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Site Plan

BRIGHTWATER RANCH

Figure 5

1.3.3 Focused Surveys

Rare Plants

Rare plant surveys were conducted on April 16 and May 29, 2014 (Table 1). The entire site was traversed by foot and habitat areas were inspected for the presence of rare plant species. Opportunistic inspections for rare plants were also performed during other surveys conducted in February, June, and July 2014. Rare plants investigated include those that are listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) USFWS or CDFW; those designated as List 1 and 2 plant species by the California Native Plant Society (CNPS); those that are on the County Sensitive Plant List (County 2010b); and narrow endemic species with potential to occur on site.

Quino Checkerspot

A focused site assessment for Quino checkerspot butterfly (*Euphydryas editha quino*; Quino) was performed by HELIX Biologist Jasmine Bakker (Permit # TE 778195) in April 2014 (Table 1). The site falls outside of the USFWS Recommended Quino Survey Area (USFWS 2014). Based primarily on site location, density of vegetation, lack of host plants, and limited nectar sources, the site was determined to have a low potential to support Quino.

Hermes Copper

Protocol-level focused surveys for Hermes copper (*Lycaena hermes*) began in May 2014 and were completed in July 2014 (Table 1). The survey area for Hermes copper was determined by mapping spiny redberry (*Rhamnus crocea*) individuals occurring within 15 feet of flat-top buckwheat (*Eriogonum fasciculatum*) individuals. Spiny redberry plants without flat-top buckwheat nearby were not mapped or surveyed, nor were those redberry plants surrounded by dense and impenetrable vegetation where access to those plants would result in significant damage to the vegetation. The resulting survey area was created by delineating 15-foot buffers around each redberry plant and grouping those areas that overlapped or were adjacent to each other. Surveys were conducted on foot with the aid of binoculars. Observed butterflies were recorded, and observed flowering plants also were recorded.

Coastal California Gnatcatcher

Protocol-level focused surveys for coastal California gnatcatcher (*Poliioptila californica californica*) were conducted in May and June 2014 (Table 1). Surveys were performed by HELIX Biologist Jason Kurnow (Permit # TE 778195) according to USFWS protocol (USFWS 1997).

1.3.4 Jurisdictional Delineation

An initial basic jurisdictional delineation was completed on the project site on April 28, 2014 by HELIX biologists Larry Sward and Jason Kurnow (Table 1). A follow-up, formal jurisdictional delineation was performed on November 7, 2014 by HELIX regulatory specialist Joshua Zinn.

The jurisdictional delineation was field-verified by the USACE and RWQCB on July 1, 2015 and subsequent revisions were made to jurisdictional boundaries and reporting in response to the USACE and RWQCB input. Prior to beginning fieldwork, aerial photographs (1"=200' scale), USGS topographic maps, and soil survey maps were reviewed to determine the location of potential jurisdictional areas that may be affected by the project.

U.S. Army Corps of Engineers (USACE) Jurisdictional Areas

U.S. Army Corps of Engineers (USACE) wetland boundaries or lack thereof were determined using three criteria (vegetation, hydrology, and soils) established for wetland delineations, as described within the Wetlands Delineation Manual (Environmental Laboratory 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008). Other references included memoranda (USACE and U.S. Environmental Protection Agency [USEPA] 2007; Grumbles and Woodley 2007) that helped clarify the wetland manual and recent court decisions.

All potential wetlands areas were surveyed. If an area was suspected of being a wetland, vegetation and hydrology indicators were noted and soil was sampled and described. The area was then determined to be a federal (USACE) wetland if it satisfied all 3 wetland criteria.

Areas were determined to be non-wetland waters of the U.S. if there was evidence of regular surface flow (e.g., bed and bank) but neither vegetation nor soils criterion was met. Jurisdictional limits for these areas were defined by the ordinary high water mark (OHWM), which is defined in 33 CFR Section 329.11 as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas.” The USACE has issued further guidance on the OHWM (Riley 2005), which was also used for the delineation.

CDFW Jurisdictional Areas

CDFW jurisdictional boundaries were determined based on the presence of riparian vegetation or regular surface flow. Streambeds within CDFW jurisdiction were delineated based on the definition of streambed as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports riparian vegetation” (Title 14, Section 1.72). This definition for CDFW jurisdictional habitat allows for a wide variety of habitat types to be jurisdictional, including some that do not include wetland species (e.g., oak woodland and alluvial fan sage scrub). The CDFW jurisdictional habitat includes all riparian shrub or tree canopy that may extend beyond the banks of a stream.

County Resource Protection Ordinance Wetlands

Areas were considered County wetlands if they met 1 of the 3 following attributes pursuant to the County RPO (County 2011): (1) at least periodically, the land supports a predominance of

hydrophytes (plants whose habitat is water or very wet places); (2) the substratum is predominantly undrained hydric soil; or (3) an ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

1.3.5 Nomenclature

Nomenclature used in this report comes from Holland (1986) and Oberbauer (2008) for vegetation communities; Baldwin *et al.* (2012) for plants; Glassberg (2001) for butterflies; Collins and Taggart (2002) for amphibians and reptiles; American Ornithologists' Union (2014) for birds, and Baker et al (2003) for mammals. Plant species status is taken from the CNPS (2014), and animal species status is taken from the CDFW CNDDDB (2014). Sensitive plant species' habitat information is from Reiser (2001) and CNPS (2014).

1.4 ENVIRONMENTAL SETTING

1.4.1 Regional Context

The project site generally occurs in an urbanized part of the County near the communities of Lakeside and Winter Gardens. It is located in the Metro-Lakeside-Jamul Segment of the South County MSCP. A significant portion of the region is developed, with the highest concentration of development in the cities of El Cajon and Santee further to the west and southwest of the site. The communities of Lakeside and Winter Gardens are also substantially developed, although fragmented patches of undeveloped land occur scattered throughout these communities. Larger open space areas in the region occur in areas surrounding the San Diego River corridor, Louis Stelzer County Park, and Lake Jennings to the general north of the site, in addition to Crestridge Ecological Reserve and areas around Harbison Canyon to the general east of the site. Smaller, fragmented open space areas in the region include the Lakeside Linkage, Lakeside Crest, and unnamed fragments to the general north approaching Lake Jennings, in addition to several unnamed fragments to the general south approaching Interstate 8. Important biological resources in the region generally include core blocks and constrained linkages of coastal sage scrub habitat, in addition to open water, wetland, and riparian habitat associated with Lake Jennings and the San Diego River and Sweetwater River corridors.

In terms of regional importance, the project site is situated along one of several conceptual archipelagos or stepping stone linkages comprised of constrained undeveloped land connecting large blocks of habitat in the region. The site represents one of several fragmented undeveloped parcels in the local area. Over time, these parcels have become isolated from core habitat blocks in the region as a result of intense development. The Lakeside Crest and Lakeside Linkage preserves occur approximately 1.0 mile north of the site, and the Crestridge Ecological Reserve occurs approximately 1.0 mile southeast. Existing residential developments, fragmented undeveloped land, and transportation developments (e.g., Interstate 8) occur between the site and these preserve areas.

1.4.2 General Land Uses

The project site is undeveloped with no existing uses. The site contains split zoning, with the eastern portion zoned as RS (Single-Family Residential) and the western portion zoned as RR (Rural Residential). An existing water tank and paved access road occur internal to the western portion of the site. Residential development surrounds the site, except for limited areas along the northwestern and southwestern boundaries that abut constrained undeveloped land.

1.4.3 Disturbance

The project site is moderately disturbed as a result of being surrounded by residential uses. Existing residential developments in the immediate vicinity of the site have resulted in removal and fragmentation of habitat in the local area. The existing developments represent a physical barrier and disturbance to some animal species attempting to move to and from undeveloped habitats in the region. Reptile and mammal species are expected to be most affected by the existing barriers, whereas birds and other avian species are expected to be less affected and could still use the fragmented habitat for movement.

The southwestern portions of the site appear to have been subject to previous vegetation clearing. This is evidenced by disturbed soils and prevalence of sparse, disturbance-tolerant vegetation. The site is also subject to regular noise and nighttime lighting disturbances associated with the abutting roads and homes. Other notable disturbances include regular pedestrian traffic; vehicular traffic on nearby streets; off-highway vehicle use; equestrian use; illegal dumping, trash, and debris; presence of exotic plant species; and use by domestic pets (e.g., dog, cat). These disturbances degrade the existing habitat and preclude the use of the site by many of the sensitive species known to the region.

1.4.4 Topography and Soils

The project site slopes generally east and north, from a high point of approximately 996 feet above mean sea level (amsl) in the west, to a low point of approximately 600 feet amsl in the north. The site is mapped as including three soil mapping units belonging to two soil series (U.S. Department of Agriculture [USDA] 2014): Ramona sandy loam, 9 to 15 percent slopes, eroded; Vista coarse sandy loam, 15 to 30 percent slopes; and Vista rocky coarse sandy loam, 30 to 65 percent slopes (Figure 6). Soils in the Ramona and Vista series consist of well-drained sandy loams derived from granodiorite or quartz diorite, or granitic alluvium (USDA 2014).

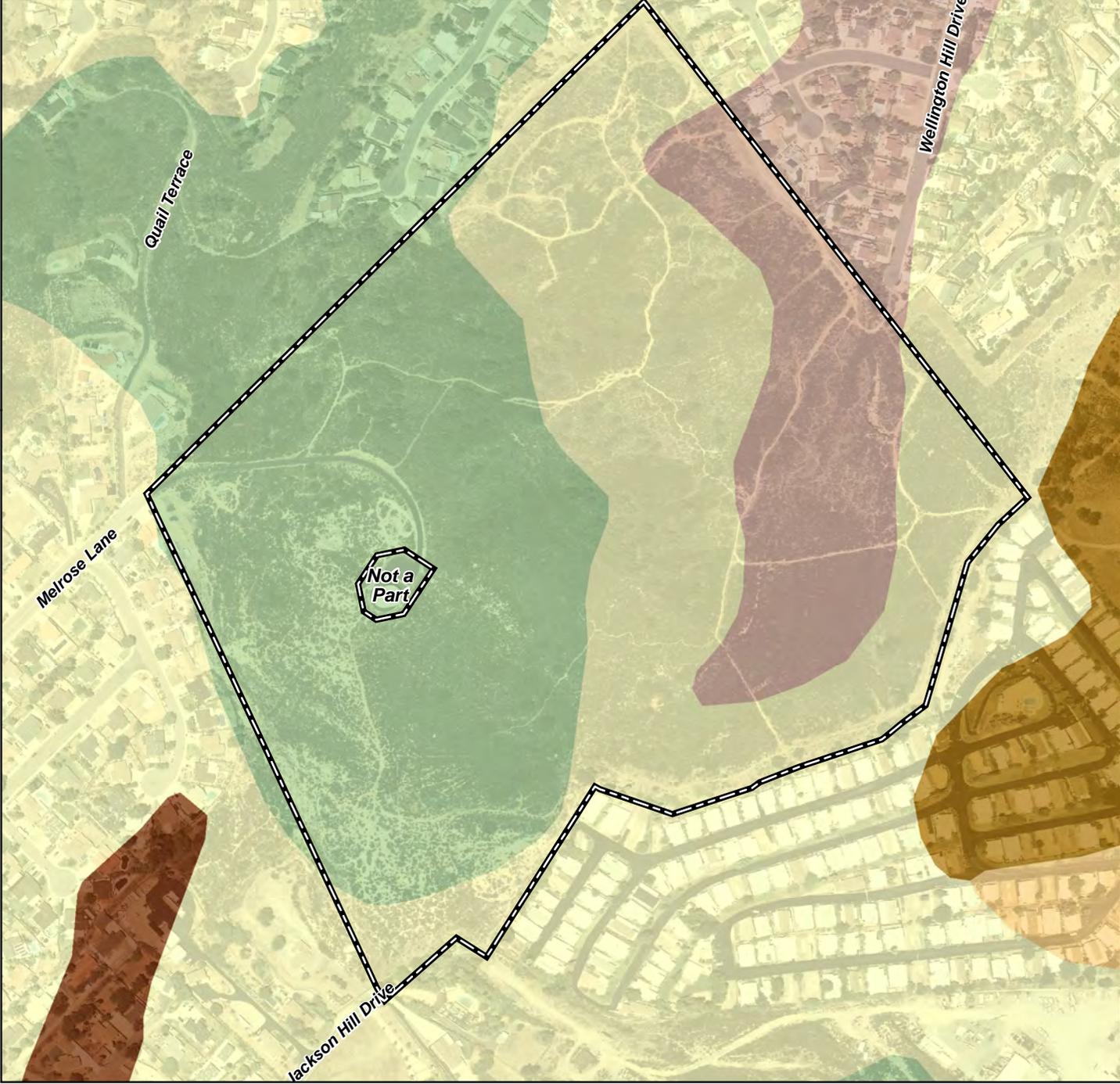
1.4.5 Habitat Types/Vegetation Communities

Five vegetation communities/land cover types occur on site: Diegan coastal sage scrub, non-native grassland, non-native vegetation, disturbed habitat, and developed land (Figure 7; Table 2).

 Project Site

Soil Type

-  Fallbrook-Vista sandy loams, 15 to 30 percent slopes
-  Fallbrook-Vista sandy loams, 9 to 15 percent slopes
-  Ramona sandy loam, 5 to 9 percent slopes
-  Ramona sandy loam, 9 to 15 percent slopes, eroded
-  Vista coarse sandy loam, 15 to 30 percent slopes
-  Vista rocky coarse sandy loam, 30 to 65 percent slopes



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Soils Map

BRIGHTWATER RANCH