearby (Bird Atlas).

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Icteria virens</i>	yellow-breasted chat	SSC/-	-	X	1	Summer visitor in dense riparian woodland. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground. Most common in coastal lowland, strongly concentrated in NW corner of County; usually return to SD second week in April and start to leave by early August.	Low; onsite riparian woodland is sparse.
<i>Ixobrychus exilis</i>	least bittern	SSC/-	-	-	2	Nest colonially in dense, tall growths of emergent vegetation (e.g. cattail, sedge, bulrush, or common reed) interspersed with some woody vegetation and open, fresh or brackish water.	Low; very limited amounts of emergent vegetation onsite.
<i>Lanius ludovicianus</i>	loggerhead shrike	SSC/-	-	-	1	Open country with scattered trees and shrubs, agricultural land, desert washes and desert-edge scrub, broken chaparral and, occasionally, open woodland; often perches on poles, wires or fenceposts. Suitable hunting perches are an important part of the habitat.	Low-moderate; suitable habitat occurs onsite but is only documented in winter in a few areas nearby (Bird Atlas).
<i>Larus californicus</i>	California gull	WL/-	-	-	2	In winter along coast and near bodies of water; also dumps, cities and agricultural lands. Uncommon to rare in summer. Nest inland on open sandy or gravelly areas on islands or along shores of lakes and ponds, generally with scattered grasses. Nests on ground in open areas with irregular terrain near shore of islands.	Low; suitable habitat does not occur onsite and species not documented nearby (Bird Atlas).

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Laterallus jamaicensis coturniculus</i>	California black rail	ST, FP/-	X	-	2	Freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Very low; suitable habitat does not occur onsite.
<i>Passerculus guttatus beldingi</i> ( <i>P. sandwichensis b.</i> )	Belding's savannah sparrow	SE/-	X	-	1	Coastal salt marshes. Nests on the ground in natural depression or scrape, primarily in pickleweed ( <i>Salicornia virginica</i> ) habitat at the higher levels of the marsh, above the reach of the highest spring tides.	Very low; suitable habitat does not occur onsite.
<i>Plegadis chihi</i>	white-faced ibis	WL/-	-	X	1	Shallow freshwater marsh; nest in dense tule thickets with areas of shallow water for foraging.	Low; marginally suitable foraging habitat occurs onsite.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	SSC/FT	-	X	1	Obligate, permanent resident of coastal sage scrub especially where <i>Artemisia californica</i> dominates; up to 915 m but 90% at 305 m or lower.	Low; disturbed coastal age scrub habitat occurs in small patches along the central western border of the property, outside the MUP project footprint. This coastal sage scrub transitions to higher-quality coastal sage scrub to the west of the property. Given the very small amount of coastal sage scrub on the property the availability of higher quality habitat to the west, and the relatively lower ecological value of the former golf course and vineyard, potential for gnatcatcher use of the property is low, and of the MUP project footprint very low.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Rallus obsoletus levipes</i> ( <i>R. longirostris l.</i> )	light-footed Ridgway's rail (light-footed clapper rail)	SE, FP/FE	X	X	1	Year-round resident in coastal salt marsh dominated by cordgrass and pickleweed, and also known at three freshwater sites in SD County.	Low; suitable habitat does not occur onsite.
<i>Riparia riparia</i>	bank swallow	ST/-	-	-	1	Coastal sage scrub, riparian and freshwater marsh; colonial nester, requires vertical banks or cliffs with fine-textured soils, near streams, rivers, lakes, or ocean to dig nest holes.	Low; only very marginally suitable habitat occurs onsite.
<i>Setophaga aestiva</i> ( <i>Dendroica petechia brewsteri, S. p.</i> )	yellow warbler	SSC/-	-	-	2	Riparian forest/scrub/woodlands in close proximity to water. Nest and forage in willow shrubs and thickets, and in other riparian plants including cottonwoods and sycamores. In migration and winter, often occur in open woodland, agricultural lands, brushy areas, and forest edges.	Moderate; Bird Atlas documents breeding season observations nearby but onsite habitat is only marginally suitable.
<i>Sialia mexicana</i>	western bluebird	-/-	-	-	2	Various woodlands (open, burned, oak, and riparian), farmlands, orchards, also deserts in winter. Nests are in natural tree cavities, abandoned woodpecker holes, or bird nest boxes.	<b>Detected onsite; one individual observed perched in sycamore in developed land and four observed in orchard/vineyard.</b>
<i>Sternula antillarum browni</i>	California least tern	SE, FP/FE	X	-	1	Coastal; nest colonially up to 4 mi inland on bare or sparsely vegetated sand beaches, alkali flats, land fills, paved areas. Usually nest in same area in successive years; tend to return to natal site to nest.	Low; suitable habitat does not occur onsite.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Tyto alba</i>	barn owl	-/-	-	-	2	Forages in dense grassland or agricultural fields. Nest in cut bank burrows and cliff recesses; may also use bases of palm leaves and a wide variety of artificial cavities. In winter often roosts in dense conifers; also roosts in nest boxes if available. San Diego owl most adapted to suburban and urban environments.	Moderate; observed year round in project area (Bird Atlas) and marginally suitable foraging habitat occurs onsite.
<i>Vireo bellii pusillus</i>	least Bell's vireo	SE/FE	X	X	1	Summer resident in riparian vegetation along rivers and larger creeks, also dry river bottoms, with both riparian canopy and a somewhat dense or shrubby understory for nesting. 0-610 m	Low. Onsite riparian woodland is too narrow and sparse, and lacks suitable understory and stratification; the canopy is relatively open and the shrub layer is poorly developed. This vegetation lacks the coverage and camouflage needed for vireo nesting. In addition, the areas of riparian vegetation are highly exposed to human activity and noise, previously due to golf course use and currently due to agricultural activity.
<b>MAMMALS</b>							
<i>Antrozous pallidus</i>	pallid bat	SSC/-	-	X	2	Coastal sage scrub, mixed chaparral, oak woodlands, chamise chaparral, desert wash and desert scrub; often near rocky outcrops and water. May forage over agricultural lands, but is largely absent from urban and suburban areas.	Low; very marginally suitable foraging habitat occurs onsite but area is likely too developed.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Bassariscus astutus</i>	ringtail	FP/-	-	-	2	Rocky areas with cliffs or crevices for daytime shelter; desert scrub, chaparral, pine-oak and conifer woodland. Usually within 0.5 miles of water. Dens usually in rock shelter; also in tree hollows, under tree roots, in burrows dug by other animals, in remote buildings, and under brush piles. Nocturnal.	Low; suitable habitat does not occur onsite.
<i>Chaetodipus californicus femoralis</i>	Dulzura pocket mouse	SSC/-	-	-	2	Gravelly substrates in or near chaparral, to a lesser extent in coastal sage scrub, oak woodland, and edge of grassland. More abundant on steeper slopes and increasing cover of scrub oak and Ceanothus.	Low; suitable habitat and substrate do not occur onsite.
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	SSC/-	-	-	2	Loose sandy soil to gravel to mixed rock on moderate to steep slopes with open shrubland, also grassland (negligible in chaparral and woodland). On coast and urban canyons, also up to at least 1000 m on shrubby slopes. Extirpated from urbanized habitat and most small fragments of natural habitat.	Low; patches of coastal sage scrub onsite too disturbed.
<i>Choeronycteris mexicana</i>	Mexican long-tongued bat	SSC/-	-	-	2	Arid habitats throughout range, urban and suburban areas in SD County. Roost in relatively well-lit caves but also crevices and man-made structures. Feed on pollen and nectar, especially of agaves and columnar cacti, and will visit hummingbird feeders. Seen in fall and winter, presumed to not breed in CA, San Diego on periphery of range. 0-500 m.	Low; suitable food plants do not occur onsite.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	SSC/-	-	X	2	Obligate cave-roosting species, no preference for particular vegetation community. Also use mines, buildings, and bridges that offer cave-like situations. Forage in mosaic of forested and edge habitats, including riparian; avoid open areas. Sensitive to human disturbance, presumed absent from coastal locations.	Low; suitable habitat does not occur onsite, site subject to human disturbance.
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	ST/FE	-	X	1	Open grassland and sparse coastal sage scrub (< 30% shrub cover) with extensive bare ground; avoids steep slopes and densely vegetated areas. Prefers friable, loamy soil, but may use other mammal burrows in clay soil. Recolonizes disturbed lands with weedy forbs. San Jacinto Valley south to Warner Ranch; nocturnal. < 1250 m.	Low; patches of coastal sage scrub do not include extensive bare ground; dense non-native grasses between shrubs.
<i>Euderma maculatum</i>	spotted bat	SSC/-	-	-	2	Rocky arid and semi-arid habitats, forested mountains to open scrublands and deserts with rocky cliffs. Roost in high rocky cliffs near expanses of open habitat. Forage near mesic and riparian areas. Very rare in SD County.	Low; somewhat suitable foraging habitat occurs onsite but species is not documented nearby (Mammal Atlas).
<i>Eumops perotis californicus</i>	western mastiff bat	SSC/-	-	-	2	Strongly associated with roosting habitat: steep rocky cliffs, rock quarries, large granitic boulders and occasionally large buildings. Flies long distances and can be found foraging in coastal and desert scrub, riparian, oak woodlands, open grasslands, openings in montane pine forests, and over open water.	Low; no roosting habitat onsite but marginal foraging habitat does occur.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Lasiurus blossevillii</i>	western red bat	SSC/-	-	-	2	Low-elevation wooded habitats. Associated with riparian trees but also eucalyptus and tamarisk as well as orchards. Forage along rivers and streams but also forested meadow edges and sometimes parks in urban or suburban areas.	Low-moderate; somewhat suitable habitat occurs onsite and species is documented somewhat nearby (Mammal Atlas).
<i>Lasiurus xanthinus</i>	western yellow bat	SSC/-	-	-	-	Roost in "skirts" of dead palm fronds, strongly associated with groves of California fan palm, particularly with open surface water. Has expanded range to use non-native palms in coastal suburban areas with artificial water sources.	Moderate; small amounts of open water and Mexican fan palms present onsite.
<i>Leptonycteris yerbabuena</i>	lesser long-nosed bat	-/FE	-	-	-	Occurrence in San Diego County based on single 1996 specimen from urban Oceanside, 400 km from westernmost record in Arizona. In typical range, roost in caves and feed on nectar from agave, yucca, and columnar cacti.	Low; outside of typical range and suitable nectar-sources do not occur onsite.
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	SSC/-	-	X	2	Prefers grasslands or open areas with patches of scrub of varying densities, generally absent in chaparral with closed canopy.	Moderate; not documented by Mammal Atlas in area but suitable habitat occurs on and adjacent to site.
<i>Macrotus californicus</i>	California leaf-nosed bat	SSC/-	-	-	2	Lowland desert scrub. Uses caves or abandoned mine tunnels during day. Small groups may also use natural rock shelters in canyon walls. Uses shelter of open buildings, bridges, rocks, and mines for temporary night roosts.	Low; suitable habitat does not occur onsite or nearby.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Myotis ciliolabrum</i>	western small-footed myotis	-/-	-	-	2	Desert, badland, semiarid and mesic habitats, open stands in forests and woodlands. Requires drinking water. In summer, roost in rock crevices, caves, tunnels, under boulders, beneath loose bark, or in buildings. Hibernate in caves or mines. Maternity colonies often are in abandoned houses, barns, or similar structures.	Moderate; suitable foraging habitat occurs onsite, would not have been detectable during surveys, and is documented nearby (Mammal Atlas).
<i>Myotis yumanensis</i>	Yuma myotis	-/-	-	-	2	Diverse vegetation and habitat types but most closely associated with rivers, creeks, ponds, and reservoirs. Roost in crevices, cavities, and buildings-especially those associated with water such as bridges and dams. Will also roost in live trees in suburban landscapes. Forages over open water, rivers and streams, as well as oak woodlands and native scrublands. Most common bat in SD County. < 1650 m.	High; suitable habitat occurs onsite, is widespread in western San Diego, and would not have been detectable during survey.
<i>Neotoma bryanti intermedia</i> ( <i>N. lepida i.</i> )	San Diego desert woodrat	SSC/-	-	-	2	Coastal sage scrub and chamise chaparral to pinyon-juniper woodland (but not coniferous forest). Associated with large exposures of boulder outcrops. Houses most commonly constructed under ledges, in crevices, or within rock piles, but also at base of juniper, ceanothus, creosote bush, yucca, and clumps of prickly-pear or cholla. Nocturnal. 180-1500 m.	Low; patches of coastal sage scrub onsite lack suitable boulders/rocks.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	SSC/-	-	-	2	Closely associated with roosting habitat: vertical cliffs, quarries, rocky outcrops. Does not favor any particular vegetation community for foraging.	Low; roosting habitat does not occur onsite or nearby but site could be used for foraging.
<i>Nyctinomops macrotis</i>	big free-tailed bat	SSC/-	-	-	2	Closely associated with roosting habitat: vertical cliffs, quarries, rocky outcrops, and occasionally tall buildings. Associated with coastal and desert scrub, evergreen forests, riparian, and montane woodlands. Forages over diverse habitats long distances from roosts.	Low; roosting habitat does not occur onsite or nearby but site could be used for foraging.
<i>Odocoileus hemionus</i>	mule deer	-/-	-	-	2	Wide array of habitats including coastal sage scrub, chaparral, oak woodland, riparian woodland, montane conifer-hardwood forest, and desert scrub. Concentrated in areas of greater vegetation diversity and rainfall; associated with post-disturbance habitats with brush regrowth.	Low; the site lacks connectivity to sufficiently large areas of suitable habitat.
<i>Onychomys torridus ramona</i>	southern grasshopper mouse	SSC/-	-	-	2	Semi-arid to arid scrub with friable soils and low to moderate shrub cover. Carnivorous, preferred food of preference is grasshoppers but will consume seeds, other insects and lizards.	Low; suitable habitat does not occur onsite and is not documented nearby (Mammal Atlas).
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	SSC/-	-	-	2	Oak woodland, sandy washes, grassland, disturbed sage scrub from San Fernando Valley (extirpated) east to Cabazon, south through San Jacinto and Temecula Valleys to Aguanga, Warner Pass, Vail, and Temecula; nocturnal.	Low; outside of known range (Mammal Atlas and CNDDB) and onsite habitats only very marginally suitable.

**ATTACHMENT E**

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	Habitat	Potential to Occur Onsite
<i>Puma concolor</i> ( <i>Felis concolor</i> )	mountain lion	-/-	-	X	2	Forests, woodlands, broken country with good cover of brush or woodland; associated with mountainous or remote undisturbed areas. Habitat of at least 2,200 sq km is needed to ensure long-term population persistence. Young are born in secluded places among rocks or dense vegetation.	Low; the site lacks connectivity to sufficiently large areas of suitable habitat.
<i>Taxidea taxus</i>	American badger	SSC/-	-	X	2	Persists mainly in large blocks of undeveloped land, avoids urbanization. Prefers grasslands, alluvial fans, meadows, desert, and other open areas. Requires friable soils, primarily consumes rodents. < 3600 m.	Low; site too disturbed and near to development.

**Listing Designations**

Federal Listing (USFWS 2015, CDFW 2015)

FE - Federal-listed Endangered  
 FT - Federal-listed Threatened  
 FC - Federal candidate for listing

State Listing (CDFW 2015, 2015)

SE - State-listed Endangered  
 ST - State-listed Threatened  
 STC - State Threatened Candidate  
 SEC - State Endangered Candidate  
 FP - CA Dept. of Fish and Wildlife Fully Protected  
 SSC - State Species of Special Concern  
 WL - CA Dept. of Fish and Wildlife Watch List

Cnty NE - an X in this column indicates the species is considered a Narrow Endemic by the County of San Diego (MSCP County of San Diego Subarea Plan 1997)

NCPC - an X in this column indicates the species is proposed covered under in-process North County Multiple Species Conservation Program

Cnty Group - County of San Diego Sensitive Animal Group (County of San Diego 2010)

1 - County of SD Sensitive Animal List Group 1  
 2 - County of SD Sensitive Animal List Group 2



## **Attachment F**

Fallbrook Land Conservancy Letter of Interest and Draft PAR



Jade Work  
1492 Rainbow Valley Rd.  
Fallbrook, CA 92028

August 13, 2018

Re: Letter of Intent Regarding Access Easement

Dear Jade:

First and foremost, thank you for your ongoing cooperation in working with the Fallbrook Land Conservancy ("FLC") regarding its 47-acre Parcel ("47 Acres") adjacent to your Monserate Winery property ("MW"), and for your offer to donate a conservation easement ("CE") over a portion of the MW.

This Letter of Intent will serve as a non-binding expression of interest between MW and FLC with regard to access to the 47 Acres, and the CE.

The 47 Acres is currently accessed by a fee strip that provides direct access to Gird Road ("Existing Road").

MW shall grant FLC and the 47 Acres an easement over and across MW, stretching from the existing parking lot on MW, north to the 47 Acres, in the approximate location shown on the attached map ("Access Easement"). The Access Easement is for road purposes in favor of FLC and the public to access the 47 Acres, and will be maintained by FLC. It will serve a parking lot on the 47 Acres to be used by FLC.

In consideration for this, FLC and MW agree that the Existing Road will be kept locked and used only by authorized FLC personnel, *and North County Fire.*

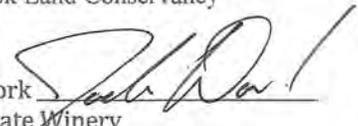
Additionally, MW shall grant a CE to cover a portion of the MW land. The exact boundaries of the CE and the endowment necessary to ensure long-term monitoring of the CE will be specified in a subsequent agreement. A draft Property Analysis Record (PAR) concludes that an endowment of \$88,183.33 will be required to manage the CE in perpetuity. Combined with first year's costs and associated fees, the total to be paid to the FLC prior to recording of the CE would be \$99,475.00. These numbers are current best estimates and may change depending on the conditions in the CE.

If this meets with your approval, please execute this Letter of Intent in the space below. FLC will then proceed to have a licensed surveyor plot and survey the proposed Access Easement. There will be no binding agreement between MW and FLC regarding the foregoing until the survey has been completed and we execute a mutually agreeable written contract.

Thank you again,



Karla Standridge  
Executive Director  
Fallbrook Land Conservancy

Jade Work   
Monserate Winery

Date 8-18-18



8/9/2018	SPECIFICATION						
CATEGORY		UNIT	UNIT COUNT	UNIT COST	ON YEARS	Unamortized ON COST	CATEGORY TOTAL
<b>Ongoing Tasks</b>							
<b>Operations</b>							1,025
Monitoring	Monitoring Conservation Easement	Mrg. Hrs.	6	45.00	1	270	
Monitoring Phot	Photo-Point Photos	Mrg. Hrs.	3	45.00	1	135	
Review Bank Ar	Documentation Review	Sup.Hours	2	60.00	1	120	
Audit	CPA Audit	Hours	1	100.00	1	100	
Insurance	General Liability	Percent	1	68.00	1	68	
Insurance	Worker Comp.	Percent	1	80.00	1	80	
CE Defense Fu	Terrafirma Risk Retention Group Ins.	Ann. Fee	1	60.00	1	60	
Project Account	Bookeeping	Hours	4	45.00	1	180	
Travel	Mileage	miles	20	0.60	1	12	
<b>Reporting</b>							1,380
Annual Reports	Summary	Hours	12	60.00	1	720	
Database Mana	Data Input	Hours	4	45.00	1	180	
County review						480	
<b>Subtotal</b>							<b>2,405</b>
<b>Annual Management Contingency @10%</b>							241
<b>Subtotal</b>							2,646
<b>TOTAL</b>							<b>2,646</b>

**Endowment: Assumes net return of 3.0% above inflation and endowment mgmt expenses**

**\$88,183.33**

Estimate expires Jan 1, 2019.

Estimate assumes endowment will be placed in The San Diego Foundation as a separate endowment for Monserate Winery CE

This estimate contingent on review and approval of the conservation easement document by Fallbrook Land Conservancy

First Two Years Cost: As stated in the Endowment Management Agreement FLC will receive two years cost of \$5,292.00

Additional first year cost: Baseline Report \$3,000.00

Additional first year cost: Conservation Easement Defense Fund \$3,000.00

Total first years cost **\$11,292.00**

**ENDOWMENT PLUS FIRST YEAR COSTS \$99,475.00**

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**ATTACHMENT G - Grading Violation Area Forensic Biological Resources Review – Before and After**



Part 1 of 3: Northern end, eastern section of Monserate Winery property, east of Gird Road  
**2016 “Before”**

This area consisted of golf course and contained a concrete-lined drainage swale. The golf course originally included an artificial pond. When the irrigation water source was cut off, the pond dried up.



**ATTACHMENT G - Grading Violation Area Forensic Biological Resources Review – Before and After**



Part 1 of 3: Northern end, eastern section of Monserate Winery property, east of Gird Road  
**2018 “After”**

The golf course, including the dried artificial pond, was converted to vineyard, and the concrete-lined drainage swale was left in place.



**ATTACHMENT G - Grading Violation Area Forensic Biological Resources Review – Before and After**



Part 2 of 3: Central eastern area, eastern section of Monserate Winery property, east of Gird Road  
**2016 “Before”**

This area consisted of golf course and included an eastern drainage swale that was concrete-lined at the northeastern end. Trees along the middle of the area were almost entirely ornamentals such as pines and eucalyptus, with a few native western sycamores and an oak.



**ATTACHMENT G - Grading Violation Area Forensic Biological Resources Review – Before and After**



Part 2 of 3: Central eastern area, eastern section of Monserate Winery property, east of Gird Road  
**2018 “After”**

The golf course was converted to vineyard and the eastern drainage swale was undergrounded along its northeastern extent. Only ornamental trees were removed, and the native sycamores and coast live oak remain.



**ATTACHMENT G - Grading Violation Area Forensic Biological Resources Review – Before and After**



Part 3 of 3: Southern end, eastern section of Monserate Winery property, east of Gird Road  
**2016 “Before”**

The creek crosses under Gird Road and flows south near the western edge. Vegetation in and along the creek contained native and non-native species (see Attachment H). The northern concrete-lined drainage swale drains to the creek. The western, unlined drainage swale also flows to the creek across the golf course. The southeastern arm of the golf course contains a central concrete path lined with ornamental trees.



**ATTACHMENT G - Grading Violation Area Forensic Biological Resources Review – Before and After**



Part 3 of 3: Southern end, eastern section of Monserate Winery property, east of Gird Road  
**2018 “After”**

The northern concrete-lined drainage swale remains. The lower end of the eastern drainage swale was lined. The central path in the southeastern area was re-paved. Native sycamores along the path remain. Only non-native trees were removed along the creek (see Attachment H).



# ATTACHMENT H - Grading Violation Area Forensic Tree Review from Google Maps Street View



Trees at former golf course pond in northern area  
Left: 2016  
Right: 2018  
Yellow arrow indicates location and direction of Street View image. Removed trees either end of the pond were non-native ornamental weeping willows or similar, not native riparian trees.



## ATTACHMENT H - Grading Violation Area Forensic Tree Review from Google Maps Street View



Trees at creek crossing under Gird Road  
 Left: 2016  
 Right: 2018  
 Non-native pines were removed, but the native coast live oak on the north side of the bridge, willow on the northern bank of the creek, sycamore southeast of the willow remain (pale sycamore trunk is visible in 2018 image).



# ATTACHMENT H - Grading Violation Area Forensic Tree Review from Google Maps Street View



Trees south of creek crossing under Gird Road  
Left: 2016  
Right: 2018  
The two native coast live oaks along the road remain. Protective silt fence along the creek is visible in the 2018 image.



# ATTACHMENT H - Grading Violation Area Forensic Tree Review from Google Maps Street View



Trees further south of creek crossing under Gird Road  
 Left: 2016  
 Right: 2018  
 A group of non-native pines was removed from along the creek, but native willow, coast live oak, and sycamores remain.



# ATTACHMENT H - Grading Violation Area Forensic Tree Review from Google Maps Street View



Trees near southwestern corner  
Left: 2016  
Right: 2018  
A non-native pine was removed, but native oak, willow, and sycamores remain.



# ATTACHMENT H - Grading Violation Area Forensic Tree Review from Google Maps Street View



Trees at south end  
 Left: 2016  
 Right: 2018  
 North of the southern bridge at Oak Cliff Drive, native willow, coast live oak, cottonwood, and patch of young willows in the creek remain.