

Project Site

Vegetation

- Diegan Coastal Sage Scrub
- Non-native Grassland
- Non-native Vegetation
- Disturbed Habitat
- Developed

Sensitive Resources

- CAGN** Coastal California Gnatcatcher (*Poliopitila californica californica*)
- COHA** Cooper's Hawk (*Accipiter cooperii*)
- MONA** Monarch Butterfly (*Danaus plexippus*)
- OTWH** Orange-throated Whiptail (*Aspidoscelis hyperythra beldingi*)
- RCSP** Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)
- TUVU** Turkey Vulture (*Cathartes aura*)
- BI** San Diego Sunflower (*Bahiopsis laciniata*)
- Re** Coulter's Matilija Poppy (*Romneya coulteri*)

Vegetation and Sensitive Resources

BRIGHTWATER RANCH

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Table 2 EXISTING VEGETATION COMMUNITIES	
VEGETATION COMMUNITY/HABITAT*	ACRE(S)
Tier II	
Diegan coastal sage scrub (32500)	72.6
Tier III	
Non-native grassland (42200)	0.3
Tier IV	
Non-native vegetation (11000)	0.3
Disturbed habitat (11300)	2.5
Developed (12000)	0.5
TOTAL	76.2

*Vegetation categories and numerical codes are from Oberbauer (2008)

Diegan Coastal Sage Scrub

Diegan coastal sage scrub is one of the major shrub communities in southern California that occupies xeric sites with shallow soils. Dominated by drought-deciduous shrubs with shallow root systems and open canopies, coastal sage scrub communities often contain a substantial herbaceous component. Diegan coastal sage scrub occurs in coastal southern California from Los Angeles County into northwestern Baja California, Mexico (Baja; Holland 1986), where it supports a number of threatened, endangered, and rare vascular plants, as well as several bird and reptile species that are candidates for federal listing.

Diegan coastal sage scrub is the dominant vegetation community on site (Figure 7). Characteristic plant species observed within this community on site include California sagebrush (*Artemisia californica*), flat-top buckwheat, broom baccharis (*Baccharis sarothroides*), laurel sumac (*Malosma laurina*), and white sage (*Salvia apiana*). This vegetation type covers 72.6 acres of the project site (Table 2).

Non-native Grassland

Non-native grassland is a dense to sparse cover of annual grasses, often associated with native annual forbs. This association occurs on gradual slopes with deep, fine-textured, usually clay soils. Most of the annual introduced species that compose non-native grassland originated in the Mediterranean region of Europe, an area with a climate similar to that in California and a long history of agriculture. These two factors have contributed to the successful invasion and establishment of these species and the replacement of native perennial grasslands with annual non-native grassland (Jackson 1985).

Non-native grassland occurs in three small patches along the northeast site boundary (Figure 7) and consists primarily of red brome (*Bromus madritensis*) and ripgut grass (*Bromus diandrus*), with other scattered species such as telegraph weed (*Heterotheca grandiflora*), star-thistle (*Centaurea melitensis*), and horehound (*Marrubium vulgare*). These patches are highly

disturbed, within 100 feet of existing development, and provide limited biological function and value. They do not provide functioning raptor foraging habitat due to their small size, fragmented arrangement, presumed lack of abundant prey base, and adjacency with existing development. Non-native grassland covers 0.3 acre of the project site (Table 2).

Non-native Vegetation

Non-native vegetation is dominated by escaped ornamentals and naturalized introduced species, often in a monoculture. This community occurs in three locations along the site perimeter, consisting primarily of stands of non-native trees such as olive (*Olea europaea*) and Peruvian pepper (*Schinus molle*). This vegetation type covers 0.3 acre of the project site (Table 2).

Disturbed Habitat

Disturbed habitat is highly disturbed land that retains a soil substrate. If it is vegetated, it supports an assemblage of almost exclusively non-native, weedy, upland species that colonize after human disturbance. There is no recognizable native or naturalized vegetation association, and characteristic species vary considerably depending on local colonization potential.

The area mapped as disturbed habitat on the project site consists of the several dirt trails crossing the site, as well as unvegetated areas along portions of the site perimeter (Figure 7). The project site supports 2.5 acres of disturbed habitat (Table 2).

Developed Land

Developed land exists where permanent structures and/or pavement have been placed (preventing the growth of vegetation) or where landscaping is clearly tended and maintained. Approximately 0.5 acre of developed land occurs within the project site and consists of the paved access road to the water tank and small areas of landscaping associated with adjacent residential development (Table 2; Figure 7).

1.4.6 Flora

A total of 89 plant species were observed on the project site during surveys, of which 35 are non-native (Appendix A).

1.4.7 Fauna

A total of 56 animal species were recorded on the project site during surveys, including 17 invertebrate, 4 reptile, 31 bird, and 4 mammal species (Appendix B).

1.4.8 Sensitive Plant Species

Two sensitive plant species (San Diego sunflower [*Bahiopsis laciniata*] and Coulter's matilija poppy [*Romneya coulteri*]) were observed on the project site (Figure 7) and are discussed below. The potential for sensitive plant species to occur on the site was assessed based on known

distribution, habitat requirements, and existing site conditions (Appendix C). Listing codes are explained in Appendix F.

San Diego sunflower (*Bahiopsis laciniata*)

Listing: --/--; CNPS List 4.2; County Group D

Distribution: San Diego and Orange County; Baja California, Mexico

Habitat: Diegan coastal sage scrub. Generally, shrub cover is more open than at mesic, coastal locales supporting sage scrub. Occurs on a variety of soil types.

Status on site: Approximately 507 individuals were observed in the central and southern portions of the project site.

Coulter's matilija poppy (*Romneya coulteri*)

Listing: --/--; CNPS List 4.2; CA-Endemic; County Group D

Distribution: Eastern south coastal and peninsular ranges in Los Angeles, Orange, Riverside, and San Diego counties

Habitat: Dry washes and canyons in chaparral and coastal sage scrub communities, often areas that have been burned. Open or mildly disturbed terrain is sometimes favored, and mature chaparral or sage scrub limits the expansion of this showy member of the poppy family.

Status on site: A total of 38 individuals were observed in the southern tip of the project site near the terminus of Jackson Hill Drive. Two large individuals of this species are located just off site and appear to be planted as landscaping. This species likely spread onto the site from these adjacent off-site plantings.

1.4.9 Sensitive Animal Species

Six sensitive animal species (monarch butterfly [*Danaus plexippus*], Belding's orange-throated whiptail [*Aspidoscelis hyperythrus beldingi*], Cooper's hawk [*Accipiter cooperi*], turkey vulture [*Cathartes aura*], southern California rufous-crowned sparrow [*Aimophila ruficeps canescens*], and coastal California gnatcatcher [*Polioptila californica californica*]), were observed on the project site (Figure 7) and are discussed below. Coastal California gnatcatcher is the only federal or state listed animal species detected on site. No other listed species were determined to have a high potential to occur due to lack of suitable habitat. The potential for sensitive animal species to occur on the site was assessed based on known distribution, habitat requirements, and existing site conditions (Appendix D). Listing codes are explained in Appendix F.

Monarch butterfly (*Danaus plexippus*)

Status: --/--, County Group 2

Distribution: Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.

Habitat: Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds (*Asclepias* sp.).

Status on site: A single individual was observed flying low over the project site on two separate survey days.

Orange-throated whiptail (*Aspidoscelis hyperythrus beldingi*)

Status: --/SSC, County Group 2, MSCP Covered

Distribution: Southern Orange County and southern San Bernardino County, south through Baja California

Habitat: Coastal sage scrub, chaparral, edges of riparian woodlands, and washes. Also found in weedy, disturbed areas adjacent to these habitats. Important habitat requirements include open, sunny areas, shaded areas, and abundant insect prey base, particularly termites (*Reticulitermes* sp.).

Status on site: Two individuals were observed in Diegan coastal sage scrub the central portion of the site. Previous surveys have confirmed this species using the site as well, and an existing record occurs from the CNDDDB data.

Coastal California gnatcatcher (*Polioptila californica californica*)

Status: FT/SSC; County Group 1; MSCP Covered

Distribution: In San Diego County, occurs throughout coastal lowlands

Habitat(s): Coastal sage scrub

Status on site: Two pairs were observed on site in Diegan coastal sage scrub. One pair was confirmed using habitat in the eastern half of the site and the other pair was confirmed using habitat in the western half. Previous surveys have confirmed gnatcatchers using the site as well, and existing records occur from SanBIOS, CNDDDB, and USFWS data. A protocol survey conducted by REC Consultants in 1999 observed 11 gnatcatchers on-site: four individuals, two pairs, and a family group of one adult with two juveniles. A protocol survey by REC in 2003 found one family group of four gnatcatchers. This species has the highest potential to use the western half of the site for permanent live-in and temporary habitat. The western half is located along an existing conceptual linkage that facilitates north-south flight route for gnatcatchers in the local area.

Cooper's hawk (*Accipiter cooperi*)

Listing: --/WL; County Group 1, MSCP Covered

Distribution: Throughout the continental U.S., excluding Alaska and parts of both Montana and the Dakotas. Winters south to Mexico and Honduras.

Habitat: In San Diego County, tends to inhabit lowland riparian areas and oak woodlands in proximity to suitable foraging areas, such as scrublands or fields.

Status on site: One individual observed perched in a large laurel sumac in the northeastern portion of the site. No suitable nesting habitat occurs, although this species could forage over the site.

Turkey vulture (*Cathartes aura*)

Status: --/--; County Group 1

Distribution: Observed throughout San Diego County with the exception of extreme coastal San Diego where development is heaviest

Habitat(s): Foraging habitat includes most open habitats with breeding occurring in crevices among boulders

Status on site: One individual was observed soaring over the northwestern portion of the project site. The site does not provide nesting habitat for this species. Although marginal foraging opportunities occur, the species would not be expected to specifically utilize the site for foraging.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)

Status: --/WL; County Group 1; MSCP Covered

Distribution: Observed throughout coastal lowlands and foothills of San Diego County

Habitat(s): Coastal sage scrub and open chaparral as well as shrubby grasslands

Status on site: One individual was observed in Diegan coastal sage scrub on site. This species was not found to be nesting on site during 2014 surveys.

1.4.10 Jurisdictional Waters and Wetlands

The project site includes 0.11 acre of ephemeral non-wetland waters of the U.S., ranging from 1.0 to 3.0 feet in width and comprising 2,272 linear feet (Table 3; Figure 8). No areas were identified that met all three criteria for potential USACE-jurisdictional wetland. Potential non-wetland waters of the U.S. on site are comprised of three reaches of ephemeral water courses, portions of which are deeply incised. The features are presumed to have downstream connectivity to Los Coches Creek and the San Diego River, which outfalls into the Pacific Ocean, a traditional navigable water.

The waters of the U.S. would also be regulated by the RWQCB pursuant to Clean Water Act Section 401 as waters of the State. In addition, 0.06 acre (2,755 linear feet) of waters of the State subject to exclusive RWQCB jurisdiction pursuant to State Porter-Cologne Water Quality Control Act was also delineated on the site.

CDFW-jurisdictional streambed was identified at the same locations as USACE/RWQCB non-wetland waters of the U.S./State, in addition to swale and gullied streambed features located upstream that lacked a discernible OHWM, but supported a streambed. Widths ranged from 0.5 to 8.0 feet. The total CDFW jurisdictional area in the project site is 0.28 acre and 4,395 linear feet (Table 3; Figure 9).

No County RPO wetlands occur on site, as the site does not contain areas supporting hydrophytic vegetation, and the ephemeral streams on site do not contain hydric soils and do not have non-soil substrates.

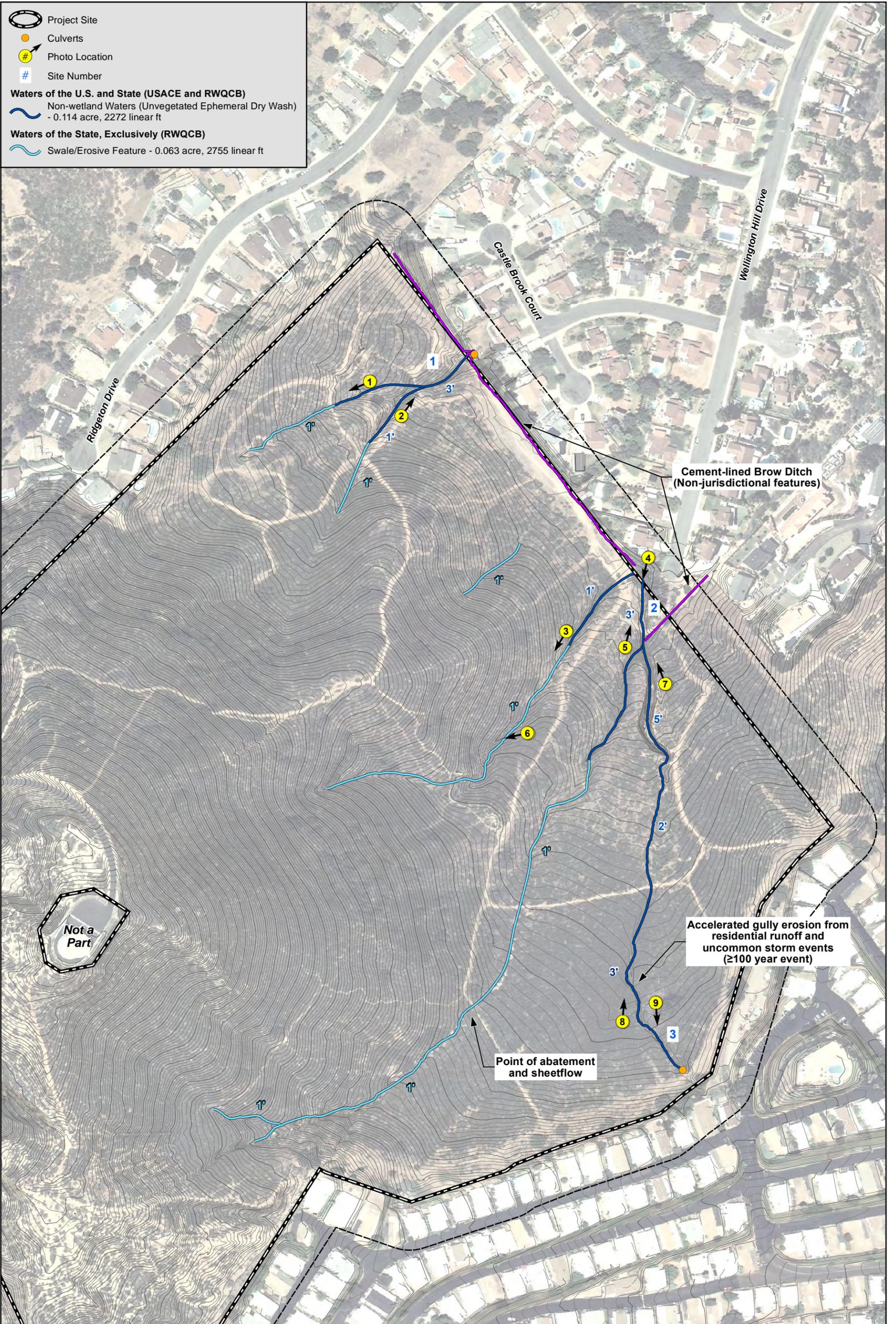
Table 3 EXISTING JURISDICTIONAL WATERS		
JURISDICTIONAL WATERS	AREA (ac)	LENGTH (ft)
USACE/RWQCB		
Ephemeral Non-wetland Waters of the U.S./State	0.11	2,272
TOTAL USACE/RWQCB	0.11	2,272
RWQCB, Exclusively		
Swale/Erosive Feature	0.06	2,755
TOTAL RWQCB, Exclusively	0.06	2,755
CDFW		
Ephemeral Streambed	0.28	4,395
TOTAL CDFW	0.28	4,395

1.4.11 Habitat Connectivity and Wildlife Corridors

Wildlife corridors connect otherwise isolated pieces of habitat and allow movement or dispersal of animals. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of their daily routine. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations. A corridor is a specific route that is used for the movement and migration of species, and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of animals and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are comprised of a fragmented archipelago arrangement of habitat over a linear distance. Important corridors and linkages have been identified on a local and regional scale throughout the Multiple Habitat Conservation Program (MHCP) and MSCP planning areas in San Diego County. The planning objectives of most corridors and linkages in San Diego County include establishing a connection between regional populations of the coastal California gnatcatcher, in addition to facilitating movement and connectivity of habitat for large mammals and riparian bird species.

The local area surrounding the project site is substantially developed, although fragmented patches of undeveloped land occur. 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. The project site is regionally isolated and occurs at great distances away from these larger blocks of open space. 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. The project site is associated with a local network of open space fragments in the region.

 Project Site
 Culverts
 Photo Location
 Site Number
Waters of the U.S. and State (USACE and RWQCB)
 Non-wetland Waters (Unvegetated Ephemeral Dry Wash)
 - 0.114 acre, 2272 linear ft
Waters of the State, Exclusively (RWQCB)
 Swale/Erosive Feature - 0.063 acre, 2755 linear ft

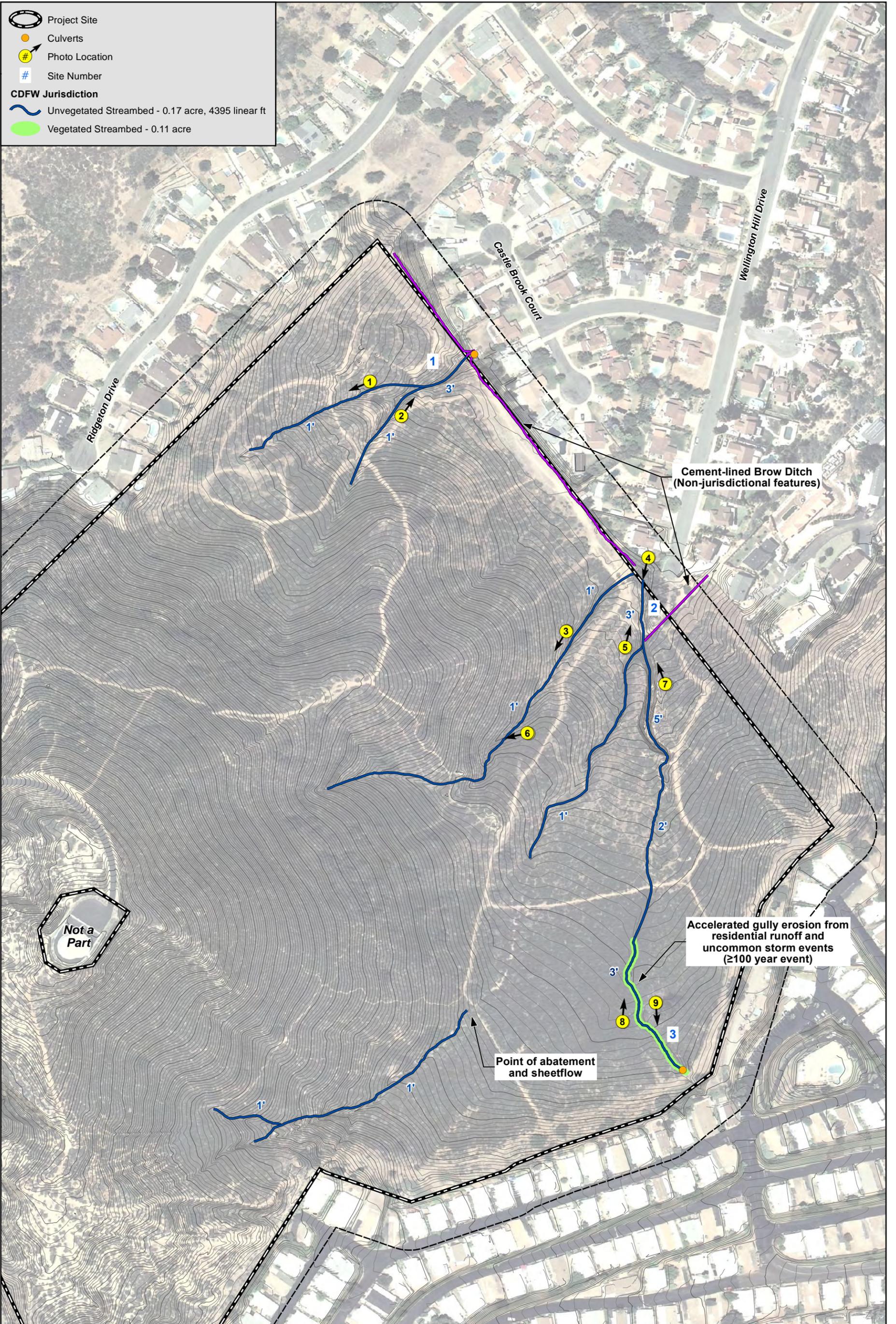


USACE/RWQCB Jurisdiction

BRIGHTWATER RANCH

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 Project Site
 Culverts
 Photo Location
 Site Number
CDFW Jurisdiction
 Unvegetated Streambed - 0.17 acre, 4395 linear ft
 Vegetated Streambed - 0.11 acre



CDFW Jurisdiction

BRIGHTWATER RANCH

Figure 9

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The project site represents one of several fragmented undeveloped parcels in the local area designated as PAMA in the South County MSCP (Figure 4). The site is identified as being part of regional linkage on the MSCP maps, situated along one of several archipelagos or stepping stone linkages comprised of constrained undeveloped land connecting large blocks of habitat in the region. Over time, parcels such as the project site have become isolated from core habitat blocks in the region as a result of increasing development in the area. The site currently has no direct connectivity to large blocks of habitat and is largely constrained by existing development; however, there is undeveloped habitat adjacent to the site to the northwest and the south. 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.

Significant development barriers exist in the local area for large mammals. Large mammals such as mule deer and coyote may move through the local area, but the site does not function or contribute to a local or regional corridor for large mammals. Large mammal movement through the region likely occurs within the larger habitat blocks (e.g., Louis Stelzer County Park, Lake Jennings, El Capitan, Crestridge Ecological Reserve, Harbison Canyon) and riparian corridors (e.g., San Diego River, Sweetwater River) located further to the northeast, east, and southeast. Local movement of large mammals likely occurs to and from El Capitan and Lake Jennings habitat along the San Diego River corridor, and within the expansive open space within Crestridge and along Sweetwater River toward McGinty Mountain and Sycuan Peak. As such, the project site does not provide key live-in habitat for large mammals and does not contribute to a regional corridor or linkage for large mammals.

Despite existing development and incompatible land uses, bird movement occurs through the local area and project site. Birds with the ability to fly at greater heights and over long distances would be able to access and move through the site despite the existing barriers and incompatible land uses in the local area. Birds that are low fliers over shorter distances may have more difficulty accessing the site due to existing developments and incompatible uses in the local area, although it is evident that the site is used by a variety of bird species. For low- and short-distance flying bird species, movement through the project site is most likely to occur within the western half along the vegetated ridgeline and shallow slopes that intercept a north-south flight route. Direct access to the site along a north-south flight route is limited to two undeveloped locations along the site perimeter: one in the extreme southern portion near Jackson Hill Drive; and another in the northwestern portion near the southern terminus of Ridgeton Drive. These portions of the site promote a north-south line-of-sight and flight route between the two undeveloped locations along the site perimeter. Birds with the potential to move through the site include the coastal California gnatcatcher, which uses portions of the site as live-in habitat and temporary dispersal and migration habitat.

1.5 APPLICABLE REGULATIONS

Biological resources within the project site are subject to regulatory review by federal, State, and local agencies. Under CEQA, impacts associated with a proposed project or program are assessed in light of significance criteria determined by the CEQA Lead Agency (in this case, the

County) pursuant to CEQA Guidelines. Biological resources-related laws, regulations, and plans that apply include federal Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), Clean Water Act (CWA), CEQA, California Fish and Game Code (CFG Code), County RPO, and South County Segment MSCP Subarea Plan and BMO.

With respect to the proposed project, the USFWS will be responsible for reviewing issues related to migratory birds pursuant to the MBTA, and coastal California gnatcatcher and conservation planning issues in light of the MSCP. The USACE will be responsible for reviewing issues related to waters of the U.S. pursuant to the CWA. The RWQCB will be responsible for reviewing issues related to waters of the State pursuant to the CWA. The CDFW will be responsible for reviewing issues related to jurisdictional streambed pursuant CFG Code, nesting birds and raptors pursuant to CFG Code, and conservation planning in light of the MSCP.

The County is the lead agency for the CEQA environmental review process in accordance with state law and local ordinances. During CEQA review, the County will be responsible for reviewing project issues in light of their adopted Guidelines for Determining Significance for Biological Resources, RPO, and MSCP Subarea Plan and BMO.

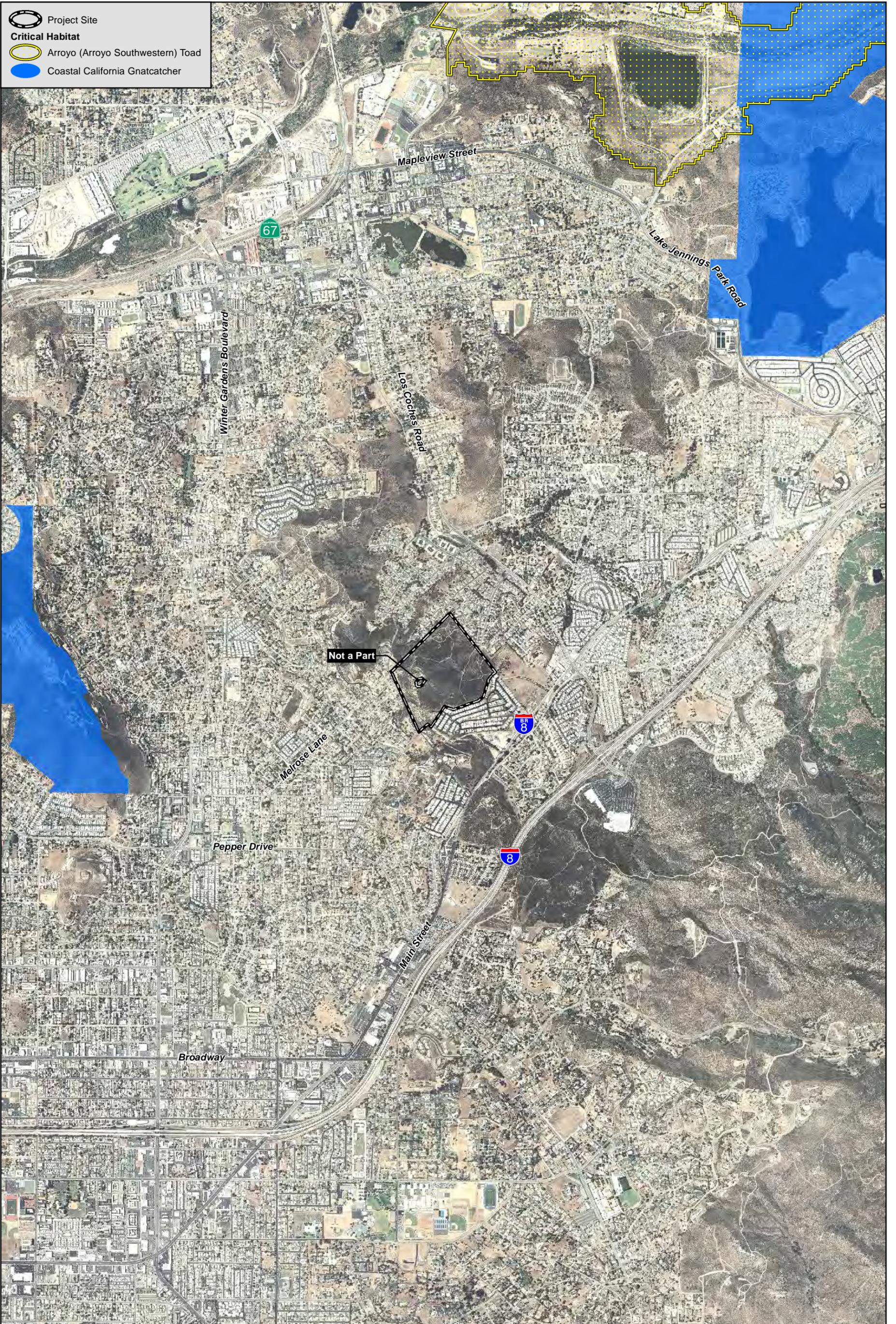
Coordination efforts for the project to date consist of an initial consultation meeting with staff from the County Department of Planning and Development Services on September 9, 2013.

1.5.1 Federal

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

The USFWS identifies critical habitat for endangered and threatened species. Critical habitat is defined as areas of land considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitat so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the federal ESA, all federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat. No critical habitat for any species occurs on site (Figure 10).

Sections 7 and 10(a) of the federal ESA regulate actions that could jeopardize endangered or threatened species. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species. A biological assessment is required for any major construction activity if it may affect listed species. In this case, take can be authorized via a letter of biological opinion issued by the USFWS for non-marine related listed species issues. A Section 7 consultation (formal or informal) is required when there is a nexus between



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Critical Habitat

BRIGHTWATER RANCH

Figure 10

endangered species' use of the site and impacts to USACE jurisdictional areas. Section 10(a) allows issuance of permits for incidental take of endangered or threatened species with preparation of a Habitat Conservation Plan (HCP). The term "incidental" applies if the taking of a listed species is incidental to, and not the purpose of, an otherwise lawful activity. An HCP demonstrating how the taking would be minimized and how steps taken would ensure the species' survival must be submitted for issuance of Section 10(a) permits.

All migratory bird species native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is now used to place restrictions on disturbance of active bird nests during the nesting season (generally January 15 to August 31). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests. Commonly, construction activities are precluded within a minimum 300 feet of an active bird nest.

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the CWA. The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of waters of the U.S. Permitting for projects filling waters of the U.S. (including wetlands) is overseen by the USACE under Section 404 of the CWA. In addition, when a Section 404 permit is required, a CWA Section 401 Water Quality Certification is also required from the RWQCB. The project could require CWA Section 404 and 401 permits.

1.5.2 State

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (or impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

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

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in listed plants. The California ESA follows the NPPA and covers both plants and animals designated as endangered or threatened with extinction. Plants listed as rare under NPPA were also designated rare under the CESA.

The CFG Code (Sections 1600 *et seq.*) requires an agreement with CDFW for projects affecting riparian and wetland habitats through issuance of a Streambed Alteration Agreement (SAA).

The California Natural Communities Conservation Planning (NCCP) Act of 1991 (Section 2835) allows the CDFW to authorize interim take of species covered by plans in agreement with NCCP guidelines. A Natural Communities Conservation Program initiated by the State of California focuses on conserving coastal sage scrub, and in concert with the USFWS and the federal ESA, is intended to avoid the need for future federal and state listing of coastal sage scrub dependent species. The County of San Diego became a participant in the NCCP in 1993 for projects located within the planning area for the Coastal Sage Scrub NCCP with the intent to "...provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth." The NCCP process guidelines were established as interim guidelines until formal subregional plans were approved. An NCCP 4(d) take permit is required for the project to demonstrate compliance with the NCCP Act. The adopted South County MSCP Subarea Plan is the applicable NCCP subregional plan for this portion of the County. The project is located within PAMA of the Lakeside-Metro-Jamul Segment of the County's MSCP Subarea Plan.

1.5.3 Local

Multiple Species Conservation Program

The NCCP Act of 1991 (Section 2835) allows the CDFW to authorize take of species covered by plans in agreement with NCCP guidelines. A Natural Communities Conservation Program initiated by the State of California focuses on conserving coastal sage scrub, and in concert with the USFWS and the federal ESA, is intended to avoid the need for future federal and state listing of coastal sage scrub dependent species.

The MSCP has been prepared to meet the requirements of the California NCCP, federal ESA, and CESA. It is a comprehensive, long-term habitat conservation plan that addresses the needs of multiple species by identifying key areas for preservation as open space in order to link core biological areas into a regional wildlife preserve. The County's MSCP Subarea Plan (County 1997) implements the MSCP within the unincorporated areas under County jurisdiction.

County MSCP Subarea Plan

The project site is located within the Metro-Lakeside-Jamul Segment of the County's MSCP Subarea Plan and most of the site is designated as PAMA (Figure 4). Take of covered species and their habitat is authorized for projects that satisfy the requirements of the County's BMO, further discussed below.

Biological Mitigation Ordinance

The BMO is the mechanism by which the County implements the County MSCP Subarea Plan at the project level within the unincorporated area to attain the goals set forth in the County MSCP Subarea Plan. The BMO contains design criteria and mitigation standards which, when applied to projects requiring discretionary permits, protect habitats and species and ensure that a project does not preclude the viability of the MSCP Preserve System. In this way, the BMO promotes

the preservation of lands that contribute to contiguous habitat core areas or linkages. Under the BMO (County 2010c), habitat is considered a BRCA if it meets one of the following criteria:

- It is considered a pre-approved mitigation area (PAMA) on the wildlife agencies' PAMA area map;
- It contains biological resources that support or contribute to the long-term survival of sensitive species and is adjacent to the pre-approved mitigation area;
- It is part of a regional linkage/corridor;
- It is mapped as Very High or High shown on the Habitat Evaluation Map and links significant patches of habitat;
- It is part of a block of habitat greater than 500 acres in area of diverse and undisturbed habitat that contributes to the conservation of sensitive species; or
- It supports a high number of sensitive species and is adjacent or contiguous to surrounding undisturbed lands, or contains soil derived from the following geologic formations that are known to support sensitive species: gabbroic rock, metavolcanic rock, clay, or coastal sandstone.

The majority of the project site is within PAMA and consists primarily of land categorized as Very High value on the County's Habitat Evaluation Map (2002), with some portions characterized as Moderate and small areas as Developed. The Diegan coastal sage scrub on site is occupied by the coastal California gnatcatcher and would meet the criteria to be considered BRCA, as defined in the County's BMO. In addition to providing live-in habitat for gnatcatcher and other animals, it also functions to facilitate bird movement through the local area as part of a conceptual archipelago or stepping stone linkage through urbanized portions of the communities of Winter Gardens and Lakeside. Bird movement is most likely to occur through the western half of the site, which is also where one of the two gnatcatcher pairs was confirmed during the 2014 surveys.

County Guidelines also direct that projects should incorporate avoidance of impacts to 80 percent of local populations of County List A and B sensitive plants. However, no County List A or B plants were recorded on site.

Resource Protection Ordinance

The County regulates natural resources (among other resources) via the RPO, the regulations of which cover wetlands, wetland buffers, sensitive plants and animals, sensitive habitats, and habitats containing sensitive animals or plants as sensitive biological resources. The resources on the site were analyzed in light of the County RPO, and specifically, whether they meet the criteria to be considered RPO sensitive habitat lands and wetlands.

Section 86.602(n) of the RPO defines sensitive habitat lands as “Land which supports unique vegetation communities, or the habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the State California Environmental Quality Act (CEQA) Guidelines (14 Cal. Admin. Code Section 15000 *et seq.*), including the area which is necessary to support a viable population of any of the above species in perpetuity, or which is critical to the proper functioning of a balanced natural ecosystem or which serves as a functioning wildlife corridor. Unique vegetation community refers to associations of plant species which are rare or substantially depleted. These may contain rare or endangered species, but other species may be included because they are unusual or limited due to a number of factors, for example: (a) they are only found in the San Diego region; (b) they are a local representative of a species or association of species not generally found in San Diego County; or (c) they are outstanding examples of the community type as identified by the California Department of Fish and Game listing of community associations.”

Land within the project site does not support unique vegetation communities. No portions of the site support associations of plant species that are rare or substantially depleted. Diegan coastal sage scrub, although a sensitive natural community does not meet the definition of a unique vegetation community. Coastal sage scrub is not only found in the San Diego region. The coastal sage scrub on the site does not support a local representative of a species or association of species not generally found in San Diego County. Last, the coastal sage scrub on the site is not expected to represent an outstanding example of the community type as identified by the CDFW listing of community associations. Therefore, the site does not meet this criterion in the RPO sensitive habitat lands definition.

The Diegan coastal sage scrub on the site is not occupied by a high number of coastal California gnatcatcher pairs, but is occupied nonetheless and functions as linkage habitat. Gnatcatcher represents a rare or endangered species or sub-species of animals or plants as defined by Section 15380 of CEQA Guidelines. If any of the coastal sage scrub on the site were to represent sensitive habitat lands, it would arguably be the linkage habitat that also supports a gnatcatcher breeding territory in the western portions of the site. The coastal sage scrub abutting existing development and subject to existing disturbances and adverse indirect effects in the eastern portions of the site would not constitute sensitive habitat lands. Consider gnatcatcher use, portions of the site meet this criterion in the RPO sensitive habitat lands definition.

The site is not critical to the proper functioning of a balanced natural ecosystem. The site is already fragmented and surrounded by existing development. The natural ecosystem on the site and in the local area is already impacted and unbalanced. The land is not critical to the ecosystem function, as similar land occurs in the local and regional area. The value of the site is that the existing sage scrub is large enough in size to support live-in habitat for gnatcatcher and it is situated along the path of the Lakeside Linkage. The project proposes preservation of 41.5 acres of sage scrub, which is large enough to support at least two gnatcatcher pairs and conserve gnatcatcher breeding functions and values. The sage scrub preserve is also situated along the linear path of the Lakeside Linkage to conserve existing wildlife movement functions through the site and local and regional area.

The site contributes to a habitat and movement archipelago that is critical to the survival of a population of the threatened California gnatcatcher. The site itself has capacity to support a number of gnatcatcher breeding territories based on its size and is within the critical movement area that joins the northern and southern populations of gnatcatchers. The number of breeding territories would be expected to vary from year-to-year based on environmental conditions (seasonal climatic conditions), population fluctuations, food availability, predation pressure, and other factors. While the size of the coastal sage scrub and ongoing disturbances may limit the number of gnatcatcher that would breed on the site, its function as a movement linkage is critical. Referencing the territory sizes included in Attachment I of the BMO, documented breeding home ranges of gnatcatcher have ranged from six to 45.0 acres in size. Inland territories constrained by development, such as the condition of the project site, averaged less than 11.0 acres. Following these studies and respecting the 2014 survey data, the coastal sage scrub on the site probably has capacity to support between two and seven gnatcatcher pairs.

Although portions of the site do serve as part of an existing “linkage,” the entire site does not serve as a functioning “wildlife corridor.” Portions of the site are located along the path of the Lakeside Linkage. The project proposes preservation of 41.5 acres of sage scrub along the linear path of the linkage, which would conserve existing wildlife movement functions through the site and local and regional area. The project has been sited against existing development in the eastern portions of the site and the biological integrity of the linkage would be conserved. The existing movement corridor on the site occurs in the western portions along the linear path of the linkage and where a clear line of sight within contiguous habitat is provided. The core of the preserve on site includes these important areas. Vegetative cover and topographic cover will be conserved with the preserve on the site. The existing widths along the linkage path will be conserved and will not be further constrained by the proposed development. A width of greater than 1,000 feet will be maintained in all areas where existing developments do not already impose a reduced width. Long lines-of-sight will be conserved in the western portion of the preserve along the corridor path. Considering linkage functions, portions of the site meet this criterion in the RPO sensitive habitat lands definition.

In conclusion, portions of the site would qualify as sensitive habitat lands due to the presence of gnatcatcher and linkage functions. However, the project would include all feasible measures necessary to protect and preserve the sensitive habitat lands, as follows.

Preservation of 41.5 acres of coastal sage scrub on the site is estimated to conserve the two gnatcatcher pairs confirmed in 2014 and potentially two or more additional pairs. The impact to sensitive habitat lands has been minimized by consolidating development footprint and maximizing open space, and would be mitigated by the on-site preservation. The project would provide a good preserve design; preserve key habitat along the Lakeside Linkage in perpetuity; preserve gnatcatcher breeding and dispersal functions; incorporate adequate buffer zones at edges; maintain appropriate linkage widths; and provide appropriate habitat management of the preserve. The proposed on-site mitigation provides an equal or greater benefit to the affected species than the lands being impacted because the area to be preserved is better located within the alignment of the Lakeside Linkage as described above. In conclusion, the project would preserve the existing gnatcatcher pairs and conserve existing functions and values for gnatcatcher breeding and movement. The project would mitigate for impacts in accordance with RPO and the sensitive habitat lands requirements.

RPO wetlands are defined according to the RPO as lands having one or more of the following attributes:

- At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
- The substratum is predominantly undrained hydric soil; or
- 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.

According to the RPO, the following are not considered RPO wetlands:

- Lands which have attribute(s) specified above, solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of PDS determines that they:
 - Have negligible biological function or value as wetlands;
 - Are small and geographically isolated from other wetland systems;
 - Are not vernal pools; and
 - Do not have substantial or locally important populations of wetland dependent sensitive species.
- 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 PDS:
 - Have negligible biological function or value as wetlands even if restored to the extent feasible; and
 - Do not have substantial or locally important populations of wetland dependent sensitive species.

As discussed in further detail below, the project site does not contain RPO wetlands. No areas with wetland or riparian vegetation occur on site.

The site supports several unnamed ephemeral drainage features that discharge into existing storm drain (MS4) facilities located offsite to the northeast. These drainages represent erosion features cut within the site's upland landscape.

The drainage features occur within upland habitat types and do not support a predominance of hydrophytes. Where vegetation occurs, it is composed of upland shrubs and herbaceous grasses and forbs found in the Diegan coastal sage scrub and other upland habitat types that encompass the drainage features. The site does not meet this criterion in the RPO wetlands definition.

The drainage features are ephemeral and convey short duration, low volume flows. As such, the underlying soils are not inundated or saturated for sustained periods of time. The soils are sandy loams and non-hydric. The substratum is not predominantly undrained hydric soil. The site does not meet this criterion in the RPO wetlands definition.

No perennial streams occur on the site. Although ephemeral streams are present, the substratum is composed of non-hydric, sandy loam soil. The substratum is not predominately non-soil. The features discharge into existing storm drain facilities located offsite to the northeast and do not contribute substantially to the biological functions or values of wetlands in the drainage system. As such, the site does not meet this criterion in the RPO wetlands definition.

2.0 PROJECT EFFECTS

Direct impacts are immediate impacts resulting from permanent habitat removal. Direct impacts were quantified by overlaying the limits of project-related impacts on the biological resources map of the site. Indirect impacts are all actions that are not direct removal of habitat, but affect the surrounding biological resources either as a secondary effect of the direct impacts or as the cause of degradation of a biological resource over time. Projects can have a wide variety of indirect impacts depending on the nature of the project, such as edge effects, animal behavioral changes, and errant construction. Cumulative impacts are those caused by numerous projects in the region and their additive effect of multiple direct and indirect impacts to biological resources over time.

Figures 11 through 15 depict the project impacts in relation to existing biological resources on the site. Figure 16 depicts the proposed biological open space on the site. Figure 17 depicts the project's conservation of existing linkage functions in the local area. Following County Guidelines, a total of 33.8 acres of the 76.2-acre project site will be considered impacted. Of the 33.8 acres, 5.1 acres are considered impact neutral due to the presence of existing brush management allowances (i.e., areas within 100 feet of existing inhabitable residential structures that immediately abut portions of the project site), leaving a remaining balance of 28.7 acres of impacts. Of the 28.7 acres, 27.1 acres of impact would occur to Diegan coastal sage scrub (Tier II) and 0.05 acre would occur to non-native grassland (Tier III).

The remaining portion of the site not impacted and not occurring within the existing water tank parcel and associated access road will be dedicated to a 41.8-acre preserve. The preserve will be placed in a biological open space easement and managed in perpetuity for conservation purposes. In total, the project would preserve 57 percent of the coastal sage scrub present on site, including habitat occupied by gnatcatcher and located along the north-south flight route and linkage habitat in the western half of the site. The project has been specifically sited and designed to avoid the highest quality coastal sage scrub on the project site, minimize edge interface, and consolidate development to the far northeast portion of the site. The project abuts existing development on three of its four sides and maximizes avoidance of high quality habitat on site. The project would not introduce new barriers or pinch points to existing linkages, and would conserve the existing movement functions and values for gnatcatcher and other animals using the local area.

2.1 SPECIAL STATUS SPECIES

The project would result in impacts to a single County List D plant: San Diego sunflower. As depicted on Figure 11, project impacts would be limited to three of the approximately

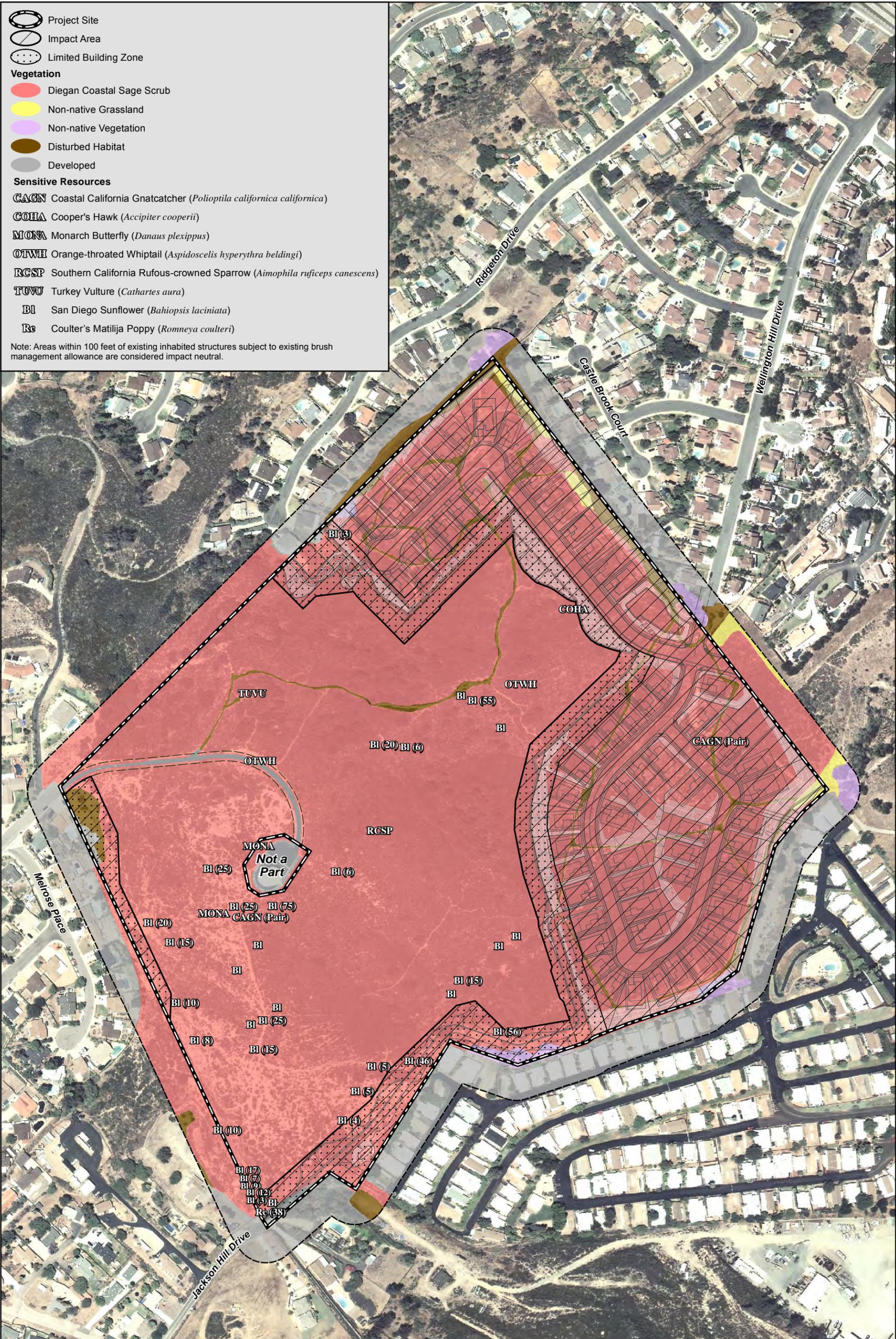
507 individuals of San Diego sunflower that occur on site. All 38 individuals of Coulter's matilija poppy, also a County List D plant, would be avoided. The avoided 504 individuals of San Diego sunflower and 38 individuals of matilija poppy would be placed in biological open space and preserved in perpetuity. The project would not affect the long-term survival of the species and impacts would be considered less than significant.

The project would directly impact Diegan coastal sage scrub habitat at locations where a single pair of coastal California gnatcatcher (Group 1 animal species) was confirmed during 2014 protocol-level surveys. Mitigation measures are proposed to avoid direct and indirect disturbance to nesting gnatcatchers and other birds with potential to occur. The project would also impact suitable habitat for three other County Group 1 animal species observed temporarily using habitat or flying over the project site during 2014 biological surveys: Cooper's hawk, turkey vulture, and southern California rufous-crowned sparrow. Project impacts would not jeopardize the survival of local populations of these species.

As depicted on Figure 16, the project would avoid and preserve 41.5 acres of high quality coastal sage scrub on site that is occupied by gnatcatcher and provides suitable breeding and/or foraging habitat for other sensitive animal species determined to have a high potential to occur. Sensitive animals with high potential to occur, but not observed during previous surveys include Coronado skink (*Eumeces skiltonianus interparietalis*), northern red-diamond rattlesnake (*Crotalus ruber ruber*), San Diego horned-lizard (*Phrynosoma coronatum blainvillei*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and San Diego desert woodrat (*Neotoma lepida intermedia*). Potential impacts on these species, including loss of potential habitat, would be mitigated through the preservation of suitable habitat within the on-site open space.

2.2 RIPARIAN HABITAT OR SENSITIVE NATURAL COMMUNITY

As summarized below within Table 4 and depicted on Figure 11, 27.1 acres of impact would occur to Diegan coastal sage scrub (Tier II) and 0.05 acre would occur to non-native grassland (Tier III).



- Project Site
- Impact Area
- Limited Building Zone

Vegetation

- Diegan Coastal Sage Scrub
- Non-native Grassland
- Non-native Vegetation
- Disturbed Habitat
- Developed

Sensitive Resources

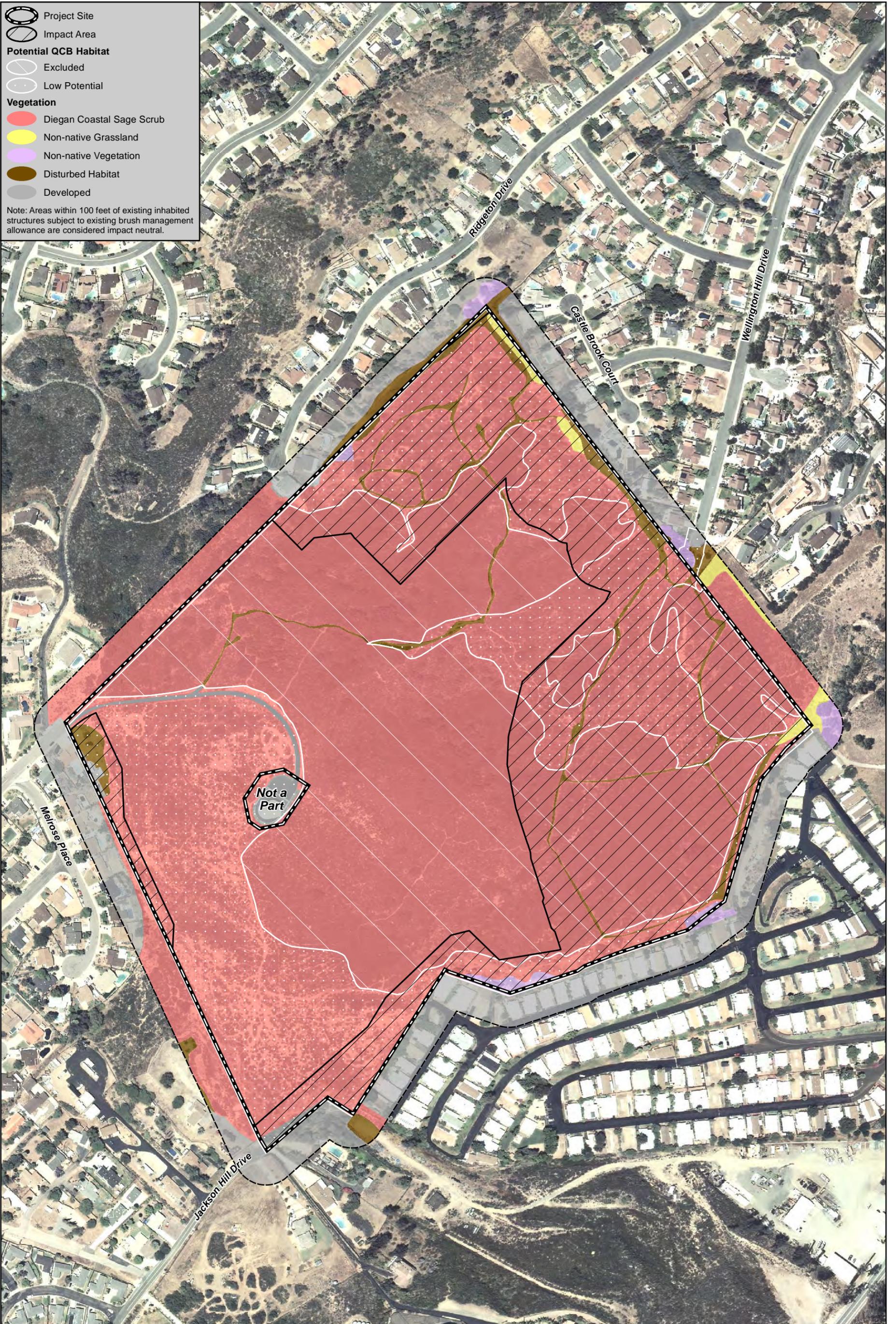
- CAGN** Coastal California Gnatcatcher (*Poliopitila californica californica*)
- COHA** Cooper's Hawk (*Accipiter cooperii*)
- MONA** Monarch Butterfly (*Danaus plexippus*)
- OTWH** Orange-throated Whiptail (*Aspidoscelis hyperythra beldingi*)
- RCSP** Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)
- TUVU** Turkey Vulture (*Cathartes aura*)
- BI** San Diego Sunflower (*Bahioopsis laciniata*)
- Re** Coulter's Matilija Poppy (*Romneya coulteri*)

Note: Areas within 100 feet of existing inhabited structures subject to existing brush management allowance are considered impact neutral.

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Vegetation and Sensitive Resources/Impacts

BRIGHTWATER RANCH



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Quino Site Assessment Results

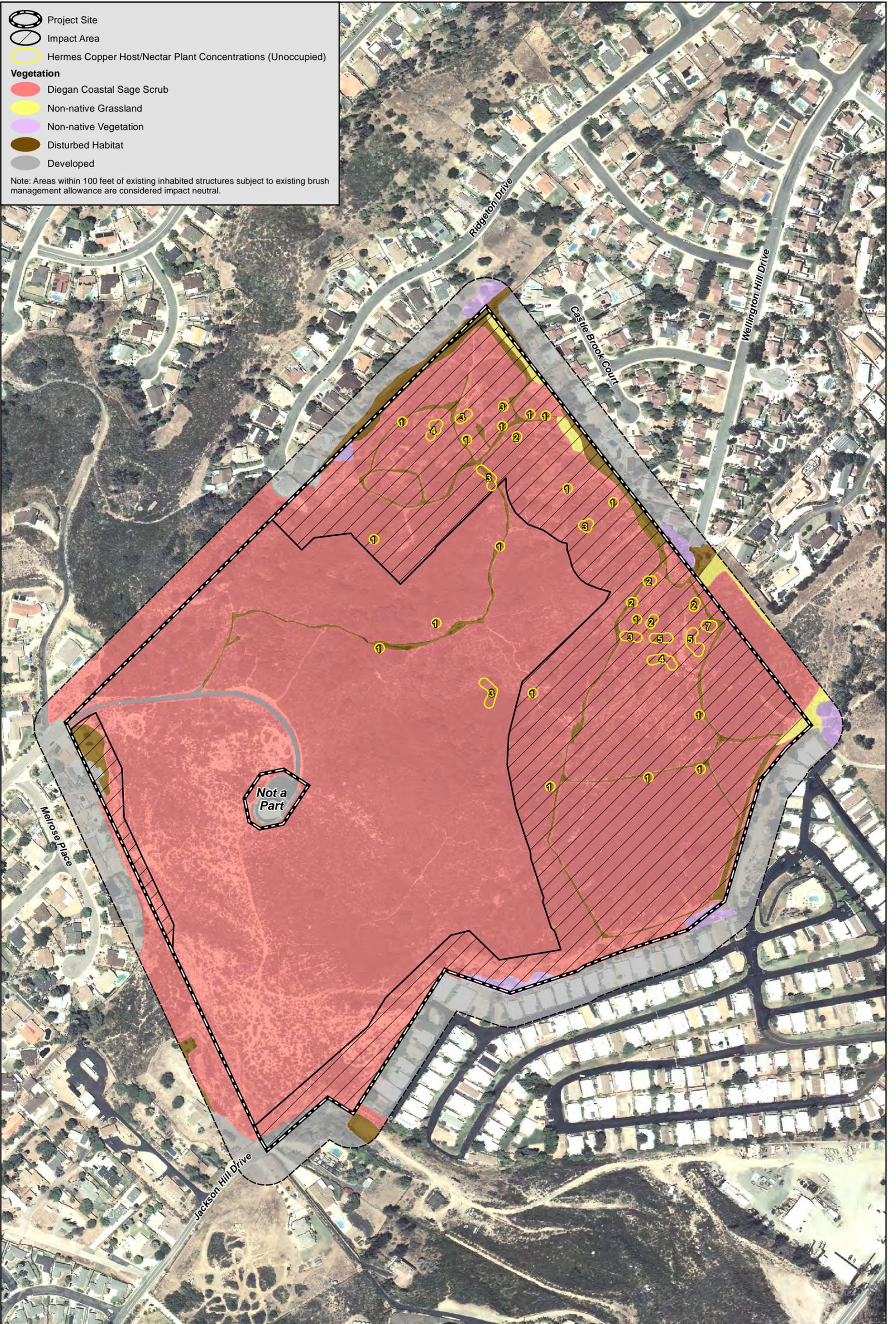
BRIGHTWATER RANCH

-  Project Site
-  Impact Area
-  Hermes Copper Host/Nectar Plant Concentrations (Unoccupied)

Vegetation

-  Diegan Coastal Sage Scrub
-  Non-native Grassland
-  Non-native Vegetation
-  Disturbed Habitat
-  Developed

Note: Areas within 100 feet of existing inhabited structures subject to existing brush management allowance are considered impact neutral.



Hermes Copper Survey Results

BRIGHTWATER RANCH