

2.2 **Biological Resources**

This subchapter describes existing biological conditions within the Proposed Project site and vicinity, identifies associated regulatory requirements and evaluates potential impacts (including cumulative impacts) and mitigation measures related to implementation of the Proposed Project. A Biological Technical Report (BTR) was prepared for the Project by HELIX Environmental Planning, Inc. (HELIX; 2025~~3~~), in conformance with the County Guidelines for Determining Significance and Report Format and Content Requirements – Biological Resources (County 2010a) and is summarized below. The complete updated report is included as Appendix C of this EIR.

2.2.1 **Existing Conditions**

2.2.1.1 ***Existing Setting***

Land Uses

The Project site is generally located within the southern valley humid temperate ecoregion of San Diego County, partially within the boundaries of the Rancho San Diego Specific Plan area and within the Valle de Oro Community Plan area. Generalized climate in the region is regarded as dry, subhumid mesothermal, with warm dry summers and cold moist winters. Mean annual precipitation is between 14 and 18 inches, and the mean annual temperature is between 60 degrees and 62 degrees Fahrenheit. The frost-free season is 260 to 300 days.

Important biological resources in the region generally include core blocks of coastal sage scrub and chaparral, open space conserved within the SDNWR and Otay Valley Regional Park, and perennial waters and riparian habitat associated with Sweetwater River and Otay River corridors and Sweetwater and Otay Reservoirs. The Project site is located within the Sweetwater River Valley and in the floodplain of the Sweetwater River, which flows in a northeast-to-southwest direction through the central portion of the site. The region hosts core populations of special status plants, including Dean’s milk-vetch (*Astragalus deanei*), Orcutt’s brodiaea (*Brodiaea orcuttii*), and felt-leaved monardella (*Monardella hypoleuca* ssp. *lanata*), in addition to important habitat for several special status animals, including least Bell’s vireo (*Vireo bellii pusillus*) and coastal California gnatcatcher (*Polioptila californica californica*), among others. As shown on Figures 2.2-1, *MSCP Designations*, and Figure 2.2-2, *Critical Habitat*, USFWS-designated critical habitat for three species occurs within the extreme southwestern portion of the Project site: coastal California gnatcatcher (2.66 acres), least Bell’s vireo (10.42 acres), and San Diego ambrosia (*Ambrosia pumila*; 15.66 acres). Additionally, critical habitat for southwestern willow flycatcher (*Empidonax traillii extimus*) occurs off site, just west of the Project boundary along a downstream segment of the Sweetwater River. The portion of least Bell’s vireo critical habitat mapped within the Project site is primarily located within areas that have been converted to golf course, though a small portion of riparian habitat along Sweetwater River is present. Mapped critical habitat for coastal California gnatcatcher within the Project site is associated with the edge of the Sweetwater River riparian canopy, though critical habitat for this species also occurs directly off site in areas vegetated with coastal sage scrub. Designated critical habitat for San Diego ambrosia within the Project site is located along the Sweetwater River, though some of these areas consist of golf course.

In the context of the MSCP, the Project site occurs within both the northeastern portion of the South County Segment and the southwestern portion of the Metro-Lakeside-Jamul Segment of the adopted County MSCP Subarea Plan. The majority of the site is mapped as developed on Attachment J (Habitat Evaluation Map) of the BMO (County 2010b), though small portions along the Project site's southern boundary are also mapped as low, moderate, high, and very high habitat value. The MSCP Hardline is mapped off site to the west and south of the Project along Sweetwater River and within the SDNWR (Figure 2.2-1).

Lands designated as Pre-Approved Mitigation Area (PAMA), totaling 16.40 acres within the Project site, occur along the northeastern, southeastern, and southern Project boundaries (Figure 2.2-1). A narrow strip of PAMA (4.96 acres), averaging approximately 100 feet wide, occurs at the northeastern boundary just south of Willow Glen Drive and generally follows the upstream portion of Sweetwater River. A small portion of PAMA (3.20 acres), connected to a larger block of off-site habitat that continues further east and southeast of the Project site, is found at the extreme southeastern portion of the Project. The largest patch of PAMA (8.24 acres) occurs directly east of Steele Canyon Road, along the Project site's southern border, in an area that was excavated during the 1960s. This area was located at the edge of the historic Sweetwater River floodplain and was excavated to a depth that created conditions suitable to support ponded areas. Lastly, approximately 37.79 acres of the Project site at the southwestern boundary represent a Minor Amendment Area. This includes riparian habitat at the downstream portion of Sweetwater River, and lands developed as part of the golf course.

Biological Surveys

General biological surveys of the Project site were conducted, consistent with County requirements, by HELIX on August 13 and November 7, 2018, September 28 and 29, 2020, October 6, 2020, and May 10 and 19, 2022. The site was examined for general biological data, including vegetation mapping and species inventories. The locations of special status plant and animal species incidentally observed or otherwise detected were mapped. The Project site was also examined for evidence of potential jurisdictional waters and wetlands.

In addition to the general biological surveys, HELIX conducted a jurisdictional delineation, rare plant surveys, southwestern pond turtle (*Actinemys pallida*) surveys, acoustical bat surveys, wildlife camera trapping surveys, and protocol-level surveys for arroyo toad (*Anaxyrus californicus*), coastal California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher, as summarized below. All portions of the Project site were surveyed for potential resources and evaluated for Project impacts. More information on the extent and nature of these surveys is provided in the BTR for this Project (Appendix C).

Rare Plant Surveys

Surveys for special status plant species were conducted on April 17 and June 20, 2019, and May 20 and July 11, 2022, in accordance with applicable protocols. Rare plant surveys included focused surveys for San Diego ambrosia. USFWS-designated habitat for the federally listed endangered San Diego ambrosia occurs in the southwestern portion of the Project site. A nearby population of San Diego ambrosia is located south of the southwestern portion of the Project site within the SDNWR. This population was field verified for detectability during the surveys. Special status

plant species include species that are: listed as threatened or endangered by the USFWS or the CDFW; those with a California Rare Plant Rank (CRPR) 1 through 4 designated by the California Native Plant Society (CNPS); those that are on the County's Sensitive Plant List (County 2010c); and those covered by the County's MSCP Subarea Plan (County 1997).

Arroyo Toad Surveys

Focused surveys for arroyo toad were conducted within the Project site and consisted of six survey visits, spaced at least seven days apart, conducted between April 15 and June 25, 2019, in accordance with *Survey Protocol for Arroyo Toad* (USFWS 1999). At least one survey was conducted during the months of April, May, and June. The survey area covered all areas of potential habitat within the Project site, including riparian habitat located along, or directly adjacent to, the Sweetwater River.

An updated habitat assessment for arroyo toad was conducted on May 9, 2022. The habitat assessment consisted of one daytime and one nighttime site visit to assess and document changes in biological resources from the 2019 focused surveys and evaluate the suitability of potential habitat to support arroyo toad.

Southwestern Pond Turtle Surveys

Visual surveys for the southwestern pond turtle were conducted in spring and summer of 2022. The survey consisted of two site visits performed during the species' active period, May to July. The surveys were conducted using a modified protocol that generally followed those detailed in *USGS Western Pond Turtle Visual Survey Protocol for the Southcoast Ecoregion* (United States Geological Survey [USGS] 2006). The pond turtle survey area consisted of all potential aquatic habitat occurring within the Project site, including several artificial ponds that were constructed as part of the golf course development, though not all of these ponds were inundated during the surveys. A total of six ponded areas were surveyed, including two artificial ponds within the closed golf course area west of Steele Canyon Road, three artificial ponds within the active golf course area east of Steele Canyon Road, and a ponded area east of the Steele Canyon Road along the Project's southern boundary that represents a lower lying area that was excavated in the 1960s during construction of the golf course.

Least Bell's Vireo Surveys

Focused surveys for least Bell's vireo were conducted and consisted of eight survey visits spaced at least 10 days apart, between April 16 and July 15, 2019, in accordance with *Least Bell's Vireo Survey Guidelines* (USFWS 2001). The survey area consisted of potential least Bell's vireo riparian habitat present within the Project site.

Southwestern Willow Flycatcher Surveys

Focused surveys for southwestern willow flycatcher were conducted within the Project site in 2019 and 2022. ~~The survey and~~ consisted of five survey visits conducted at least five days apart, between May 30 and July 15, 2019, and between May 26 and July 13, 2022, in accordance with USFWS-approved survey protocol (Sogge et al. 2010). The survey area consisted of potential southwestern willow flycatcher riparian habitat present within the Project site.

Coastal California Gnatcatcher Surveys

Focused surveys for coastal California gnatcatcher were conducted within the Project site and consisted of three survey visits, at least seven days apart, conducted between June 23 and July 7, 2022, in accordance with the *Coastal California Gnatcatcher Presence/Absence Survey Protocol* (USFWS 1997). The survey area consisted of all potential gnatcatcher habitat present within the Project site.

Bat Surveys

Bat surveys were conducted within the Project site in 2022 and consisted of acoustic monitoring surveys and a nighttime emergence survey. A habitat assessment was conducted during the first survey visit to evaluate and identify potential roosting and/or foraging habitat for bats present within the Project site (e.g., abandoned buildings, water bodies, rock outcrops, etc.). Acoustic monitoring surveys were conducted on the Project site over two separate two-week deployment periods between May 17 and July 14, 2022. Three AnaBat Express detectors were deployed throughout the Project site to record bat calls. Anolook software was used to process the AnaBat Express recordings and aid in species identification. A nighttime emergence survey was conducted on the Project site by HELIX biologists on July 26, 2022. The emergence survey occurred between one hour before local sunset and one hour after sunset. An Echo Meter Touch 2 Pro detector was used to record bat calls. Following the survey, Sonobat software (version 4.5.5) was used to process the recordings and aid in species identification.

Wildlife Trapping Surveys

Wildlife camera trapping surveys were conducted using motion-activated cameras deployed within the Project site to document wildlife presence, use, and movement throughout the Project site. Three cameras were deployed throughout the Project site between May 19 and July 28, 2022 and were installed in areas where signs of wildlife use and movement (i.e., tracks and scat) were observed; potential food, shelter, and aquatic resources were present (such as existing native riparian habitat areas and artificial ponds); and at potential ingress/egress areas. A total of four deployments were conducted, with each deployment period spanning between two to three weeks. The images with a positive detection were reviewed, and species recorded were identified to the closest taxonomic group possible.

Jurisdictional Delineation

HELIX conducted a formal jurisdictional delineation on September 18 and October 5, 2018, to identify and map water and wetland resources potentially subject to USACE jurisdiction pursuant to Section 404 of the Clean Water Act (CWA; 33 USC 1344), RWQCB jurisdiction pursuant to Section 401 of the CWA and State Porter-Cologne Water Quality Control Act, and streambed and riparian habitat potentially subject to CDFW jurisdiction pursuant to Sections 1600 et seq. of the California Fish and Game Code (CFG Code). The delineation was also conducted to determine the presence or absence of County Resource Protection Ordinance (RPO) wetlands. Areas generally characterized by depressions, drainage features, and riparian and wetland vegetation were evaluated.

Habitats

Fifteen vegetation communities/land use types occur on the Project site, as shown on Figure 2.2-3, *Vegetation and Sensitive Resources*. The numeric codes in parentheses following each community/land use type name are from the Holland classification system (Holland 1986) as added to by Oberbauer (2008) and as presented in the County's Biology Guidelines (County 2010a). The communities are presented in Table 2.2-1, *Existing Vegetation Communities/Land Use Types*, and described below in order by MSCP Tier.

Disturbed Wetland

Disturbed wetland is dominated by exotic wetland species that invade areas that have been previously disturbed or undergone periodic disturbances. These non-natives become established more readily following natural or human-induced habitat disturbance than the native wetland flora. Characteristic species of disturbed wetlands include giant reed (*Arundo donax*), tamarisk (*Tamarix* spp.), cocklebur (*Xanthium strumarium*), umbrella sedge (*Cyperus involucratus*), and wild celery (*Apium graveolens*).

Disturbed wetland on site is located along the Sweetwater River and is dominated by Bermuda grass (*Cynodon dactylon*) or bare ground. The river channel has been altered from current and past disturbances associated with previous mining activities and golf course development, including on-going maintenance and operations. It has been planted with turf grass and is regularly mowed as part of golf course maintenance activities. Approximately 10.25 acres of disturbed wetland are mapped within the Project site.

Freshwater Marsh

Freshwater marsh is dominated by perennial, emergent monocots, 5 to 13 feet tall, forming incomplete to completely closed canopies. This vegetation type occurs along the coast and in coastal valleys near river mouths and around the margins of lakes and springs, and freshwater or brackish marshes. These areas are semi-permanently or permanently flooded, yet lack a significant current (Holland 1986). Dominant species include cattails (*Typha* sp.) and bulrushes (*Schoenoplectus* sp.), along with umbrella sedges (*Cyperus* sp.), rushes (*Juncus* sp.), and spike-sedge (*Eleocharis* sp.).

Freshwater marsh within the Project site is dominated by cattails and California bulrush (*Schoenoplectus californicus*). A small patch occurs in the southwestern portion of the Project site at the downstream end of Sweetwater River, just east (upstream) of a bridge crossing. Freshwater marsh also occurs in the south-central portion of the Project site, just east of Steele Canyon Road, in an area that was previously disturbed by mining and golf course development. A total of 0.22 acre of freshwater marsh are mapped on site.

Southern Cottonwood-Willow Riparian Forest (including disturbed)

Southern cottonwood-willow riparian forest consists of tall, open, broad-leaved, winter deciduous riparian species and is dominated by cottonwood species (e.g., *Populus* spp.), with willow species (*Salix* spp.) composing the main understory. This vegetation community is dense, structurally diverse, and similar to southern arroyo willow riparian forest, although it contains a greater number

of cottonwoods and western sycamores (*Platanus racemosa*). Disturbed southern cottonwood-willow riparian forest contains a higher percentage of exotic species such as tamarisk, shamel ash (*Fraxinus uhdei*), eucalyptus (*Eucalyptus* spp.), peppertree (*Schinus* spp.), and Mexican fan palm (*Washingtonia robusta*).

Typical species occurring within southern cottonwood-willow riparian forest on site include western cottonwood (*Populus fremontii*), western sycamore (*Platanus racemosa*), arroyo willow (*Salix lasiolepis*), and black willow (*Salix gooddingii*). Non-native species within disturbed portions of southern cottonwood-willow riparian forest include eucalyptus, tamarisk, and Mexican fan palm. Approximately 12.87 acres of southern cottonwood-willow riparian forest, which includes 1.02 acres disturbed, are mapped at the northeastern and southwestern portions of the Project site along Sweetwater River, and to the east of Steele Canyon Road along the site's southern boundary in an area previously disturbed by mining activities.

Southern Willow Scrub (disturbed)

Southern willow scrub consists of dense, broad-leaved, winter-deciduous stands of trees dominated by shrubby willows in association with mule fat (*Baccharis salicifolia*), and with scattered emergent cottonwood and western sycamores. This vegetation community occurs on loose, sandy or fine gravelly alluvium deposited near stream channels during flood flows. Frequent flooding maintains this early seral community, preventing succession to a riparian woodland or forest (Holland 1986). In the absence of periodic flooding, this early seral type would be succeeded by southern cottonwood or western sycamore riparian forest. Disturbed southern willow scrub contains a higher percentage of exotics and non-native species.

This habitat occurs along the downstream portion of Sweetwater River in the southwestern portion of the Project site. Dominant species include arroyo willow, black willow, and sandbar willow (*Salix exigua*). Disturbed southern willow scrub includes the same species along with intermixed giant reed and tamarisk trees. A total of 4.82 acres of disturbed southern willow scrub occurs on site.

Tamarisk Scrub

Tamarisk scrub typically comprises shrubs and/or small trees of exotic tamarisk species but may also contain willows, salt bushes (*Atriplex* spp.), and salt grass (*Distichlis spicata*). This habitat occurs along intermittent streams in areas where high evaporation rates increase the salinity level of the soil. Tamarisk is a phreatophyte, a plant that can obtain water from an underground water table. Because of its deep root system and high transpiration rates, tamarisk can substantially lower the water table to below the root zone of native species, thereby competitively excluding them. As a prolific seeder, it may rapidly displace native species within a stream channel.

Tamarisk scrub on site is dominated by tamarisk with occasional cattails and willows. It is found along the downstream portion of Sweetwater River in the southwestern portion of the Project site. A total of 1.23 acres of tamarisk scrub is mapped on site.

Open Water

Open water on the Project site consists of stands of fresh water located to the east of Steele Canyon Road along the Project's southern boundary in an area that was previously disturbed by mining activities. The area was excavated during sand extraction creating lower-lying areas that intersect the water table. These open water features are surrounded by native riparian habitat. A total of 1.68 acres of open water/freshwater pond is mapped on site.

Arundo-dominated Riparian

Arundo-dominated riparian consists of densely vegetated riparian thickets dominated almost exclusively by giant reed. It occurs along disturbed water courses. On site, this habitat occurs as a near monoculture of giant reed within a portion of Sweetwater River, an associated tributary off Ivanhoe Ranch Road, and at the fringe of a constructed pond west of Steele Canyon Road. A total of 0.56 acre of arundo-dominated riparian is mapped on site.

Diegan Coastal Sage Scrub (including Disturbed)

Coastal sage scrub is one of the two major shrub types that occur in southern California, occupying xeric sites characterized by shallow soils (the other is chaparral). Diegan coastal sage scrub may be dominated by a variety of species depending on soil type, slope, and aspect. Typical species found within Diegan coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), lemonadeberry (*Rhus integrifolia*), white sage (*Salvia apiana*), and black sage (*Salvia mellifera*). Disturbed Diegan coastal sage scrub contains many of the same shrub species as undisturbed Diegan coastal sage scrub but is sparser and has a higher proportion of non-native, annual species.

Small patches of this habitat occur at the southeastern and southwestern Project boundaries. These patches are connected to larger swaths of coastal sage scrub that occur off site within preserved lands and open space. Dominant species include California sage brush, California buckwheat, Palmer's goldenbush (*Ericameria palmeri* var. *palmeri*) and broom baccharis (*Baccharis sarothroides*). Disturbed coastal sage scrub on site occurs as narrow bands of habitat to the south of Willow Glen Drive at the northeastern boundary, and to the west of Steele Canyon Road along the southern boundary. These areas consist of scattered shrubs of California sagebrush and California buckwheat growing among planted non-native trees and woody debris deposited on the slopes. A total of 1.8 acres of Diegan coastal sage scrub, including 0.5 acre disturbed, is mapped within the site.

Non-native Grassland

Non-native grassland is a mixture of annual grasses and broad-leaved, herbaceous species. Annual species comprise from 50 percent to more than 90 percent of the vegetative cover, and most annuals are non-native species. Non-native grasses typically comprise at least 30 percent of the vegetative cover, although this percentage can be much higher in some years and lower in others, depending on land use and climatic conditions. Usually, the grasses are less than three feet in height and form a continuous or open cover. Emergent shrubs and trees may be present but do not comprise more than 15 percent of the total cover. Most of the non-native grasses originated from

the Mediterranean region, an area with a long history of agriculture and a climate similar to California.

A small patch of non-native grassland totaling 0.2 acre, occurs in the southwestern portion of the Project site. Dominant species include ripgut grass (*Bromus diandrus*), short-pod mustard (*Hirschfeldia incana*), and Bermuda grass.

Non-native Woodland

Non-native woodland is dominated by exotic trees, often intentionally planted. These areas are not artificially irrigated or maintained. A single stand of non-native woodland is found in the southeastern portion of the site. Dominant species include eucalyptus, tamarisk, and Peruvian pepper tree (*Schinus molle*) with an understory comprised of scattered California sagebrush and California buckwheat shrubs, and annual non-native grasses (*Bromus* spp.). Approximately 1.7 acres of non-native woodland is mapped within the Project site.

Eucalyptus Woodland

Eucalyptus woodland is dominated by eucalyptus (*Eucalyptus* spp.), an introduced genus that produces a large amount of leaf and bark litter. The chemical and physical characteristics of this litter, combined with the shading effects of the trees, limit the ability of other species to grow in the understory, thereby decreasing floristic diversity. If sufficient moisture is available, eucalyptus becomes naturalized and can reproduce and expand its cover.

Scattered stands of eucalyptus woodland occur throughout the Project site, mostly at the northeastern, southeastern, and southern boundaries. Scattered eucalyptus trees also occur throughout the golf course amongst the trees lining the fairways. A total of 2.6 acres of eucalyptus woodland is mapped within the Project site.

Non-native Vegetation

Non-native vegetation is a category describing stands of naturalized trees and shrubs (e.g., acacia [*Acacia* spp.], peppertree [*Schinus* spp.]), many of which are also used in landscaping. On site, this habitat consists of Peruvian pepper trees and oleander (*Nerium oleander*) lining Willow Glen Drive along the site's northern boundary and tamarisk and other non-natives that have emerged within drained artificial ponds, totaling approximately 7.5 acres.

Disturbed Habitat

Disturbed habitat includes areas where there is evidence of soil surface disturbance and compaction resulting from previous legal human activities. Vegetation, if present, has a predominance of non-native and/or weedy species that are indicators of such surface disturbance (County 2010c). Vegetation on disturbed land (if present) will have a high predominance of non-native and/or weedy species that are indicators of surface disturbance and soil compaction, such as Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca grandiflora*), horehound (*Marrubium vulgare*), and sow-thistle (*Sonchus oleraceus*). Although annual, non-native grasses may be present on disturbed land, they do not dominate the vegetative cover.

Disturbed habitat on site predominantly occurs to the west of Steele Canyon Road within the closed portion of the golf course. This area is no longer being irrigated and maintained, though it is subject to periodic mowing. Disturbed habitat consists of dirt roads and non-native, weedy vegetation such as Bermuda grass, short-pod mustard, Russian thistle, filaree (*Erodium* spp.), and scattered non-native grasses (*Bromus* spp.). Additionally, native and non-native planted trees including cottonwoods, eucalyptus, shamel ash, and northern catalpa (*Catalpa speciosa*) are present along the borders of the previous fairways. A total of 91.3 acres of disturbed habitat is mapped on site.

Artificial Pond

Artificial ponds on site consist of open water habitat excavated in uplands. A total of six constructed ponds totaling 3.0 acres are present on site, which serve as water hazards and aesthetic features for the golf course. Four ponds are present in the eastern portion of the site and two occur to the west of Steele Canyon. The water level in these constructed ponds is maintained artificially by pumping groundwater into them.

Developed Land

Developed land includes areas that have been constructed upon or otherwise covered with a permanent, unnatural surface and may include, for example, structures, pavement, irrigated landscaping, or hardscape to the extent that no natural land is evident. These areas no longer support native or naturalized vegetation (County 2010c).

Developed land within the Project site consists of the active portion of Cottonwood Golf Club, to the east of Steele Canyon Road. These areas include a club house, parking lot, maintenance facilities and other buildings, golf cart paths, and other areas of hardscape or maintained landscaping that includes irrigated turf grass and planted native and non-native trees. Approximately 136.9 acres of developed land are mapped within the Project site.

Sensitive Vegetation Communities/Habitat Types

Sensitive vegetation communities/habitat types are defined as land that supports unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the CEQA Guidelines. Table 5 of the County guidelines (County 2010a, 2010c) provides a list of habitat mitigation ratios for each vegetation community type.

Sensitive vegetation communities/habitat types mapped on the Project site include disturbed wetland, freshwater marsh, southern cottonwood-willow riparian forest (including disturbed), disturbed southern willow scrub, tamarisk scrub, open water, arundo-dominated riparian, Diegan coastal sage scrub (including disturbed), and non-native grassland.

Non-native woodland, eucalyptus woodland, non-native vegetation, disturbed habitat, artificial pond, and developed lands do not meet the definition of sensitive habitat under CEQA.

Jurisdictional Wetlands/Waters

The Project site does not contain any vernal pools, but supports wetland and non-wetland waters of the U.S. subject to the regulatory jurisdiction of the USACE pursuant to Section 404 of the

federal CWA; wetland and non-wetland waters of the State subject to the regulatory jurisdiction of the RWQCB pursuant to Section 401 of the CWA; riparian-vegetated and unvegetated streambed subject to the regulatory jurisdiction of the CDFW pursuant to Section 1600 et seq. of California Fish and Game Code; and wetlands subject to the regulatory jurisdiction of the County pursuant to the RPO. However, as discussed in further detail in the local regulatory framework under *Resource Protection Ordinance*, below, the Proposed Project is exempt from RPO requirements based on implementation of measures specified in Section 86.605(d) of the RPO as conditions of the Project's MUP.

Impacts to jurisdictional wetlands/waters would require consultation and approvals from federal and state agencies, including a Section 404 Permit from USACE, 401 Certification from the San Diego RWQCB, and a 1602 Streambed Alteration Agreement (SAA) from CDFW.

Wetland habitat on site is primarily associated with the Sweetwater River, which enters the Project site at the northeastern boundary, flows west, and exits the site at the southwestern boundary. The majority of habitat along the river has been heavily modified by the development of the golf course and is dominated by Bermuda grass that is subjected to on-going disturbances associated with maintenance activities (i.e., mowing). A stand of riparian habitat is present at the downstream portion of the river within the southwestern portion of the Project site.

Three ephemeral drainages, two of which are tributary to Sweetwater River, are also present within the Project site. All three drainages enter the site at separate locations along the Project's southern boundary. The eastern-most drainage enters the Project site from the south and terminates within a lower lying area that was excavated in the 1960s during the construction of the golf course. This drainage course does not have downstream connectivity to the Sweetwater River or any other waterways. A second drainage, Mexican Canyon Creek, enters the site from Ivanhoe Ranch Road, just east of Steele Canyon Road. The drainage flows north, eventually converging with Sweetwater River. Development of the golf course and on-going maintenance activities have severely altered this drainage, which lacks a defined bed and bank. Vegetation along the drainage consists of Bermuda grass, which serves as turf grass along the golf course's fairways. The westernmost drainage flows west from Steele Canyon Road, south of the Project boundary. The off-site reach of this drainage enters a small detention basin located within a residential property at the terminus of Heatherwood Drive. A spillway is located at the western portion of the basin at the point where the narrow drainage feature enters the Project site. The on-site reach of this drainage flows west for approximately 400 feet and then converges with the Sweetwater River.

USACE Jurisdiction

Through implementation of the CWA, the USACE claims jurisdiction over waterways that are, or drain to, waters of the U.S. or "waters." The definition of "waters" includes (but is not limited to) inland waters; lakes, rivers, and streams that are navigable; tributaries to these waters; and wetlands adjacent to these waters or their tributaries. Waters of the U.S. are considered wetlands if wetland indicators for the following three parameters are met: vegetation, soils, and hydrology. If any single parameter does not contain a positive wetland indicator, the feature is not a USACE jurisdictional wetland. The jurisdictional limit of wetlands is the upper limit of the wetland. Delineations of wetland limits were conducted for the Proposed Project according to the procedures found in the Wetlands Delineation Manual (USACE 1987) and Arid West Regional

Supplement (USACE 2008). Areas within the Project site were determined to be potential non-wetland waters of the U.S. if there was evidence of regular surface flow (e.g., bed and bank) but vegetation and/or soil criteria were not met. The jurisdictional limit of non-wetland waters (i.e., creeks and drainages) were delineated by their relation to an ordinary high water mark.

All areas with depressions or drainage channels were evaluated for the presence of waters of the U.S., including jurisdictional wetlands. If an area was suspected of being a wetland, vegetation and hydrology indicators were noted, and a soil pit was dug and described. The area was then determined to be a federal (USACE) wetland if it satisfied the three wetland criteria (vegetation, hydrology, and soil). Fifteen sampling points were studied, and soil pits were excavated at each of these. Sampling points were located within representative uplands and wetlands.

Potential waters of the U.S. in the Project site include wetland waters of the U.S. and non-wetland waters of the U.S. within Sweetwater River and unnamed tributaries, as shown in Table 2.2-2, *Waters of the U.S. – Existing Conditions* and Figure 2.2-4, *Waters of the U.S.*). A total of 24.37 acres of potential waters of the U.S. occurs on site, comprised of 23.82 acres of wetlands and 0.55 acre of non-wetland waters. These waters of the U.S. would also be subject to RWQCB jurisdiction pursuant to CWA Section 401.

RWQCB Jurisdiction

Potential RWQCB-jurisdictional waters of the State were delineated in the same manner as potential USACE-jurisdictional waters of the U.S. All waters of the U.S. were also considered waters of the State subject to RWQCB jurisdiction pursuant to CWA Section 401; no geographically isolated waters subject to Porter-Cologne are present on the Project site (refer to Table 2.2-2 and Figure 2.2-4).

CDFW Jurisdiction

Under Section 1600 of the CFG Code, a Project Applicant may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel or bank of any river, stream or lake, or deposit or dispose of debris, waste or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream or lake, unless CDFW receives written notification regarding the activity. After said notification is complete, CDFW must determine whether the activity may substantially adversely affect an existing fish and wildlife resource. The Project Applicant would be required to apply for and receive approval of a SAA from CDFW.

Potential CDFW-jurisdictional streambed and riparian habitat were determined based on the presence of riparian vegetation or regular surface flow within a measurable bed and bank. Potential CDFW-jurisdictional unvegetated streambed encompasses the top-of-bank to top-of-bank width for the features within the Project site. The CDFW jurisdictional habitat includes all riparian shrub or tree canopy that may extend beyond the banks of a stream.

Potential CDFW jurisdictional areas within the Project site consist of arundo-dominated riparian, disturbed wetland, freshwater marsh, open water, southern cottonwood-willow riparian forest (including disturbed), disturbed southern willow scrub, tamarisk scrub, and streambed, as presented in Table 2.2-3, *California Department of Fish and Wildlife Jurisdiction*, and shown on

Figure 2.2-5, *CDFW Jurisdictional Areas*. The potential CDFW jurisdiction totals 50.33 acres on site.

San Diego County RPO Wetlands

The County's RPO is more inclusive than the USACE's criteria for defining wetlands. Under the RPO, a wetland must only meet one of the following criteria in order to be classified as a wetland: (1) at least periodically the land supports predominantly hydrophytes (plants whose habitat is water or very wet places); (2) the substratum is predominantly undrained hydric soils; or (3) an ephemeral or perennial stream is present, whose substratum is predominantly non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

As shown in Table 2.2-4, *County Resource Protection Ordinance Wetlands*, and Figure 2.2-6, *County RPO Wetlands*, areas meeting the criteria to be considered County RPO wetlands (County 2011a) in the Project site include arundo-dominated riparian, disturbed wetland, freshwater marsh, open water, southern cottonwood-willow riparian forest (including disturbed), disturbed southern willow scrub, and tamarisk scrub. County RPO wetlands total 31.35 acres on site.

Plant Species

HELIX identified a total of 190 plant species within the Project site, of which 80 (42 percent) are native species and 110 (58 percent) are non-native species (refer to Appendix I of the BTR [EIR Appendix C] for a complete list of identified plant species).

Special Status Plant Species

Special status plant species have been afforded special status and/or recognition by the USFWS, CDFW, and/or the County and may also be included in the CNPS' Inventory of Rare and Endangered Plants. Their status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. A species that exhibits a small or restricted geographic range (such as those endemic to the region) is geographically rare. A species may be more or less abundant but occur only in very specific habitats. Lastly, a species may be widespread but exist naturally in small populations.

No federally or state listed plant species were observed within the Project site. While USFWS designated critical habitat for the federally endangered San Diego ambrosia is present in the southwestern portion of the site, no individuals were observed within the Project site during the 2019 and 2022 rare plant surveys. A nearby reference population of San Diego ambrosia that occurs within the SDNWR was field verified for detectability during the rare plant surveys. The species was observed both in vegetative and flowering states within the SDNWR during the surveys. As such, the species would likely have been visible during the survey if present within the Project site.

Four special status plant species were observed on the Project site, as listed below, referenced in Appendix I to the BTR, and shown on Figure 2.2-3.

San Diego Sagewort (*Artemisia palmeri*)

Status: --/--; CRPR 4.2; County List D

Distribution: Coastal regions of Orange and San Diego Counties at elevations below 1,970 feet.

Habitat(s): Moist drainages and stream courses on sandy and mesic soils.

Presence on site: Seven individuals were observed at the western Project boundary at the edge of southern riparian forest habitat along the Sweetwater River.

San Diego County Viguiera (*Bahiopsis laciniata*)

Status: --/--; CRPR 4.3, County List D

Distribution: Coastal portions of southern California from Ventura County south to San Diego County and into western Riverside County at elevations below 2,500 feet.

Habitat(s): Grows on a variety of soil types within coastal sage scrub and chaparral.

Presence on site: Three individuals were observed at the northeastern portion of the Project site within disturbed coastal sage scrub and non-native vegetation. Another three individuals were observed just outside of the Project site at the northeastern boundary along Willow Glen Drive and at the southeastern boundary along a dirt road.

Palmer 's Goldenbush (*Ericameria palmeri* var. *palmeri*)

Status: --/--; CRPR 1B.1; County List B; MSCP Covered and Narrow Endemic (NE)

Distribution: Coastal San Diego County and Baja California, Mexico at elevations below 1,970 feet.

Habitat(s): Mesic areas within chaparral and coastal sage scrub communities.

Presence on Site: This species was observed along the southeastern Project boundary, within the south-central portion of the site east of Steele Canyon Road, and in the southwestern portion of the Project site. Approximately 225 individuals were mapped within Diegan coastal sage scrub habitat in the southeastern portion of the site. Another 11 individuals were mapped within the Project site along the southern Project boundary at the edge of a patch of giant reed where Mexican Canyon Creek enters the Project site, within disturbed habitat just north of the patch of riparian habitat to the east of Steele Canyon Creek, and in the southwestern portion of the site within disturbed habitat just north of the Sweetwater River.

Southwestern Spiny Rush (*Juncus acutus* ssp. *leopoldii*)

Status: --/--; CRPR 4.2; County List D

Distribution: Coastal regions of southern California at elevations below 1,000 feet. San Luis Obispo County south to San Diego County, and further east into Riverside and Imperial Counties.

Habitat(s): Moist saline environments such as alkaline seeps and meadows, and coastal salt marshes and swamps.

Presence on site: Seventeen individuals were observed at the southwestern portion of Project site in wetland habitat at the downstream portion of the Sweetwater River.

Special Status Plant Species with Potential to Occur

Special status plant species that may have potential to occur on the Project site but were not observed are listed in Appendix K of the BTR (EIR Appendix C). In total, three special status plant species were determined to have a high potential to occur on site: singlewhorl burrobush (*Ambrosia monogyra*), San Diego ambrosia, and Robinson's pepper grass (*Lepidium virginicum* var. *robinsonii*). No additional species have a high potential to occur, primarily due to the lack of

suitable conditions, habitat conversion and disturbances from previous golf course uses, ongoing maintenance activities, and prevalence of non-native vegetation.

Animal Species

A total of 129 animal species were observed or otherwise detected on the Project site during the biological surveys, including 14 invertebrate, one fish, four amphibian, six reptile, 85 bird, and 19 mammal species (Appendix J of the BTR [EIR Appendix C]).

Special Status Animal Species

Special status animal species include those that have been afforded special status and/or recognition by the USFWS, CDFW, and/or the County. In general, the principal reason an individual taxon (species or subspecies) is given such recognition is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in most cases from habitat loss. The designations of special status species are defined as follows:

Federal Designations:

- Federally Endangered (FE) – species that are listed as endangered under the FESA are in danger of extinction throughout all or a significant portion of its range.
- Federally Threatened (FT) – species that are listed as threatened under the FESA are likely to become endangered in the foreseeable future throughout all or a significant portion of its range.
- Federal Candidate (FC) – species for which the USFWS has sufficient information on its biological status and threats to propose it as endangered or threatened under the FESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities.
- Bird of Conservation Concern (BCC) – migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent USFWS highest conservation priorities and draw attention to species in need of conservation action.

State Designations:

- State Endangered (SE) – species listed as endangered under the CESA are in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.
- Fully Protected (FP) – designation under CFGC Sections 3511, 4700, 5050, and 5515 that prohibits "take" (harm, killing, or possession) of these species, with very limited exceptions.

- Species of Special Concern (SSC) –species vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats; provides conservation focus but does not grant legal protection.
- Watch List (WL) – species that were previously SSCs but do not currently meet SSC criteria, and for which there is concern and a need for additional information to clarify status.

County Designations:

- County List A – plants rare, threatened, or endangered in California or elsewhere.
- County List B – plants rare, threatened, or endangered in California but more common elsewhere.
- County List C – Plants that may be quite rare, but more information is needed to determine rarity status.
- County List D – Plants of limited distribution and are uncommon, but not presently rare or endangered.
- County Group 1 – animals that have a very high level of sensitivity, either because they are listed as threatened or endangered or because they have very specific natural history requirements that must be met.
- County Group 2 – animals that are becoming less common but are not yet so rare that extirpation or extinction is imminent without immediate action. These species tend to be prolific within their suitable habitat types.
- MSCP Covered – species covered under the County of San Diego’s South County MSCP Subarea Plan for which the County has take authorization within the MSCP area.
- Narrow Endemic (NE) – native species that have “restricted geographic distributions, soil affinities, and/or habitats”. Narrow endemic species are defined in the County’s Biological Mitigation Ordinance in Attachment D (animals) and Attachment E (Plants).

Twenty-three special status animal species have been observed or detected on or directly adjacent to the Project site, or observed flying over the Project site, during biological surveys conducted for the Project. Each species is listed below in alphabetical order by common name, described, and shown on Figure 2.2-3.

Barn Owl (*Tyto alba*)

Status: --/--; County Group 2

Distribution: Common, yearlong resident of California.

Habitat: Open habitats such as grassland, chaparral, riparian, and wetlands avoiding dense forests and open desert habitats. Also found in urban and suburban areas. Nest in sheltered areas of cliffs

or man-made structures, on ledges, in crevices, culverts, nest boxes, and in cavities in trees. Roosts in dense vegetation, cliffs, and buildings and other man-made structures.

Presence on Site: A single individual was observed foraging in the eastern portion of the Project site during an evening toad survey.

Belding's Orange-throated Whiptail (*Aspidoscelis hyperythra beldingi*)

Status: --/Watch List (WL); MSCP Covered; County Group 2

Distribution: Southern Orange County and southern San Bernardino County, south through Baja California below 3,500 feet.

Habitat(s): 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.).

Presence on Site: At least three individuals were observed on several occasions in the northeastern portion of the Project site between Willow Glen Drive and Sweetwater River, and at least two individuals were observed adjacent to the patch of riparian habitat east of Steele Canyon Road.

Coastal California Gnatcatcher (*Polioptila californica californica*)

Status: Federally Threatened (FT)/ Species of Special Concern (SSC); MSCP Covered, County Group 1

Distribution: Year-round resident of California occurring from Ventura County south to San Diego County, and east within the western portions of San Bernardino and Riverside Counties.

Habitat(s): Coastal sage scrub, coastal bluff scrub, and coastal sage-chaparral scrub.

Presence on Site: A female gnatcatcher was observed foraging with and feeding one fledgling within coastal sage scrub at the Project's southwestern boundary on June 11, 2019. Additional observations of the species in 2019 include a single juvenile calling within the patch of riparian habitat along Sweetwater River in the southwestern portion of the Project site on July 1, 2019 and another female/juvenile type foraging in the same general area on July 17, 2019. In 2022, two single males were detected off site southeast of the southeastern Project boundary, and one adult male was observed off site southwest of the southwestern Project boundary foraging with and feeding a single juvenile. Though the species was observed within the Project site, suitable habitat present is limited to small patches of coastal sage scrub in the extreme southwestern and southeastern portions of the site that connect to larger blocks of coastal sage scrub that continue off site. The species may utilize these areas for foraging opportunities but would most likely breed off site in more extensive, higher quality habitat.

Cooper's Hawk (*Accipiter cooperii*)

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

Distribution: In California, the species breeds from Siskiyou County south to San Diego County and east towards Owens Valley at elevations below 9,000 feet.

Habitat(s): Oak groves, mature riparian woodlands, and eucalyptus stands or other mature forests. Increasingly found in suburban and urban areas. Nests within dense woodlands and forests and isolated trees in open areas.

Presence on Site: A single individual was documented at five different locations within the eastern and western portions of the Project site. Observations included individuals flying over the site and individuals perched in trees within the closed and developed golf courses and riparian habitat along the Sweetwater River.

Great Blue Heron (*Ardea herodias*)

Status: --/--; County Group 2

Distribution: Year-round resident of California occurring throughout most of the state.

Habitat(s): Found in a wide variety of habitats foraging in various wetland habitats, water bodies, and occasionally uplands. Nests as single pairs and in small colonies with nests located on the ground, in trees and bushes, and on artificial structures that are usually adjacent to water and secluded from human disturbance.

Presence on Site: Individuals observed foraging in four separate locations within the Project site. A pair was observed in the southeastern portion of the site at an artificial pond, one individual was detected within the patch of riparian habitat just east of Steele Canyon Road, and two other individuals were detected at the edge of an artificial pond to the west of Steele Canyon Road.

Green Heron (*Butorides virescens*)

Status: --/--; County Group 2

Distribution: In California, the species is a year-round resident found generally west of the Sierra Nevada and within the southern deserts.

Habitat(s): Found in a wide variety of wetland habitats such as swamps, marshes, riparian habitat along creeks and streams, lake edges, and man-made ditches, canals, and ponds preferring thick vegetation and avoiding open areas.

Presence on Site: Detected in four separate locations within the Project site. A pair was observed at an artificial pond at the eastern boundary, an individual was observed perched within riparian habitat just east of Steele Canyon Road, and two other individuals were detected at the edge of an artificial pond to the west of Steele Canyon Road.

Lawrence's Goldfinch (*Spinus lawrencei*)

Status: Bird of Conservation Concern (BCC)/--

Distribution: Resident of California breeding from Tehama, Shasta, and Trinity Counties to the foothills surrounding Central Valley, south through the southern Coast Range to Santa Barbara County continuing into San Diego County and east to the western edge of the southern Mojave and Colorado Deserts.

Habitat(s): Inhabits arid and open woodlands adjacent to scrub or chaparral habitats, grasslands or meadows, and water resources such as a stream, pond, or lake from sea level up to 10,000 feet.

Presence on Site: A small flock consisting of approximately eight birds was observed foraging within the eastern portion of the Project site along the southern boundary. The species is highly nomadic, flocking to areas where food sources are abundant, and most likely utilizes the site for foraging opportunities.

Least Bell's Vireo (*Vireo bellii pusillus*)

Status: Federally Endangered (FE)/State Endangered (SE); MSCP Covered and NE; County Group 1

Distribution: In California, breeds along the coast and western edge of the Mojave Desert from Santa Barbara County south to San Diego County, and east to Inyo, San Bernardino, and Riverside Counties.

Habitat(s): Breeding habitat consists of early to mid-successional riparian habitat, often where flowing water is present, but also found in dry watercourses within the desert. A structurally

diverse canopy and dense shrub cover is required for nesting and foraging. The species can be tolerant of the presence of non-native species such as tamarisk.

Presence on Site: A total of two vireo pairs, and six additional male vireos were detected during the 2019 protocol surveys. One least Bell's vireo pair and three male vireos were detected within the Project site. The least Bell's vireo pair was observed foraging with and feeding three fledglings on May 30, 2019, in the patch of riparian habitat directly east of Steele Canyon Road. Additionally, one least Bell's vireo pair and three male vireos were detected outside of the Project site. The pair was observed to the west within the SDNWR, two of the males were detected within the Steele Canyon Golf Course, and one male was observed to the west within the SDNWR. Critical habitat for the species occurs both on site and off site along the Sweetwater River. Vireos were heard singing at many of these same locations during the 2022 biological surveys.

Monarch Butterfly (*Danaus plexippus*)

Status: Federal Candidate (FC)/--; County Group 2

Distribution: Winter roost sites extend along the coast from northern Mendocino south 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.).

Presence on Site: A single individual was observed flying within non-native woodland in the southeastern portion of the Project site in August 2018. An additional individual was observed just outside of the Project boundary, to the south of the patch of riparian habitat east of Steele Canyon Road, in July 2019.

Oak Titmouse (*Baeolophus inornatus*)

Status: BCC/--

Distribution: Year-round resident found from southern Oregon south through California to northwestern Baja California, Mexico.

Habitat(s): Prefers dry oak and oak-pine woodlands but may use scrub oaks and other scrub habitat near woodlands. Also found in juniper woodlands and open pine forests.

Presence on Site: Individuals were detected foraging within trees at two separate locations east and west of Steele Canyon Road.

Peregrine Falcon (*Falco peregrinus*)

Status: BCC/Fully Protected (FP); MSCP Covered and NE, County Group 1

Distribution: In California, the species is a very uncommon breeding resident and migrant throughout the state.

Habitat(s): Inhabits a large variety of open habitats including marshes, grasslands, coastlines, and woodlands but is generally absent from desert areas. Typically nest on cliff faces in remote rugged sites where adequate food is available nearby, but the species can also be found in urbanized areas nesting on man-made structures.

Presence on Site: A pair was observed flying overhead on May 5, 2019. The pair flew north and perched on a transmission tower located on the hillside north of the Project site. An individual was later observed perched on a tree in the western portion of the site before flying further west and off site. The pair is presumed to have been foraging individuals moving through the area. No suitable nesting habitat for the species is present within or immediately adjacent to the Project site, and no nesting individuals were observed during Project surveys.

Red-shouldered Hawk (*Buteo lineatus*)

Status: --/--; County Group 1

Distribution: In California, occurs throughout the state in areas west of Sierra Nevada.

Habitat(s): Mature oak and riparian woodlands, eucalyptus groves, and suburban areas near forested areas. Nests in trees, both native and non-native, often located near a water source.

Presence on Site: Multiple individuals observed at four locations across the Project site. Observations included single individuals and at least one pair perched in trees or flying overhead within both the eastern and western portions of the Project site.

Small-footed Myotis (*Myotis ciliolabrum*)

Status: --/--; County Group 2

Distribution: Found throughout California occurring in desert, chaparral, riparian areas, and forests.

Habitat(s): Presence of riparian areas and waters appears to be important in distribution. Strongly associated with chaparral and montane habitats in San Diego County. Roosts solitarily or in small numbers in rocky crevices, caves, mines, snags, buildings, and bridges.

Presence on Site: Detected by AnaBat detectors within the eastern portion of the Project site. The species likely utilizes the site for foraging and has potential to roost within trees and buildings present within the Project site.

Townsend's Big-eared Bat (*Corynorhinus townsendii pallescens*)

Status: --/SSC; County Group 2

Distribution: In San Diego County, presumed absent from coastal areas being found more commonly in historic mining districts and boulder-strewn regions (i.e., Escondido, Lakeside, Dulzura, Jacumba, etc.).

Habitat(s): Found in a variety of habitats including desert scrubs as well as pine and pinyon-juniper forests with presence of caves or cave-like structures (such as buildings).

Presence on Site: This species was detected by AnaBat detectors within the eastern and western portions of the Project site. The species likely utilizes the site for foraging opportunities but is unlikely to roost within the Project site as preferred roosting sites are not present. Although buildings within the Project site could provide potential roosting habitat, this species is highly susceptible to disturbance and will abandon its roost if disturbed.

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. Roosts communally preferring stands of large trees or hilly areas, usually away from human disturbance.

Presence on Site: Single individual observed soaring high overhead in the eastern and southwestern portion of the Project site. No potentially suitable breeding habitat is present on site.

Vermilion Flycatcher (*Pyrocephalus rubinus*)

Status: --/SSC; County Group 1

Distribution: Scarce breeding records occur in southern California with a few individuals wintering regularly along the California coast from Ventura County south to San Diego County.

Habitat(s): Arid scrub, farmlands, parks, golf courses, desert, savanna, cultivated lands, and riparian woodland, usually near water. Wintering individuals can be found in open and semi-open areas with hedges, scattered trees and bushes, and often near water.

Presence on Site: Multiple individuals and pairs were observed within and throughout the Project site during Project surveys. At least two breeding pairs were confirmed to occupy the site during 2019 and a pair was observed with an active nest in 2022. Observations included adult males and females, immature males and females, and numerous fledglings.

Western Bluebird (*Sialia mexicana*)

Status: --/--; MSCP Covered; County Group 2

Distribution: Common year-round resident throughout California but absent from the higher mountains and eastern deserts.

Habitat(s): Breeds in open woodlands, riparian habitats, grasslands, and farmlands. Nests and roosts in cavities of trees and snags, often in holes previously created by woodpeckers, and nest boxes. Winters in a wider variety of habitats.

Presence on Site: Multiple individuals were detected in thirteen different locations throughout the Project site within riparian habitat and the developed golf course. Observations included single individuals and small flocks of up to five individuals perched on trees, flying over the site, or foraging within the Project site. Suitable breeding habitat is present on site.

Western Mastiff Bat (*Eumops perotis*)

Status: --/SSC; County Group 2

Distribution: In California, the species occurs from Monterey County to San Diego County from the coast eastward to the Colorado Desert.

Habitat(s): Found in open, semi-arid to arid habitats including coastal and desert scrub, grasslands, woodlands, and palm oases. Prefers to roost in high situations above the ground on vertical cliffs, rock quarries, outcrops of fractured boulders, and occasionally tall buildings.

Presence on Site: Detected within the western portion of the Project site by AnaBat detectors. The species likely utilizes the site for foraging opportunities but is unlikely to roost within the Project site as preferred roosting sites are not present.

Western Red Bat (*Lasiurus blossevillii*)

Listing: --/SSC; County Group 2

Distribution: In California, the species is locally common occurring from Shasta County south to San Diego County and west of the Sierra Nevada/Cascade Range and deserts.

Habitat(s): Mainly occurs in riparian woodlands populated by willows, cottonwoods, sycamores, and oak trees but can be found in non-native vegetation such as tamarisk, eucalyptus, and orchards. Primarily roosts in trees preferring heavily shaded areas which are open underneath.

Presence on Site: Detected by AnaBat detectors within the western portion of the Project site. This tree roosting species has the potential to roost within riparian habitat and planted trees within the Project site. The species would also be expected to utilize the site for foraging opportunities.

White-tailed Kite (*Elanus leucurus*)

Status: --/ FP; County Group 1

Distribution: In California, year-long resident of coasts and valleys west of the Sierra Nevada foothills and southeast deserts, though the species has been documented breeding in arid regions east of the Sierra Nevada and within Imperial County.

Habitat(s): Inhabits low elevation grasslands, wetlands, oak woodlands, and open woodlands, and is associated with agricultural areas. Breeds in riparian areas adjacent to open spaces.

Presence on Site: A single individual was observed on numerous occasions during the 2022 biological surveys foraging off site within the SDNWR.

Yellow-breasted Chat (*Icteria virens*)

Status: --/SSC; County Group 1

Distribution: In California, occurs as a migrant and summer resident breeding from the coastal regions in northern California, east of the Cascades, and throughout the central and southern portions of the state.

Habitat(s): Breeds in early successional riparian habitats with well-developed shrub layer and an open canopy nesting on the borders of streams, creeks, rivers, and marshes.

Presence on Site: Two individuals were heard singing in the southwestern portion of the Project site within the patch of riparian habitat along the Sweetwater River. Additional individuals were detected further west of the Project site within the SDNWR.

Yellow Warbler (*Setophaga petechia*)

Status: BCC/SSC; County Group 2

Distribution: Common to locally abundant species breeding throughout California at elevations below 8,500 feet, excluding most of the Mojave Desert, and all of the Colorado Desert.

Habitat(s): Breeds in riparian areas dominated by willows and cottonwoods, near rivers, streams, lakes, and wet meadows. Also breeds in montane shrub and conifer forests at higher elevation areas.

Presence on Site: Multiple individuals were observed throughout the Project site. Observations included individuals perched in trees and along fences in the northeastern portion of the Project site, as well as foraging in these areas. Additional individuals were detected further west of the site within the SDNWR.

Yuma Myotis (*Myotis yumanensis*)

Status: --/--; County Group 2

Distribution: Widespread in California but uncommon in the Mojave and Colorado Deserts, except in the mountain ranges bordering the Colorado River Valley.

Habitat(s): Found in a variety of habitats including juniper and riparian woodlands, riparian forests, and desert regions where bodies of water (i.e., rivers, streams, ponds, lakes, etc.) are present. Closely associated with water which it uses for foraging and sources of drinking water. Roosts in caves, attics, buildings, mines, underneath bridges, and other similar structures.

Presence on Site: Detected by AnaBat detectors and during the nighttime emergence survey within the eastern and western portions of the Project site. The species likely utilizes the site for foraging and has the potential to roost within trees and buildings present within the Project site. Bridges suitable for roosting were not observed on site.

Special Status Animal Species with Potential to Occur

Special status animal species present on site or with potential to occur on site are included in Appendix L of the BTR (EIR Appendix C). The species are grouped into invertebrates and vertebrates (fish, amphibians, reptiles, birds, and mammals) and alphabetized by scientific name. Eight additional special status animal species that were not observed on the Project site were determined to have a high potential to occur: western spadefoot (*Spea hammondi*), two-striped garter snake (*Thamnophis hammondi*), sharp-shinned hawk (*Accipiter striatus*), Canada goose (*Branta canadensis*), California horned lark (*Eremophila alpestris actia*), merlin (*Falco columbarius*), loggerhead shrike (*Lanius ludovicianus*), and Mexican long-tongued bat (*Choeronycteris mexicana*). These species are further discussed in Appendices L and M of the BTR (EIR Appendix C).

Focused surveys for San Diego fairy shrimp (*Branchinecta sandiegonensis*), Quino checkerspot butterfly (*Euphydryas editha quino*), and Stephens' kangaroo rat (*Dipodomys stephensi*) were not warranted, as the site either lacks habitat suitable for the species (fairy shrimp and Quino checkerspot butterfly) or is located outside of the species known range (Stephens' kangaroo rat) as detailed in Appendix L of the BTR (EIR Appendix C).

San Diego fairy shrimp are generally restricted to vernal pools and other ephemeral basins. No vernal pools or other suitable habitat for fairy shrimp is present on site; therefore, the site lacks suitable habitat for the species and focused surveys are not required.

Quino checkerspot butterfly inhabits open-canopied habitats such as sage scrub, open chaparral, grassland, and open oak and juniper woodland communities. The Project site consists of a developed golf course lacking suitable habitat for the species and focused surveys are not required. Construction of the golf course resulted in the conversion of previous habitat, which primarily consisted of wetland- and riparian-associated habitat along the Sweetwater River, to non-native vegetation and developed areas associated with the current commercial uses of the site. On-going golf course maintenance and operation since the 1960s has resulted in further degradation and disturbance to the site, creating unsuitable conditions for Quino checkerspot butterfly occupation. Furthermore, host plants associated with the species were not found to occur within the Project site, and potential nectaring resources are limited as a result of on-going golf course operation and maintenance activities.

Stephens' kangaroo rat inhabits native to open grasslands and sparse coastal sage scrub (less than 30 percent cover) on relatively flat or gently sloping ground. The species occurs in southwestern San Bernardino, western Riverside, and northwestern San Diego Counties. In San Diego County, the species is found north of the City of Escondido within the Marine Corps Base Camp Pendleton, Fallbrook, and Lake Henshaw (USFWS 1997). The Project site is located in the southern portion of the County outside of the species known range; therefore, focused surveys are not required.

Raptor Foraging

Several species of raptors were observed within and adjacent to the Project site during the biological surveys. On most occasions, raptors were observed flying and soaring over the Project site or perching on trees in stands of riparian habitat or planted trees lining the golf course fairways.

On a few encounters, raptors were observed carrying prey items (such as small mammals or a snake) or actively foraging within the Project site or adjacent areas, including within the SDNWR. Raptors observed during biological surveys include barn owl, Cooper's hawk, turkey vulture, red-shouldered hawk, peregrine falcon, white-tailed kite, American kestrel (*Falco sparverius*), and red-tailed hawk (*Buteo jamaicensis*).

The County (2010a) defines raptor foraging habitat as, "Land that is a minimum of five acres (not limited to project boundaries) of fallow or open areas with any evidence of foraging potential (i.e., burrows, raptor nests, etc.)." Based on this definition, disturbed habitat within the western portion of the site associated with the closed golf course and fairway greens in the eastern portion of the site associated with the active golf course could be considered raptor foraging habitat since they occupy greater than five acres and supports burrows of common small mammals, namely Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel (*Otospermophilus beecheyi*). Several of the species observed within the Project site are known to be tolerant to urbanization and other disturbances, including Cooper's hawk, red-shouldered hawk, and red-tailed hawk, and are likely to utilize the site for foraging opportunities. Additional foraging opportunities for raptors occur within the surrounding local area and region, including high quality and prime foraging habitat off site within the SDNWR to the south and west, and McGinty Mountain Ecological Reserve to the east.

Habitat Connectivity and Wildlife Corridors

Wildlife corridors connect otherwise isolated pieces of habitat and allow the movement or dispersal of plants and animals, providing 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 made up of a fragmented archipelago arrangement of habitat over a linear distance.

With respect to wildlife movement in the region, conservation targets generally include conserving core blocks of coastal sage scrub and chaparral habitat, as well as maintaining linkages between critical biological resource areas. The Project site is shown as a habitat linkage between the McGinty Mountain/Sycuan Peak-Dehesa Biological Resource Core Area (BRCA) to the east and Sweetwater Reservoir/San Miguel Mountain BRCA to the west, which overlap the extreme southwestern and southeastern portions of the Project site, respectively. These BRCA are generally associated with the SDNWR to the west, southwest, and southeast of the Project site, along with open space areas to the east and southeast located within the McGinty Mountain Ecological Reserve and McGinty Mountain Preserve. The Sweetwater River and Sweetwater Reservoir are expected to be key components to the movement of wildlife in the region, namely birds and mammals. These resources support permanent water sources and provide cover for a wide range of species known to the region. Large mammals, such as southern mule deer (*Odocoileus hemionus fuliginata*) and coyote (*Canis latrans*), would be expected to travel to and from the Sweetwater River/Sweetwater Reservoir and expansive habitat blocks associated with the SDNWR. Large

mammals would also be expected to travel along the Sweetwater River valley and riparian corridor. Birds would be expected to move unobstructed between key habitat blocks of coastal sage scrub and riparian habitat, which provide important breeding, foraging, and dispersal functions. Key blocks of coastal sage scrub where gnatcatchers are known to occur include the SDNWR, with additional habitat extending further northeast within Crestridge and Harbison Canyon, and to the southeast into Proctor Valley and areas surrounding Jamul Mountain. Expected wildlife movement trends in the local and regional area are conceptually depicted on Figure 2.2-7, *Conceptual Wildlife Corridors and Linkages*, with the most significant features being undeveloped land associated with the Sweetwater River, Sweetwater Reservoir, SDNWR, San Miguel Mountain, and McGinty Mountain.

As noted above, the Project site includes areas identified as PAMA under the County's MSCP Subarea Plan. The PAMA in the region is based on the core and linkage concept of landscape-level conservation. The configuration of preserve lands includes large, contiguous areas of habitat supporting important species populations or habitat areas and important functional linkages and movement corridors between them. The Project site is mostly developed or disturbed, with only three small portions of the site at the northeastern, southeastern, and southern boundaries containing lands identified as PAMA under the County's MSCP Subarea Plan (Figure 2.2-1). The northeastern lands mapped as PAMA represent a narrow patch of habitat to the south of Willow Glen Drive and north of Sweetwater River. Vegetation in this area is comprised of small patches of disturbed wetland, disturbed southern willow scrub, disturbed southern cottonwood-willow riparian forest, disturbed Diegan coastal sage scrub, eucalyptus woodland, non-native vegetation, and disturbed habitat. The southeastern section of PAMA is contiguous with other off-site lands mapped as PAMA. These lands represent undeveloped habitat and open space areas associated with the McGinty Mountain Ecological Reserve and SDNWR. The southern section of PAMA within the Project site represents an isolated patch of riparian habitat that is surrounded on all sides by development and provides no direct connectivity to other open space areas.

The Project site is shown as a habitat linkage in the South County MSCP, contains lands mapped as PAMA, is located along the Sweetwater River, and is adjacent to preserved and open space areas. The Project site is a developed golf course that is predominantly characterized by open, exposed areas that lack suitable cover and resources typically associated with wildlife movement areas. Scattered patches of mature riparian forest, eucalyptus woodland, and non-native woodland habitats more conducive to wildlife use and movement occur along the southern Project boundary. The Sweetwater River runs through the Project site, and although riparian habitat occurs upstream and downstream of the site, most of the on-site reach of the river is characterized by bare ground or open areas vegetated with low-growing plant species, primarily Bermuda grass, as part of the golf course development. The downstream section of Sweetwater River, approximately 0.5 mile of the 1.9 miles of Sweetwater River that runs through site, contains riparian habitat, which maintains connectivity to off-site habitat within the SDNWR. Large portions of the Project boundary are fenced along the northern, eastern, and southern boundaries, which can potentially constrain or impede wildlife access into the site, though several gaps in the fencing were observed. Residential development is present to the north and south of the site, and Steele Canyon Golf Club occurs to the southeast. The site is also subject to regular human activity and other disturbances associated with golf course operations (such as irrigation, mowing, night lighting [e.g., safety lighting within the clubhouse, maintenance building areas, and parking lots], and noise) and

unauthorized recreational uses that could potentially discourage larger animals from utilizing the site.

Three motion-activated cameras were deployed within the Project site for a 10-week period between May and July 2022 to document wildlife use and movement within and throughout the site. Species captured by the cameras include great basin fence lizard (*Sceloporus occidentalis longipes*), San Diego gopher snake (*Pituophis catenifer annectens*), black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), European starling (*Sturnus vulgaris*), great blue heron, great-tailed grackle (*Quiscalus mexicanus*), greater roadrunner (*Geococcyx californianus*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), red-shouldered hawk, Say's phoebe (*Sayornis saya*), western bluebird, bobcat (*Canis latrans*), California ground squirrel, coyote, desert cottontail (*Sylvilagus audubonii*), long-tailed weasel (*Mustela frenata*), raccoon (*Procyon lotor*), and Virginia opossum (*Didelphis virginiana*). Many of the bird, reptile, and small mammal species detected within the Project site are commonly observed in urbanized, residential, and disturbed settings associated with human presence. Medium-sized mammal species such as coyote and bobcat were also detected, though larger species, such as mule deer and mountain lion, were not detected. Coyotes were detected at all camera stations during both daytime and nighttime hours. In addition, coyotes were observed in groups of two and three in the eastern and western portions of the Project site during daytime hours on several occasions during the 2022 biological surveys. Bobcat was detected a total of three times (June 25, June 28, and July 14, 2022) at two camera stations located in the extreme southeastern and southwestern portions of the Project site. All detections were of a single individual. These areas are located towards the outskirts of the Project site and have direct connectivity to undeveloped upland habitats located south of the site. The lack of other bobcat detections in more interior areas of the Project site indicate that the species likely doesn't regularly utilize the site as a main movement corridor between upstream and downstream reaches of Sweetwater River. Despite multiple field surveys conducted between 2018 to 2022, and a 10-week wildlife camera deployment period, mule deer has not been observed within the Project site (including tracks, scat, or other sign). As such, the species likely doesn't regularly visit or utilize the Project site for foraging or movement activities.

In addition to wildlife, off-leash dogs, horses, bikers, hikers, off-road vehicles, and other recreational users were observed within both the eastern and western portions of the Project site during daytime and nighttime hours. The eastern portion of the Project site still serves as an active golf course with light to moderate human activity during daylight hours, including early morning. Unauthorized pedestrian access and recreational activity in the eastern portion of the Project site was detected along Steele Canyon Road and in an adjacent patch of riparian habitat at the southern Project boundary. Observations included mountain bikers, cyclists, hikers, off-leash dogs, and unhoused people moving through the area during daytime and nighttime hours. A culvert running beneath Steele Canyon Road occurs in the area and unhoused individuals have been observed utilizing the area for shelter during biological surveys. Unauthorized pedestrian access and recreational activity in the western portion of the Project site were detected at all camera stations and observed on numerous occasions during biological surveys conducted between 2018 and 2022. Observations included off-leash dogs, hikers and joggers, fishermen, cyclists, equestrian riders, all-terrain vehicle activity, and unhoused individuals during daytime and nighttime hours. Human encampments were observed within riparian habitat in the southwestern portion of the Project site and unhoused individuals were observed moving through the area on multiple locations. In

addition, a small patch of riparian habitat downstream of a pedestrian bridge crossing at the extreme southwestern portion of the site was observed to have been recently burned during the 2022 biological surveys. These observations indicate that though the western golf course has been closed since 2017, human presence and activity still occur regularly within the area.

Birds, butterflies, and bats are expected to move freely through the site. Species documented within the Project site and the surrounding area likely utilize the site for foraging, dispersal, and breeding activities. Coastal California gnatcatcher likely forages and disperses through the Project site based on observations made during the 2019 and 2022 biological surveys during which the species, including adults and juveniles, was observed foraging within and adjacent to the Project site. Least Bell's vireo likely forages, disperses through, and breeds within the Project site based on observations made during the 2019 and 2022 biological surveys, which included the positive identification of a breeding pair with fledglings in the eastern portion of the Project site. Amphibians, reptiles, and small- to medium-sized mammals are expected to regularly move through the Project site and utilize the site for foraging, dispersal, and breeding activities where suitable habitat/conditions are present, especially in the southwestern portion of the Project site where greater connectivity to the SDNWR is present. Movement of these species through the local area is likely constrained by streets and surrounding development where present, but the site does provide potential live-in habitat with access to water resources. The only large mammal species expected to regularly move through the Project site is coyote, based on sign and direct observations made during the 2022 biological surveys. Though bobcat was observed at the outer edges of the Project site during the 2022 biological surveys, the species is not expected to use the site, in its current condition, as a main corridor, linkage, or specific travel route to and from important resources based on results of the camera trapping and biological surveys, current site uses, disturbances, and lack of sufficient vegetative cover. Other large mammal species, such as mule deer and mountain lion, are not expected to regularly use the site as a main movement corridor or linkage based on results of the camera trapping and biological surveys, current site uses, disturbances, surrounding development, and lack of sufficient vegetative cover to conceal individual movements. Larger blocks of open space areas associated with the SDNWR occur further south between Steele Canyon Golf Club and Jamul that provide better access to resources and connectivity between preserved lands, open spaces areas, and pockets of undeveloped lands located to the east and west of the site.

Regulatory Setting

Biological resources in 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 with regard to significance criteria determined by the CEQA Lead Agency (in this case, the County) pursuant to CEQA Guidelines. Biological resources-related laws and regulations that apply include federal Endangered Species Act (FESA), Migratory Bird Treaty Act (MBTA), Bald and Gold Eagle Protection Act (BGEPA), CWA, CEQA, California Endangered Species Act (CESA), CFG Code, Porter-Cologne Water Quality Control Act, and County regulations.

With respect to the Proposed Project, the USFWS will be responsible for reviewing issues related to migratory birds pursuant to the MBTA and Project consistency with the adopted South County MSCP Subarea Plan. The USACE will be responsible for reviewing issues related to waters of the U.S. The RWQCB will be responsible for reviewing issues related to WS pursuant to the CWA

and the Porter-Cologne Water Quality Control Act. The CDFW will be responsible for reviewing issues related to riparian habitat and streambeds pursuant to the CFG Code, nesting birds and raptors pursuant to the CFG Code, and Project consistency with the adopted South County MSCP Subarea Plan.

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 per the Guidelines for Determining Significance for Biological Resources (County 2010a) and the County RPO. The County will also be responsible for reviewing the Project with respect to consistency with the County BMO, County RPO, and adopted South County MSCP Subarea Plan.

Federal

Federal Endangered Species Act

Administered by the USFWS, the FESA provides the legal framework for the listing and protection of species (and their habitats) that are 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 FESA. Section 9(a) of the FESA 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 designates critical habitat for endangered and threatened species. The FESA defines critical habitat as specific geographic areas that contain features considered necessary for endangered or threatened species to recover. Critical habitat designations can include areas that are not currently occupied by the species, as the ultimate goal is to restore healthy populations of listed species within their native habitats so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the FESA, 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 the destruction or adverse modification of the critical habitat. Only activities that involve a federal permit, license, or funding require consultation with the USFWS.

Sections 7 and 10(a) of the FESA 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. 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 endangered species' use of a site and impacts associated with federal action (e.g., the USACE would initiate a Section 7 consultation with the USFWS for impacts proposed to USACE jurisdictional areas that may also affect listed species or their critical habitat). Section 10(a) allows the issuance of permits for incidental take of endangered or threatened species with the preparation of a Habitat Conservation Plan (HCP) when there is no federal nexus. 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. The MSCP is a regional HCP that was developed pursuant to Section 10(a) of the ESA.

Migratory Bird Treaty Act

All migratory bird species that are native to the U.S. or its territories are protected under the federal 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 the disturbance of active bird nests during the nesting season (generally February 1 to August 31). In addition, the USFWS commonly places restrictions on the disturbances allowed near active raptor nests.

Clean Water Act and Rivers and Harbors Act

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the Clean Water Act (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 all 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. Projects could be permitted on an individual basis or be covered under one of several approved Nationwide Permits.

State

California Environmental Quality Act

Primary environmental legislation in California is found in CEQA and its implementing guidelines (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.

California Endangered Species Act

The CESA established that it is state policy to conserve, protect, restore, and enhance state endangered species and their habitats. Under state law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. The CESA authorizes that private entities may “take” plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit if the CDFW certifies that the incidental take is consistent with CESA (CFG Code Section 2080.1[a]). For state-only listed species, Section 2081 of CFG Code authorizes the CDFW to issue an Incidental Take Permit for state listed threatened and endangered species if specific criteria are met. The MSCP is a regional Natural Communities Conservation Plan that was granted take coverage under Section 2081 of the CESA.

Native Plant Protection Act

Sections 1900 to 1913 of the CFG Code (Native Plant Protection Act; NPPA) direct the CDFW to carry out the State Legislature's intent to "...preserve, protect and enhance endangered or rare native plants of this state." The NPPA gives the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take.

California Fish and Game Code

The CFG Code provides specific protection and listing for several types of biological resources. Section 1600 requires an SAA for any activity that would alter the flow, change, or use any material from the bed, channel, or bank of any perennial, intermittent, or ephemeral river, stream, and/or lake. Typical activities that require an SAA include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement. Notification is required prior to any such activities.

Pursuant to the CFG Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Raptors, owls, and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds would not be disturbed, subject to approval by CDFW and/or USFWS.

Section 401 Water Quality Certification / Porter-Cologne Water Quality Control Act

The RWQCB, through the State Water Resources Control Board (SWRCB), asserts regulatory jurisdiction over activities affecting wetland and non-wetland waters of the State pursuant to Section 401 of the CWA and the State Porter-Cologne Water Quality Control Act. Potential RWQCB jurisdiction (i.e., waters of the State) need to be delineated on the project site and typically extend to the top of bank for streams and to the outer edge of wetlands, pursuant to the SWRCB's wetland definition that was adopted on April 2, 2019 (SWRCB 2019) and implemented as of May 28, 2020.

Whenever a project requires a federal CWA Section 404 permit or a Rivers and Harbors Act Section 10 permit, it must first obtain a CWA Section 401 Water Quality Certification. The RWQCB administers the 401 Certification program. Federal CWA Section 401 requires that every applicant for a Section 404 permit must request a Water Quality Certification that the proposed activity will not violate state and federal water quality standards.

The SWRCB and RWQCB regulate the discharge of waste into waters of the State via the 1969 Porter-Cologne Water Quality Control Act (Porter-Cologne) as described in the California Water Code. The California Water Code is the State's version of the federal CWA. Waste, according to

the California Water Code, includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

State waters that are not federal waters may be regulated under Porter-Cologne. A Report of Waste Discharge must be filed with the RWQCB for projects that result in the discharge of waste into waters of the State. The RWQCB will issue Waste Discharge Requirements (WDRs) or a waiver. The WDRs are the Porter-Cologne version of a CWA Section 401 Water Quality Certification.

Natural Communities Conservation Planning Act

The Natural Communities Conservation Planning (NCCP) program is a cooperative effort to protect habitats and species that began under the state's NCCP Act of 1991, legislation broader in its orientation and objectives than the CESA or FESA. These laws are designed to identify and protect individual species that have already declined significantly in number. The NCCP Act of 1991 and the associated Southern California Coastal Sage Scrub NCCP Process Guidelines (1993), Southern California Coastal Sage Scrub NCCP Conservation Guidelines (1993), and NCCP General Process Guidelines (1998) have been superseded by the NCCP Act of 2003.

The primary objective of the NCCP program is to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listings by focusing on the long-term stability of wildlife and plant communities and including key interests in the process.

This voluntary program allows the state to enter into planning agreements with landowners, local governments, and other stakeholders to prepare plans that identify the most important areas for a threatened or endangered species, and the areas that may be less important. These NCCP plans may become the basis for a state permit to take threatened and endangered species in exchange for conserving their habitat. The CDFW and USFWS worked to combine the NCCP program with the federal HCP process to provide take permits for state and federally listed species in exchange for conserving their habitat. Under the NCCP, local governments, such as the County, can take the lead in developing these NCCP plans and become the recipients of state and federal take permits. As described below, the County MSCP Subarea Plan is an NCCP plan adopted for South County.

Local

Multiple Species Conservation Program

The San Diego MSCP Plan for the southwestern portion of San Diego County was approved in August 1998 and covers 85 species (County 1998). The City of San Diego, portions of the unincorporated County, and 10 additional city jurisdictions make up the San Diego MSCP Plan area. 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.

County MSCP Subarea Plan

The County MSCP Subarea Plan, adopted by the Board of Supervisors in March 1998, implements the MSCP within the unincorporated areas under County jurisdiction (County 1997). The County Subarea Plan is divided into three Segments: Lake Hodges, Metro-Lakeside-Jamul, and South County. The Plan addresses areas authorized for take and planned for conservation, including portions of the South County Segment that are conserved subject to agreements with the Wildlife Agencies. Take of covered species and their habitat is authorized for projects that satisfy the requirements of the County's BMO.

The Project site is located within both the South County Segment and the Metro-Lakeside-Jamul Segment of the County MSCP Subarea Plan (Figure 2.2-1). A total of approximately 38 acres of the Project site lies within the South County Segment and is classified by the MSCP as Minor Amendment Area. Minor Amendment Areas "contain habitat that could be partially or completely eliminated (with appropriate mitigation) without significantly affecting the overall goals of the County's MSCP Subarea Plan." (County 1997). Minor Amendment Areas must meet the criteria and achieve the goals of linkages and corridors described in the County MSCP Subarea Plan and provide mitigation consistent with the BMO. Impacts to Minor Amendment Areas require approval from the USFWS Field Office Supervisor and CDFW NCCP Program Manager. The remainder of the Project site lies within the Metro-Lakeside-Jamul Segment and is classified as Unincorporated Land except for 16.4 acres that are classified as PAMA. The portion classified as PAMA lies east of Steele Canyon Road. Limited portions of the Project site are shown as Very High or High on the County's Habitat Evaluation Map from the BMO.

Biological Mitigation Ordinance

The BMO is the ordinance by which the County implements the County MSCP Subarea Plan at the project level within the unincorporated area. The BMO contains design criteria and mitigation standards that, 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.

Pursuant to Section 86.503(a)(9) of the BMO, the Proposed Project would be exempt from the BMO requirements provided that the following measures are required as conditions of the Project's MUP:

- a. The facility or project is consistent with the County General Plan, the MSCP Plan, and the Subarea Plan as approved by the Board of Supervisors;
- b. All feasible mitigation measures have been incorporated that meet the standards for mitigation required by CEQA and the State Surface Mining and Reclamation Act of 1975;
- c. Any wetland buffer area shall be restored to protect the environmental values of adjacent wetlands;
- d. In a floodplain, reclamation shall result in a net gain in functional wetlands and riparian habitat in or adjacent to the area of extraction;

- e. Native vegetation shall be used on steep slope lands to revegetate and landscape cut areas and fill areas in order to substantially restore the original habitat value, and slopes shall be graded to produce contours and soils which reflect a landform that is consistent with the approved Reclamation Plan;
- f. Mature riparian woodland may not be destroyed or reduced in size due to sand, gravel, and mineral extraction; and
- g. All Critical Populations of Sensitive Plant Species Within the MSCP Subarea, (Attachment C of Document No. 0769999 on file with the Clerk of the Board); Rare, Narrow Endemic Animal Species Within the MSCP Subarea, (Attachment D of Document No. 0769999 on file with the Clerk of the Board); Narrow Endemic Plant Species Within the MSCP subarea, (Attachment E of Document No. 0769999 on file with the Clerk of the Board); and San Diego County Sensitive Plant Species, as defined herein will be avoided as required by, and consistent with, the terms of the Subarea Plan.

Resource Protection Ordinance

The County regulates natural resources (among other resources) as sensitive biological resources via the RPO (County 2011a), the regulations of which cover wetlands, wetland buffers, sensitive plant and animal species, sensitive vegetation communities/habitat types, and habitats containing sensitive animals or plants.

Wetland habitats are defined per the RPO as described under *San Diego County RPO Wetlands* in Section 2.1.1.1, above. Sensitive habitat lands are identified by the RPO as lands that “support unique vegetation communities, or habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the CEQA Guidelines.” It is the intent of the RPO to increase the preservation and protection of the County’s unique topography, natural beauty, biological diversity, and natural and cultural resources.

Pursuant to Section 86.605(d) of the RPO, the Proposed Project would be exempt from RPO requirements provided that the following mitigation measures are required as conditions of the Project’s MUP:

- a. Any wetland buffer area shall be restored to protect the environmental values of adjacent wetlands;
- b. In a floodplain, any net gain in functional wetlands and riparian habitat shall occur in or adjacent to the area of extraction;
- c. Native vegetation shall be used on steep slopes lands to revegetate and landscape cut and fill areas in order to restore substantially original habitat value, and slopes shall be graded to produce contours and soils that reflect natural landform consistent with the surrounding area; and

- d. Mature riparian woodland¹ may not be destroyed or reduced in size due to sand, gravel, or mineral extraction.

2.2.2 Analysis of Project Effects and Determination as to Significance

2.2.2.1 Special Status Species

Guidelines for the Determination of Significance

A significant impact to special status species would occur if the Proposed Project would:

1. Impact one or more individuals of a species listed as federally or state endangered or threatened.
2. Impact the survival of an on-site population of any County Group A or B plant species, a County Group 1 animal species, or a species listed as a state Species of Special Concern.
3. Impact the local long-term survival of a County Group C or D plant species or a County Group 2 animal species.
4. Impact arroyo toad aestivation, foraging or breeding habitat.
5. Impact golden eagle habitat, foraging or nesting habitat.
6. Result in a loss of functional foraging habitat for raptors.
7. Impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, though smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or supports multiple wildlife species.
8. Cause indirect impacts, particularly at the edge of proposed development adjacent to proposed or existing open space or other natural habitat areas, to levels that would likely harm sensitive species over the long term.
9. Impact occupied burrowing owl habitat.
10. Impact occupied cactus wren habitat, or formerly occupied coastal cactus wren habitat that has been burned by wildfire.
11. Impact occupied Hermes copper butterfly habitat.
12. Impact nesting success of the following sensitive bird species through grading, clearing, fire fuel modification and/or other noise generating activities such as construction:
 - Coastal cactus wren

¹ Mature riparian woodland is defined in the RPO as “a grouping of sycamores, cottonwoods, willows, and/or oak trees having substantial biological value, where at least ten of the trees have a diameter of six inches or greater.”

- Coastal California gnatcatcher
- Least Bell's vireo
- Southwestern willow flycatcher
- Tree-nesting raptors
- Ground-nesting raptors
- Golden eagle
- Light-footed Ridgway's rail (*Rallus longirostris levipes*)

Guidelines Source

These guidelines are based on the County Guidelines for Determining Significance – Biological Resources (2010a).

Analysis

Federally or State Endangered or Threatened Species (Guideline 1)

The Project would result in significant impacts to the following species under the above guidelines for the following reasons:

The Project would result in potentially significant impacts to the federally listed threatened coastal California gnatcatcher, and potentially significant impacts to the federally and state listed endangered least Bell's vireo, further discussed below. In addition, USFWS-designated critical habitat for coastal California gnatcatcher, least Bell's vireo, and the federally listed endangered San Diego ambrosia, is present in the southwestern portion of the Project site (Figure 2.2-2) and critical habitat for the federally and state listed endangered southwestern willow flycatcher occurs off site, to the west of the Project site, within the SDNWR. The Project would not impact southwestern willow flycatcher critical habitat off site within the SDNWR, but would result in minor impacts to San Diego ambrosia, coastal California gnatcatcher, and least Bell's vireo critical habitat areas that occur on site as discussed below.

Coastal California Gnatcatcher

Coastal California gnatcatcher is a federally listed threatened, CDFW Species of Special Concern, County Group 1, and MSCP covered species. The coastal California gnatcatcher was incidentally detected within the southwestern portion of the site during Project surveys. In 2019, observations included an adult female foraging with and feeding a juvenile gnatcatcher within coastal sage scrub at the Project's southwestern boundary, and female/juvenile types foraging within riparian habitat along Sweetwater River in the southwestern portion of the site. In 2022, two single males were detected off site to the southeast of the southeastern portion of the site, and one adult male was observed foraging with and feeding a single juvenile off site to the southwest of the southwestern portion of the site.

A narrow strip of critical habitat, totaling 2.7 acres, for the coastal California gnatcatcher is mapped in the southwestern portion of the Project site (Figure 2.2-2). Critical habitat within the Project site is mostly composed of riparian forest along the Sweetwater River that provides foraging opportunities for the species, but gnatcatchers would not be expected to utilize this habitat for

breeding purposes. A small portion of critical habitat for the species would be impacted by the Proposed Project, consisting of 0.002 acre of tamarisk scrub and 0.08 acre of disturbed habitat associated with the golf course development. Impacts to areas mapped as coastal California gnatcatcher critical habitat would be less than significant since these areas do not support suitable coastal sage scrub habitat required by the species.

The Project would impact 1.2 acres of Diegan coastal sage scrub including habitat south of Willow Glen Drive, west of Steele Canyon Road, and at the southeastern Project boundary (Figure 2.2-8). Habitat along Willow Glen Drive and Steele Canyon Road consists of narrow strips of coastal sage scrub comprised of scattered shrubs and intermixed with non-native trees. Gnatcatchers were not observed within either area during biological surveys; the species would not be anticipated to occupy these areas for breeding purposes based on the small, narrow patch of habitat present in each area. Diegan coastal sage scrub habitat at the southeastern Project boundary is connected to a larger block of coastal sage scrub that continues off site. The species was not detected within the Project site in this area but was detected approximately 80 to 100 feet off site. **Impacts to occupied coastal California gnatcatcher habitat would be potentially significant (Impact BIO-1a).** Additionally, **if mining and reclamation activities take place within 500 feet of suitable gnatcatcher habitat during the gnatcatcher breeding season (March 1 to August 15), indirect impacts related to noise to nesting gnatcatchers would be potentially significant (Impact BIO-1b).**

Following reclamation, the Project would provide additional habitat for the species through the revegetation of 11.9 acres of Diegan coastal sage scrub along the cut slopes constructed at the margins of the expanded Sweetwater River floodplain. The expanded Sweetwater River floodplain and associated riparian corridor would also provide additional foraging and dispersal habitat for gnatcatchers.

Least Bell's Vireo

Least Bell's vireo is a federally and state listed endangered, County Group 1 species, and MSCP covered and narrow endemic species. The least Bell's vireo was detected in several areas within riparian habitat located both on and off site, and at least one confirmed breeding pair was observed on site just east of Steele Canyon Road (Figure 2.2-3).

Approximately 10.42 acres of critical habitat for the least Bell's vireo occur in the southwestern portion of the Project site (Figure 2.2-2). Most of this habitat occurs within the footprint of the closed golf course, with small inclusions of undeveloped areas consisting of riparian forest habitat associated with the Sweetwater River. The Project would result in impacts to 1.22 acres of least Bell's vireo critical habitat consisting of 0.23 acre of southern cottonwood-willow riparian forest, 0.002 acre of freshwater marsh, 0.81 acre of disturbed habitat, 0.18 acre of developed land associated with golf course development. Impacts to disturbed habitat and developed land would be less than significant since these areas do not contain suitable riparian habitat required by the species. Impacts to southern cottonwood-willow riparian forest and freshwater marsh would be potentially significant as discussed below.

The Project would impact approximately 0.44 acre of southern cottonwood-willow riparian forest (including disturbed), 0.13 acre of disturbed southern willow scrub, and 0.01 tamarisk scrub at the

periphery of existing habitat located along the Sweetwater River. Least Bell's vireo was detected adjacent to these areas. **Direct impacts to potentially occupied vireo habitat would be potentially significant (Impact BIO-1c).** Additionally, **if mining and reclamation activities take place within 500 feet of suitable vireo habitat during the vireo breeding season (March 15 to September 15), indirect noise impacts to nesting vireos would be potentially significant (Impact BIO-1d).**

Following reclamation, the Project would provide additional, higher quality habitat for the species through the revegetation of approximately 110.17 acres of wetland/riparian habitat within the expanded Sweetwater River floodplain.

The Project would result in less than significant or no impact to the following species under the above guidelines for the stated reasons:

San Diego Ambrosia

San Diego ambrosia is a federally listed endangered, CRPR 1B.1, County List A, and MSCP covered and narrow endemic species. The species has been documented within off-site areas south of the Project site within the SDNWR but was not detected on site during the 2019 and 2022 rare plant surveys. Approximately 15.66 acres of critical habitat for San Diego ambrosia occurs in the southwestern portion of the Project site. On-site areas mapped as critical habitat for the species are comprised of disturbed and developed areas associated with the golf course and riparian habitat associated with the Sweetwater River. The Project would result in impacts to 0.77 acre of San Diego ambrosia critical habitat consisting of 0.002 acre of freshwater marsh, 0.26 acre of southern cottonwood-willow riparian forest, 0.01 acre of tamarisk scrub, and 0.46 acre of disturbed habitat, and 0.04 acre of developed lands associated with golf course development. These impacts would be less than significant since the species was not found to occur within the Project site; therefore, **no direct impact to San Diego ambrosia would occur.**

Southwestern Willow Flycatcher

Southwestern willow flycatcher is a federally and state listed endangered, County Group 1, and MSCP covered and narrow endemic species. USFWS-designated critical habitat for the southwestern willow flycatcher occurs to the west of the Project site within the SDNWR (Figure 2.2-2), and potentially suitable riparian habitat for the species is found on site to the east of Steele Canyon Road, and at the downstream portion of Sweetwater River in the southwestern portion of the site (Figure 2.2-3). The species was not detected within or adjacent to the Project site during protocol surveys conducted in 2019 and 2022, and there are no reported occurrences of the species within the Project vicinity. The last recorded breeding occurrence of the species within the area is located approximately 3 miles southwest of the site along Sweetwater River within the SDNWR. A single pair attempted to nest in this area in 1998 and 1999, though all nest attempts were unsuccessful. Migrants were recorded in the Project vicinity between 2000 and 2002, but no recent occurrences of the species have been reported. The Project would impact 0.44 acre of southern cottonwood-willow riparian forest (including disturbed), 0.13 acre of disturbed southern willow scrub, and 0.01 tamarisk scrub at the periphery existing habitat located along the Sweetwater River. However, the species is not expected to occupy the site given the negative

survey results and lack of recent observations of the species in the area; therefore, **impacts to southwestern willow flycatcher would be less than significant.**

State Species of Concern, County Group A and B Plant Species, and County Group 1 Animal Species (Guideline 2)

The Project would result in significant impacts to the following species under the above guidelines for the following reasons:

The Project would result in potentially significant impacts to one County Group B plant species, Palmer's goldenbush. Additionally, the Project would result in impacts to suitable habitat with the potential to support the following County List A plant species that were determined to have high potential to occur within the Project site: San Diego ambrosia and Robinson's pepper grass. San Diego ambrosia is discussed above in Section 2.1.2.1 (Guideline 1), while the remaining species are discussed below.

The Project would result in potentially significant impacts to the following County Group 1 animal species and/or state Species of Special Concern: coastal California gnatcatcher, least Bell's vireo, Cooper's hawk, Lawrence's goldfinch, oak titmouse, peregrine falcon, red-shouldered hawk, turkey vulture, vermilion flycatcher, white-tailed kite, yellow-breasted chat, yellow warbler, Townsend's big-eared bat, western mastiff, and western red bat. Additionally, the Project would result in impacts to suitable habitat with the potential to support the following County Group 1 animal species and/or state Species of Special Concern that were determined to have high potential to occur within the Project site: loggerhead shrike, Mexican long-tongued bat, sharp-shinned hawk, two-striped garter snake, and western spadefoot. The Project would also result in potentially significant impacts to the following USFWS Birds of Conservation Concern: Lawrence's goldfinch and oak titmouse. Coastal California gnatcatcher and least Bell's vireo are discussed above in Section 2.1.2.1 (Guideline 1), while the remaining species are discussed below.

Palmer's Goldenbush

Palmer's goldenbush is a CRPR 1B.1 species, County List B, MSCP covered and narrow endemic species. A total of 236 individuals were observed within the southeastern, south-central, and southwestern portions of the Project site. Approximately 234 individuals would be impacted by the Proposed Project. The two individuals that would be avoided by the Proposed Project are located outside of the MUP boundary within an area that would not be impacted by mining or reclamation activities to the east of Steele Canyon Road and north of Ivanhoe Ranch Road. **Impacts to Palmer's goldenbush, a County List B plant species, would be potentially significant (Impact BIO-2a).** As a County List B plant species, species-based mitigation at a minimum 1:1 mitigation ratio is required pursuant to County Requirements.

Cooper's Hawk

Cooper's hawk, a CDFW Watch List, County Group 1, and MSCP covered species, was observed within the eastern and western portions of the Project site. The Project would impact approximately 0.44 acre of southern riparian forest, 0.13 acre of southern willow scrub, 0.01 acre of tamarisk scrub, 2.1 acres of eucalyptus woodland, and 1.7 acres of non-native woodland, in addition to removing trees along the golf course fairways that provide potential nesting and foraging habitat

for this species. However, suitable nesting and foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for nesting and foraging opportunities. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's biological open space (BOS) providing suitable nesting and foraging habitat for the species. Temporal loss of potential nesting and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive nesting and foraging habitat for the species is already preserved throughout the region within the SDNWR and other open space areas located in the Project vicinity.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential nesting and foraging habitat are considered a potentially significant impact (Impact BIO-2b). Direct impacts to nesting Cooper's hawk and/or indirect noise impacts to Cooper's hawks nesting within 300 feet of active construction, mining, or reclamation areas would be potentially significant (Impact BIO-2c).**

Lawrence's Goldfinch

Lawrence's goldfinch, a USFWS Bird of Conservation Concern, was detected foraging within the eastern portion of the Project site. The Proposed Project would impact potential breeding and foraging habitat for this species. However, suitable nesting and foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for nesting and foraging opportunities. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable nesting and foraging habitat for the species. Temporal loss of potential nesting and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive nesting and foraging habitat for the species is already preserved throughout the region within the SDNWR and other open space areas located in the Project vicinity.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential nesting and foraging habitat during mining and reclamation activities are considered a potentially significant impact (Impact BIO-2b). Direct impacts to nesting individuals would be considered potentially significant (Impact BIO-2d).**

Loggerhead Shrike

Loggerhead shrike is a USFWS Bird of Conservation Concern, CDFW Species of Special Concern, and County Group 1 species. This species was not observed within the Project site but was determined to have a high potential to occur based on the presence of suitable habitat and documented occurrences within adjacent habitat west of the site. However, suitable nesting and foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either

undisturbed or in the five-year restoration and revegetation monitoring period and accessible for nesting and foraging opportunities. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable nesting and foraging habitat for the species. Temporal loss of potential nesting and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive nesting and foraging habitat for the species is already preserved throughout the region within the SDNWR and other open space areas located in the Project vicinity.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential nesting and foraging habitat during mining and reclamation activities are considered a potentially significant impact (Impact BIO-2b). Direct impacts to nesting loggerhead shrikes would be considered potentially significant (Impact BIO-2d).**

Oak Titmouse

Oak titmouse, a USFWS Bird of Conservation Concern, was observed foraging within the western portion of the site. The Proposed Project would impact potential breeding and foraging habitat for this species. However, suitable nesting and foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for nesting and foraging opportunities. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable nesting and foraging habitat for the species. Temporal loss of potential nesting and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive nesting and foraging habitat for the species is already preserved throughout the region within the SDNWR and other open space areas located in the Project vicinity.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential nesting and foraging habitat during mining and reclamation activities are considered a potentially significant impact (Impact BIO-2b). Direct impacts to nesting individuals would be considered potentially significant (Impact BIO-2d).**

Peregrine Falcon

Peregrine falcon is a USFWS Bird of Conservation Concern, CDFW Fully Protected species, County Group 1, and MSCP covered and narrow endemic species. A pair was observed soaring over the Project site and temporarily perched on a tree in the western portion of the site. Suitable breeding habitat for the species is absent from the Project site; therefore, no suitable breeding habitat or breeding individuals would be impacted by the Project.

Potential foraging habitat occurs on site and would be impacted by the Project; however, suitable foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either

undisturbed or in the five-year restoration and revegetation monitoring period and accessible for foraging opportunities. Temporal loss of potential foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Additionally, large areas of foraging habitat for the species are present within preserved habitat in the local area, including the SDNWR, and existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable foraging habitat for the species.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential foraging habitat during mining and reclamation activities are considered a potentially significant impact (Impact BIO-2b).**

Red-Shouldered Hawk

Red-shouldered hawk, a County Group 1 species, was observed within riparian areas and flying overhead during Project surveys. Suitable woodland nesting habitat occurs on site for this species, although it was not observed nesting on site. The Project would impact approximately 0.44 acre of southern riparian forest, 0.13 acre of southern willow scrub, 0.01 acre of tamarisk scrub, 2.1 acres of eucalyptus woodland, and 1.7 acres of non-native woodland, in addition to removing trees along the golf course fairways that provide potential nesting and foraging habitat for this species. However, suitable nesting and foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for nesting and foraging opportunities. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable nesting and foraging habitat for the species. Temporal loss of potential nesting and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive nesting and foraging habitat for the species is already preserved throughout the region within the SDNWR and other open space areas located in the Project vicinity.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential nesting and foraging habitat are considered a potentially significant impact (Impact BIO-2b). Direct impacts to nesting red-shouldered hawk and/or indirect noise impacts to red-shouldered hawk nesting within 300 feet of active construction, mining, or reclamation areas would be potentially significant (Impact BIO-2c).**

Sharp-shinned Hawk

Sharp-shinned hawk, a CDFW Watch List and County Group 1 species, was not observed within the Project site but was determined to have a high potential to occur based on the presence of suitable overwintering and foraging habitat and documented occurrences within the Project vicinity. This species is an uncommon winter visitor in San Diego but breeds in the northern and central portions of California. As such, suitable breeding habitat for the species is absent from the Project site; therefore, no suitable breeding habitat or breeding individuals would be impacted by the Project.

The Project would result in impacts to potential overwintering and foraging habitat for the species; however, suitable wintering and foraging opportunities for the species would remain during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for use. Temporal loss of potential wintering and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Additionally, large areas of foraging habitat for the species are present within preserved habitat in the local area, including the SDNWR, and existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable foraging habitat for the species.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential wintering and foraging habitat during mining and reclamation activities are considered a potentially significant impact (Impact BIO-2b).**

Turkey Vulture

Turkey vulture is a County Group 1 species that has been observed soaring over the southwestern portion of the Project site. No potentially suitable breeding habitat is present on site or would be impacted by the Project. Therefore, no suitable breeding habitat or breeding individuals would be impacted by the Project.

Potential foraging habitat for this species occurs on site and would be impacted by the Project; however, suitable foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for use. Temporal loss of potential foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Additionally, large areas of foraging habitat for the species are present within preserved habitat in the local area, including the SDNWR, and existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable foraging habitat for the species.

Temporal loss of potential foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Regardless, **impacts to foraging habitat for this species are considered a potentially significant impact (BIO-2b).**

Vermilion Flycatcher

Vermilion flycatcher is a CDFW Species of Special Concern and County Group 1 species that was detected on numerous occasions in the eastern and western portions of the Project site; at least two breeding pairs were confirmed to occupy the Project site in 2019, and one pair was observed with an active nest in 2022. The Proposed Project would impact potentially suitable breeding and foraging habitat for the species; however, suitable nesting and foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-

acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for nesting and foraging opportunities.

Impacts to potential nesting and foraging habitat would be potentially significant (Impact BIO-2b). Direct impacts to nesting individuals would be considered potentially significant (Impact BIO-2d). Though the post-reclamation condition of the Project site would result in a substantial increase in native upland and riparian habitats and preserved BOS, these areas may be less suitable for vermilion flycatcher than the existing active and inactive golf course areas that are generally open with scattered mature trees. However, suitable habitat for the species is also present to the south of the site at the Steele Canyon Golf Club where the species was detected in 2000 (Unitt 2004).

White-tailed Kite

White-tailed kite, a CDFW Fully Protected and County Group 1 species, was not observed within the Project site but was observed flying overhead and foraging off site within the SDNWR in 2022. The species was determined to have a high potential to occur based on the presence of suitable riparian habitat. The Proposed Project would impact approximately 0.58 acre of suitable riparian breeding habitat for the species. However, suitable habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for use. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable nesting and foraging habitat for the species. Temporal loss of potential nesting and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, large areas of foraging and breeding habitat for the species are present within preserved habitat in the local area, including the SDNWR.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential nesting and foraging habitat are considered a potentially significant impact (Impact BIO-2b). Direct impacts to nesting white-tailed kite and/or indirect noise impacts to white-tailed kite nesting within 300 feet of active construction, mining, or reclamation areas would be potentially significant (Impact BIO-2d).** Following reclamation, the Project would provide additional, higher quality habitat for the species through the revegetation and restoration of the expanded Sweetwater River floodplain.

Yellow-breasted Chat

Yellow-breasted chat, a CDFW Species of Special Concern and County Group 1 species, was detected within riparian habitat in the southwestern portion of the Project site along the Sweetwater River. The Proposed Project would impact approximately 0.58 acre of riparian habitat with the potential to support breeding and foraging individuals (Figure 2.2-8, *Vegetation and Sensitive Resources/Impacts*). However, suitable habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for use. Additionally, existing stands of native riparian habitat to

the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable nesting and foraging habitat for the species. Temporal loss of potential nesting and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, large areas of foraging habitat for the species are present within preserved habitat in the local area, including the SDNWR.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential foraging and nesting habitat are considered a potentially significant impact (Impact BIO-2b). Direct impacts to nesting individuals would be considered potentially significant (Impact BIO-2d).** Following reclamation, the Project would provide additional, higher quality habitat for the species through the revegetation and restoration of the expanded Sweetwater River floodplain.

Yellow Warbler

Yellow warbler is a USFWS Bird of Conservation Concern, CDFW Species of Special Concern, and County Group 2 species. The species was detected on several occasions throughout the Project site. The Project would impact approximately 0.58 acre of riparian habitat with the potential to support breeding and foraging individuals. However, suitable habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for use. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable nesting and foraging habitat for the species. Temporal loss of potential nesting and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, large areas of foraging habitat for the species are present within preserved habitat in the local area, including the SDNWR.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential foraging and nesting habitat are considered a potentially significant impact (Impact BIO-2b). Direct impacts to nesting individuals would be considered potentially significant (Impact BIO-2d).** Following reclamation, the Project would provide additional, higher quality habitat for the species through the revegetation and restoration of the expanded Sweetwater River floodplain.

Two-striped Garter Snake

Two-striped garter snake, a CDFW Species of Special Concern and County Group 1 species, was not observed within the Project site but was determined to have a high potential to occur based on the presence of potentially suitable aquatic and riparian habitat and reported occurrences within the surrounding area. The Proposed Project would result in impacts to 0.55 acre of disturbed wetland, 0.44 acre of southern cottonwood-willow riparian forest, 0.13 acre of southern willow scrub, 0.01 acre of tamarisk scrub, and 2.7 acres of constructed ponds with the potential to support the species. Suitable habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site

either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for use. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along the Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable habitat for the species. Temporal loss of potential habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive habitat for the species is already preserved throughout the region within the SDNWR and other open space areas located in the Project vicinity. Ground disturbance activities during mining and grading activities could potentially result in direct impacts to two-striped garter snake, if found to occur within the Project site.

Though the Project would not adversely impact the local long-term survival of the species, **loss of suitable habitat for two-striped garter snake is considered potentially significant (Impact BIO-2b). Direct impacts to two-striped garter snake would be considered potentially significant (Impact BIO-2e).** Following reclamation, the Project would provide additional, higher quality habitat for the species through the revegetation and restoration of the expanded Sweetwater River floodplain.

Western Spadefoot

Western spadefoot, a CDFW Species of Special Concern and County Group 2 species, was not observed within the Project site but was determined to have a high potential to occur based on the presence of potentially suitable aquatic and riparian habitat and reported occurrences within the surrounding area. The Proposed Project would result in impacts to 0.55 acre of disturbed wetland, 0.58 acre of potential wetland/riparian habitat, and 2.7 acres of constructed ponds with potential to support the species. Suitable habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for use. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along the Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable habitat for the species. Temporal loss of potential habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, large areas of foraging habitat for the species are present within preserved habitat in the local area, including the SDNWR and other open space areas located within the Project vicinity. Ground disturbance activities during mining and grading activities could potentially result in direct impacts to western spadefoot, if found to occur within the Project site.

Though the Project would not adversely impact the local long-term survival of the species, **loss of suitable habitat for western spadefoot is considered potentially significant (Impact BIO-2b). Direct impacts to western spadefoot would be considered potentially significant (Impact BIO-2e).**

Mexican Long-tongued Bat

Mexican long-tongued bat, a CDFW Species of Special Concern and County Group 2 species, was not observed within the Project site but was determined to have a high potential to occur based

documented occurrences within Project vicinity. In coastal San Diego County, this species is associated with urban areas and has been found within the nearby communities of Mt. Helix and El Cajon. The species forages on night blooming flowers of agaves (Agavaceae) and cacti (Cactaceae). Suitable nectaring resources may occur within adjacent residential areas and buildings within the Project site could potentially provide suitable roosting habitat; though, this species was not documented within the Project site during the 2022 bat surveys. Individuals, if present, would most likely utilize the surrounding residential neighborhoods for roosting and foraging opportunities which provide more extensive habitat for the species. As such, implementation of the Proposed Project would not affect the local long-term survival of this species.

Though the Project would not adversely impact the local long-term survival of the species, **impacts to potential foraging habitat for the Mexican long-tongued bat are considered potentially significant (Impact BIO-2b)**. Additionally, **direct impacts to roosting bats would be potentially significant (Impact BIO-2f)**.

Townsend's Big-eared Bat

Townsend's big-eared bat, a CDFW Species of Special Concern and County Group 2 species, was detected within the eastern and western portions of the Project site. The species likely utilizes the site for foraging opportunities but is unlikely to roost within the Project site as preferred roosting sites are not present. Although buildings within the Project site could provide potential roosting habitat, this species is highly susceptible to disturbance and will abandon its roost if disturbed. Therefore, no suitable roosting habitat or roosting individuals would be impacted by the Project.

The Project would result in impacts to potential foraging habitat for the species. However, suitable foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for foraging opportunities. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along the Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable foraging habitat for the species. Temporal loss of potential foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive foraging habitat for the species is already preserved throughout the region within the SDNWR and other open space areas located in the Project vicinity.

Though the Project would not adversely impact the local long-term survival of the species, **impacts to potential foraging habitat for the Townsend's big-eared bat are considered potentially significant (Impact BIO-2b)**.

Western Mastiff Bat

Western mastiff bat, a CDFW Species of Special Concern and County Group 2 species, was detected within the western portion of the Project site. The species likely utilizes the site for foraging opportunities but is unlikely to roost within the Project site as preferred roosting sites are

not present. Therefore, no suitable roosting habitat or roosting individuals would be impacted by the Project.

The Project would result in impacts to potential foraging habitat for the species. However, suitable foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for foraging opportunities. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along the Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable foraging habitat for the species. Temporal loss of potential foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive foraging habitat for the species is already preserved throughout the region within the SDNWR and other open space areas located in the Project vicinity.

Though the Project would not adversely impact the local long-term survival of the species, **impacts to potential foraging habitat for the western mastiff bat are considered potentially significant (Impact BIO-2b).**

Western Red Bat

Western red bat, a CDFW Species of Special Concern and County Group 2 species, was detected within the western portion of the Project site. This tree roosting species has the potential to roost within riparian habitat and planted trees within the Project site. The species would also be expected to utilize the site for foraging opportunities. As such, the Project would result in impacts to potential foraging and roosting habitat for the species. However, suitable roosting and foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for roosting and foraging opportunities. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along the Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable roosting and foraging habitat for the species. Temporal loss of potential roosting and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive roosting and foraging habitat for the species is already preserved throughout the region within the SDNWR and other open space areas located in the Project vicinity.

Though the Project would not adversely impact the local long-term survival of the species, **impacts to potential foraging and roosting habitat for the western red bat are considered potentially significant (Impact BIO-2b).** Additionally, **direct impacts to roosting bats would be potentially significant (Impact BIO-2f).**

The Project would result in less than significant or no impact to the following species under the above guidelines for the stated reasons:

Robinson's Pepper Grass

Robinson's pepper grass is a CRPR 4.3 and County List A species. The Project would result in impacts to 1.2 acres of Diegan coastal sage scrub with the potential to support the species. However, the species was not found to occur within the Project site during the 2019 and 2022 rare plant surveys, and the small amount of potential habitat that would be impacted would not support a significant population of the species. Therefore, **impacts to Robinson's pepper grass would be less than significant.**

County List C and D Plant Species and County Group 2 Animal Species (Guideline 3)

The Project would result in significant impacts to the following under the above guidelines for the following reasons:

The Project would result in potentially significant impacts to three County List D plant species: San Diego County viguiera, San Diego sagewort, and southwestern spiny rush, as discussed below. No other County Group C or D plant species would be impacted by the Project. These species are further discussed below

The Project would result in potentially significant impacts to the following County Group 2 animal species, though the Project would not impact the local long-term survival of any of these species: barn owl, great blue heron, green heron, western bluebird, yellow warbler, monarch butterfly, Belding's orange-throated whiptail, small-footed myotis, and Yuma myotis. Additionally, the Project would result in impacts to suitable habitat with the potential to support the following County Group 2 animal species that were determined to have high potential to occur within the Project site: California horned lark, Canada goose, merlin, Mexican long-tongued bat and western spadefoot. With the exception of Mexican long-tongued bat, western spadefoot, and yellow warbler, which are described under Guideline 2, these species are further discussed below.

San Diego County Viguiera

San Diego County viguiera is a County List D plant and has a CRPR of 4.3. The Project would impact five individuals of San Diego County viguiera observed within the Project site along the Project's northeastern boundary. One individual located along the Project's southeastern boundary would be avoided by the Proposed Project. The impacted individuals are not part of a population at the periphery of the species' range, located in an area where the taxon is especially uncommon, or occurring on unusual substrates. Additionally, there are numerous documented occurrences of this species throughout the surrounding area. Though the Project would not adversely impact the local long-term survival of the species, **impacts to San Diego County viguiera shrubs are considered potentially significant (Impact BIO-3a).**

San Diego Sagewort

San Diego sagewort is a CRPR 4.2 and County List D species. Two San Diego sagewort individuals observed at the western Project boundary at the edge of southern riparian forest habitat would be impacted by the Proposed Project. The impacted individuals are not part of a population at the periphery of the species' range, located in an area where the taxon is especially uncommon, or occurring on unusual substrates. Additionally, five individuals located along the Project's

western boundary where it abuts the SDNWR would be avoided and preserved within the Project's BOS. Furthermore, there are numerous documented occurrences of this species throughout the surrounding area indicating that the Project site does not represent a geographically significant population. Though the Project would not adversely impact the local long-term survival of the species, **impacts to San Diego sagewort individuals are considered potentially significant (Impact BIO-3a).**

Southwestern Spiny Rush

Southwestern spiny rush is a CRPR 4.2 species and County List D species. Three individuals occurring within the southwestern portion of the Project along the Sweetwater River would be impacted by the removal of the existing bridge crossing. The impacted individuals are not part of a population at the periphery of the species' range, located in an area where the taxon is especially uncommon, or occurring on unusual substrates. Fourteen individuals located along Sweetwater River in the western portion of the Project site would be avoided and would be preserved within the Project's BOS. Furthermore, there are numerous documented occurrences of this species throughout the surrounding area indicating that the Project site does not represent a geographically significant population. Though the Project would not adversely impact the local long-term survival of the species, **impacts to southwestern spiny rush individuals are considered potentially significant (Impact BIO-3a).**

Barn Owl

Barn owl, a County Group 2 species, was observed in the northeastern portion of the Project site. The Proposed Project would impact potential breeding and foraging habitat for this species. However, suitable habitat for the species would remain during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for use. Additionally, large areas of foraging habitat for the species are present within preserved habitat in the local area, including the SDNWR, and existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable habitat for the species. Temporal loss of potential habitat during mining and reclamation activities would not adversely affect the local long-term survival of this species.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential nesting and foraging habitat during mining and reclamation activities would be considered potentially significant (Impact BIO-3b). Direct impacts to nesting individuals would be potentially significant (Impact BIO-3c).**

California Horned Lark

California horned lark, a CDFW Watch List and County Group 2 species, was not observed within the Project site but was determined to have a high potential to occur based on the presence of potentially suitable habitat and reported occurrences within the Project vicinity. The Project would result in impacts potential foraging and breeding habitat for the species. However, suitable nesting and foraging habitat would remain on site during mining and reclamation activities as mining

would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for nesting and foraging opportunities. Temporal loss of potential habitat during mining and reclamation activities would not adversely affect the local long-term survival of this species. Therefore, the Project would not adversely affect the long-term survival of the species, which is known to occur within adjacent preserved lands.

Though the Project would not adversely impact the local long-term survival of the species, **loss of suitable habitat during mining and reclamation activities would be considered potentially significant (Impact BIO-3b). Direct impacts to nesting individuals would be potentially significant (Impact BIO-3c).**

Canada Goose

Canada goose, a County Group 2 species, was not observed within the Project site but was determined to have a high potential to occur based on the presence of suitable overwintering habitat and documented occurrences within the Project vicinity. The species overwinters in southern California, but local breeding records occur within the County as a result of introductions and translocations. The Project would result in impacts to suitable wintering and foraging habitat for the species, and potential breeding habitat. However, suitable habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible to the species. Temporal loss of potential habitat during mining and reclamation activities would not adversely affect the local long-term survival of this species. Furthermore, suitable habitat for the species is also present within the surrounding area including at other golf courses (e.g., Steele Canyon Golf Club) and local reservoirs (e.g., Sweetwater Reservoir). Therefore, the Project would not adversely affect the long-term survival of the species, which is known to occur within adjacent preserved lands.

Though the Project would not adversely impact the local long-term survival of the species, **loss of suitable habitat during mining and reclamation activities would be considered potentially significant (Impact BIO-3b). Direct impacts to nesting individuals would be potentially significant (Impact BIO-3c).**

Great Blue Heron and Green Heron

Great blue heron and green heron are County Group 2 species that have the potential to forage within riparian areas and man-made ponds present within the Project site. The Project would impact 2.7 acres of artificial ponds and 0.58 acre of wetland/riparian habitat, which are used as foraging habitat for this species. However, the site is not expected to support a rookery site or significant population of these two herons based on the low numbers observed. Suitable nesting and foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for nesting and foraging opportunities. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable

nesting and foraging habitat for the species. Temporal loss of potential habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive habitat for the species is already preserved throughout the region and within the SDNWR in the local area. Therefore, the Project would not adversely affect the long-term survival of the species, which is known to occur within adjacent preserved lands.

Though the Project would not adversely impact the local long-term survival of the species, loss of potential foraging and breeding habitat during mining and reclamation activities would be significant (**Impact BIO-3b**). **Direct impacts to nesting individuals would be considered potentially significant (Impact BIO-3c)**. Following reclamation, the Project would provide additional, higher quality habitat for the species through the revegetation of the expanded Sweetwater River floodplain.

Merlin

Merlin, a CDFW Watch List and County Group 2 species, was not observed within the Project site but was determined to have a high potential to occur based on the presence of suitable overwintering and foraging habitat and documented occurrences within the Project vicinity. This species is an uncommon winter visitor in southern California occurring within San Diego from October to March (Unitt 2004); it does not breed in San Diego region. As such, the Project would not result in impacts to suitable breeding habitat or breeding individuals.

The Project would result in impacts to potential overwintering and foraging habitat for the species; however, however, suitable wintering and foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for use. Additionally, large areas of foraging habitat for the species are present within preserved habitat in the local area, including the SDNWR, and existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project's BOS providing suitable foraging habitat for the species. Temporal loss of potential wintering and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Therefore, the Project would not adversely affect the long-term survival of the species, which is known to occur within adjacent preserved lands.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential wintering and foraging habitat during mining and reclamation activities would be considered potentially significant (Impact BIO-3b)**.

Western Bluebird

Western bluebird, a County Group 2 MSCP covered species, was observed in multiple locations throughout the Project site. The Project would impact the golf course where this species is known to forage and would remove trees suitable for nesting. However, foraging and breeding opportunities for the species would remain during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible to

the species. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable nesting and foraging habitat for the species. Temporal loss of potential nesting and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive habitat for the species is already preserved throughout the region and within the SDNWR in the local area. Therefore, the Project would not adversely affect the long-term survival of the species, which is known to occur within adjacent preserved lands.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential foraging and breeding habitat during mining and reclamation activities would be significant (Impact BIO-3b). Direct impacts to nesting individuals would be considered potentially significant (Impact BIO-3c).**

Monarch Butterfly

A single monarch butterfly, which is a County Group 2 species, was observed flying through the Project site. This species is expected to migrate through the region but is not expected to roost on the site due to its inland location. This species is expected to migrate through the region but is considered unlikely to roost within the Project site due to its location away from the coast. Thus, while the species may fly through the site and use nectar resources, the site does not provide larval habitat or overwintering roosts.

The Project would impact 4.38 acres of potential habitat for this species comprised of 1.7 acres of non-native woodland, 2.1 acres of eucalyptus woodland, and 0.58 acre of riparian habitat. However, potential habitat for the species would remain during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for the species. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable habitat for the species. Temporal loss of potential habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive habitat for the species is already preserved throughout the region and within the SDNWR in the local area. Therefore, the Project would not adversely affect the long-term survival of the species, which is known to occur within adjacent preserved lands.

Though the Project would not adversely impact the local long-term survival of the species, **loss of potential habitat during mining and reclamation activities would be considered a significant impact (Impact BIO-3b).**

Belding's Orange-throated Whiptail

Belding's orange-throated whiptail, a CDFW Watch List, County Group 2, and MSCP covered species, was observed in the eastern and northeastern portions of the Project site. The Project would impact 1.2 acres of suitable Diegan coastal sage scrub habitat for the species (Figure 2.2-8). However, patches of habitat for the species would remain during mining and reclamation activities

as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for foraging. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable habitat for the species. Temporal loss of potential habitat during mining and reclamation activities would not adversely affect the local long-term survival of this species. Furthermore, extensive habitat for the species is already preserved throughout the region and within the SDNWR in the local area. Therefore, the Project would not adversely affect the long-term survival of the species, which is known to occur within adjacent preserved lands.

Though the Project would not adversely impact the local long-term survival of the species, **loss of suitable habitat during mining and reclamation activities would be considered potentially significant (Impact BIO-3b)**. Following reclamation, the Project would provide additional, higher quality habitat for the species through the creation of graded slopes planted with coastal sage scrub along the cut slopes constructed at the margins of the expanded Sweetwater River floodplain.

Small-footed Myotis

Small-footed myotis, a County Group 2 species, was detected within the eastern portion of the Project site. The species likely utilizes the site for foraging and has the potential to roost within trees and buildings present within the Project site. As such, the Project would result in impacts to potential foraging and roosting habitat for the species. However, suitable roosting and foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for roosting and foraging opportunities. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along the Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable roosting and foraging habitat for the species. Temporal loss of potential roosting and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive roosting and foraging habitat for the species is already preserved throughout the region within the SDNWR and other open space areas located in the Project vicinity.

Though the Project would not adversely impact the local long-term survival of the species, **impacts to potential bat foraging and roosting habitat are considered potentially significant (Impact BIO-3b)**. Additionally, **direct impacts to roosting bats would be potentially significant (Impact BIO-3d)**. Following reclamation, the Project would provide additional, higher quality habitat for the species through revegetation and restoration of the expanded Sweetwater River floodplain.

Yuma Myotis

Yuma myotis, a County Group 2 species, was detected within the western and eastern portions of the Project site. The species likely utilizes the site for foraging and has the potential to roost within

trees and buildings present within the Project site. As such, the Project would result in impacts to potential roosting and foraging habitat for the species. However, suitable roosting and foraging habitat would remain on site during mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for roosting and foraging opportunities. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along the Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable roosting and foraging habitat for the species. Temporal loss of potential roosting and foraging habitat during mining and reclamation activities would not affect the local long-term survival of this species. Furthermore, extensive roosting and foraging habitat for the species is already preserved throughout the region within the SDNWR and other open space areas located in the Project vicinity.

Though the Project would not adversely impact the local long-term survival of the species, **impacts to potential bat foraging and roosting habitat are considered potentially significant (Impact BIO-3b)**. Additionally, **direct impacts to roosting bats would be potentially significant (Impact BIO-3d)**. Following reclamation, the Project would provide additional, higher quality habitat for the species through revegetation and restoration of the expanded Sweetwater River floodplain.

The Project would result in less than significant or no impact to the following species under the above guidelines for the stated reasons:

Singlewhorl Burrobush (Guideline 3)

Singlewhorl burrobush is a CRPR 2B.2 species. Singlewhorl burrobush was not detected within the Project site during rare plant surveys conducted in 2019 and 2022, but the Project would result in impacts to 1.14 acres of wetland habitat and 1.2 acres of Diegan coastal sage scrub with the potential to support the species. However, **impacts to singlewhorl burrobush would be less than significant** as the species was not found to occur within the Project site and the small amount of potential habitat that would be impacted would not support a significant population of the species.

Arroyo Toad (Guideline 4)

The Project site contains potentially suitable breeding, aestivation, and foraging habitat for arroyo toad; however, no arroyo toads were detected within or adjacent to the Project site during protocol level surveys in 2019. The Sweetwater River is within the historical range of the species, but the river and associated floodplain within the region have been heavily modified by development, including the Singing Hills Golf Resort and rural residences upstream of the Project site. Furthermore, the hydrological regime of the river has been substantially altered by the creation of artificial impoundments including Loveland Reservoir upstream and Sweetwater Reservoir downstream of the site. The Sweetwater dam was constructed in 1888 and the Loveland dam was built in 1945, both of which are operated by the Sweetwater Authority and control releases of water to downstream areas.

Potentially suitable habitat within the Project site has been heavily degraded by the development of the golf course and previous mining activities. These disturbances have resulted in the removal and conversion of riparian habitat to turf grass throughout most of the Project site, along with the realignment and constriction of the river channel. Therefore, potentially suitable habitat for arroyo toad is now restricted to a single stand of riparian habitat in the southwestern portion of the Project site, and although this area has been subjected to past disturbances, it connects to more extensive, higher quality habitat off site within the SDNWR. The species is not expected to occupy the Project site as toads have not been detected south of Sloan Canyon Road, located over five miles upstream of the site, since 1997 (USFWS 2014; USGS 2005), and focused arroyo toad surveys conducted within the SDNWR, which occurs east and immediately west of site, were negative (Martin 2005). Furthermore, focused arroyo toad surveys were conducted within the Project site by the USGS in 2003, during which no arroyo toads were observed (USGS 2005). Although it is possible that toads may repopulate the reach of the Sweetwater River south of Sloan Canyon Road in the future, it is currently unlikely that a self-sustaining population of arroyo toads persists in the local area.

The Project site does not contain habitat critical to the survival of this species and the reach of river within the Project site is currently considered unoccupied by this species given the lack of observations in the area for several years, including during the 2019 protocol surveys conducted for the Proposed Project. Since arroyo toad was not found to occur within the Project site, **impacts to potentially suitable arroyo habitat would be less than significant.**

Golden Eagle (Guideline 5)

The Project site does not contain suitable nesting habitat for golden eagle and the site is not within a known golden eagle territory. The site does not contain adequate eagle foraging habitat as it is a developed and abandoned golf course which has historically been subjected to human visitation and disturbances. Golden eagles are less tolerant of development and areas associated with high amounts of human visitation and are known to avoid these areas. Golden eagles are occasional visitors to the SDNWR; however, no known active nest sites occur within 4,000 feet of the Project site. The closest golden eagle nest is the San Miguel Mountain pair, which nests over eight miles to the southeast of the site. A prime foraging area for this pair is the area around Sweetwater Reservoir, west of the Project. The Project would not impact golden eagle habitat or a known golden eagle territory, and the site does not contain suitable foraging habitat for the species based on current and past commercial uses. **Therefore, impacts to golden eagle habitat would be less than significant.**

Raptor Foraging Habitat (Guideline 6)

The Project site consists of an active and abandoned golf course, which has historically been subjected to frequent human visitation and ongoing disturbances related to golf course operations, such as regular mowing, irrigation, and pest management. In its current state, the Project site provides relatively low- to moderate- quality foraging opportunities for common raptors that are resident and migratory to the region. Although the Project site provides some function and value for raptor foraging, it has been a golf course for decades and has likely not functioned as a local or regional foraging resource of importance for raptors considering that species observed within the Project site are known to be tolerant to urbanization and other disturbances. Other more expansive areas occur in the local area and region that provide foraging habitat, such as the

SDNWR to the south and west, and McGinty Mountain Ecological Reserve to the east. Although the Project would result in the temporary loss of potential foraging habitat within subphases that are being actively mined, potential foraging opportunities for raptors would remain available in portions of the site outside of the active subphase. Since mining and reclamation activities as mining would occur incrementally in 20- to 30-acre subphases, the majority of the site would remain either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for foraging throughout the mining period. As such, the temporal loss of potential raptor foraging habitat during mining and reclamation activities would not affect the local long-term survival of raptors within the local area. **Impacts to raptor foraging habitat would be less than significant.**

Core Wildlife Areas (Guideline 7)

The extreme southwestern and southeastern portions of the Project site are located within designated Sweetwater Reservoir/San Miguel Mountain/Sweetwater River and McGinty Mountain/Sycuan Peak-Dehesa BRCAs, respectively. However, these areas are highly degraded and fragmented by development of the golf course. The Project site is identified as a linkage between core areas in the MSCP, and small portions of the site are identified as PAMA (16.4 acres). The Project site mainly consists of an existing golf course which lacks adequate vegetative cover preferred by many species for use of an area as a corridor. The on-site reach of the river is narrow and mostly devoid of native riparian habitat (except in the southwest where it connects directly to off-site conserved lands), and the Project site is fenced in many locations, with both historic and ongoing human-related disturbances spanning several decades. Though its current function is likely constrained by the site's historic and ongoing human-related disturbances associated with the golf course development, ongoing maintenance, and operations, local wildlife still utilizes the site for foraging and dispersal activities, and the location of the Project site along the Sweetwater River and between two MSCP core areas gives it high restoration potential that could significantly increase the function and viability of the linkage.

Extraction activities would temporarily impact the low-functioning linkage; however, mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for wildlife use. Additionally, existing stands of native riparian habitat to the east of Steele Canyon Road and in the southwestern portion of the site along the Sweetwater River would be avoided by Project activities and preserved within the Project's BOS providing suitable nesting and foraging habitat for wildlife species. As such, temporal impacts to these areas during mining and reclamation activities would be less than significant as any wildlife temporarily displaced by activities would be anticipated to reoccupy the area once the activities had concluded and impacts.

The Project would result in direct impacts to lands mapped as BRCA and PAMA and would impact sensitive habitats present in these areas found to support, or with the potential to support, special status wildlife species. **Impacts to sensitive habitats and wildlife species within the BRCA would be considered potentially significant (Impact BIO-4).** As part of the reclamation process the Project would ultimately contribute ~~150.7~~149.0 acres of preserved, rehabilitated, and restored habitat to the linkage through placement of these areas within a BOS easement (Figure 2.2-9, *Proposed Open Space*). This BOS includes lands mapped as BRCA and PAMA and would restore and improve the connection of the riparian corridor along the Sweetwater River to off-site areas

within the SDNWR providing important foraging, dispersal, breeding, and migratory habitat for several special status animals including the coastal California gnatcatcher and least Bell's vireo. The open space will be managed in accordance with a County-approved Resource Management Plan (RMP) to ensure preservation of native habitats and long-term management of the preserve. A 100-foot limited building zone easement adjacent to the BOS easement would protect sensitive habitats and species by restricting development of structures that would require vegetation clearing to prevent fuel modification and vegetation management within the BOS area. As such, the Project would have a less than significant effect on the viability of a core wildlife area with the implementation of mitigation.

Indirect Impacts/Edge Effects (Guideline 8)

Indirect impacts are actions that are not direct removal of habitat but affect the surrounding biological resources either as a secondary effect of the direct impacts (e.g., construction noise, runoff, nighttime lighting, fugitive dust, etc.), or as the cause of degradation of a biological resource over time (e.g., edge effects and adjacency issues). Potential significant indirect impacts may occur as a result of Project implementation, as described further below.

Noise

Construction noise from sources related to clearing, grubbing, grading, and extraction and processing activities would temporarily impact wildlife. Construction of the processing plant, aggregate extraction, and processing operations would require the daily use of heavy equipment that would elevate existing noise levels on site. Breeding birds and mammals may temporarily or permanently leave their territories to avoid disturbances from human activities, which could lead to reduced reproductive success and increased mortality. Potential short-term noise impacts could result from the proposed mining and reclamation of the site. Impacts would occur incrementally, meaning that not all areas would be impacted at once as mining activities would begin within Phase 1 and generally progress eastward following completion of earlier phasing. For example, as activities occur within subphase 1A, habitat within subphase 1B (and later phases) would not be impacted. **Noise effects would be considered potentially significant if noise levels generated during construction and/or extraction operations exceed a level of 60 A-weighted decibels (dBA) hourly average (L_{EQ}) or ambient (whichever is greater) adjacent to sensitive nesting bird species such as California gnatcatcher, least Bell's vireo, and raptors (Impact BIO-5).**

Lighting

Night lighting that extends from a developed area onto adjacent wildlife habitat can discourage the use of the habitat by nocturnal wildlife and can also provide nocturnal predators with an unnatural advantage over their prey, resulting in a potentially significant impact. However, the Proposed Project is required to direct all necessary lighting in a downward direction with appropriate shield and illumination technology to prevent adverse spillover of light. The only proposed night lighting would be installed around the processing plant for security purposes. Sand excavation and processing would only occur between 7:00 a.m. and 5:00 p.m. Therefore, no lighting associated with night work would occur. All Project-related lighting would be required to adhere to Division 9 of the San Diego County Light Pollution Code. Lighting within the Proposed Project footprint adjacent to undeveloped habitat (including reclaimed areas) would be of the lowest illumination

allowed for human safety, and would be selectively placed, shielded, and directed away from these areas. As such, **indirect impacts related to lighting would be less than significant.**

Fugitive Dust

Fugitive dust produced by construction and extraction operations has the potential to disperse onto preserved vegetation, which may reduce the overall vigor of individual plants by reducing their photosynthetic capabilities and increasing their susceptibility to pests or diseases. This in turn could affect animals dependent on these plants. Fugitive dust also may make plants unsuitable as habitat for insects and birds. Breeding birds and mammals may temporarily or permanently leave their territories to avoid construction and/or extraction operations, which could lead to reduced reproductive success and increased mortality. As a project design feature, the Project would implement a Fugitive Dust Control Plan (refer to Appendix I of this EIR) during construction (as well as during operations and reclamation activities) that would include fugitive dust control measures to minimize dust emissions and meet applicable dust control requirements. As part of the Proposed Project, active construction and extraction areas, unpaved surfaces, and stockpiles would be watered to minimize dust generation; all exposed soil would be watered a minimum of twice per day. Outgoing loaded trucks would be surface watered for dust suppression purposes and would either be covered or two feet of freeboard would be maintained. **Indirect impacts related to fugitive dust would be less than significant.**

Human Activity

Increases in human activity in the area could result in the degradation of open space habitat and associated indirect impacts on sensitive species through the creation of unauthorized trails and removal of vegetation. The eastern portion of the Project site currently consists of active and abandoned golf courses which have been historically subject to light to moderate human activity related to golf play and maintenance activities. Though the western portion of the Project site has been closed to golf play since 2017, the area is still periodically mowed and subject to unauthorized recreational uses (e.g., off-leash dogs, hikers and joggers, fishing, etc.), as well as the presence of unhoused people, resulting in disturbances from light to moderate human activity in this area. Additionally, aggregate extraction activities have occurred periodically within the site since the 1950s.

Following approval of the MUP, golf play within the Project site would cease. Public access during mining and reclamation activities would be controlled by fencing on the perimeter of the property and gates on the access roads within the Project boundaries. In addition, appropriate signage would be posted around the perimeter of the excavation area and Project boundary at 150-foot intervals. Most of the Project site is already surrounded by fencing, which would be replaced/repaired where missing or damaged. The access gates would be locked during non-operating hours. Following mining activities, the Project site would be reclaimed, restored, and revegetated habitat would be preserved within open space, and a multi-use trail system would be constructed. **Potentially significant direct and indirect impacts could occur to BOS, and sensitive habitats and species present in these areas, if protective measures are not implemented to control human access into open space areas (Impact BIO-6).** Permanent fencing and signage would be installed at the edge of open space and along on-site trails to prevent unauthorized access to sensitive habitat areas. The proposed trails would only be available for day use and are anticipated to be used primarily

by residents of the immediate area. As the site is already subjected to human uses, the Proposed Project would not represent a substantial increase in human activity and would provide protections for sensitive habitat areas that are not currently in place.

Domestic Predators

The Project site is adjacent to existing residential development and is already subject to some level of disturbance and predation by domestic animals from adjacent lands. Domestic predators (e.g., dogs and cats) have the potential to harm native wildlife species. For example, free-roaming cats are known to injure and/or kill native wildlife, and are of particular threat to small animals, including lizards, birds, and small rodents, while off-leash dogs can be a nuisance to wildlife, resulting in changes in wildlife behavior such as alteration in patterns of habitat utilization, or damage to burrows of ground-dwelling animals. Implementation of the Proposed Project would not result in increased potential for encounters between cats and native wildlife as no residential development is proposed as part of the Project. Hiking trails, however, are proposed to be constructed along the perimeter of the open space, which would likely increase the presence of domestic dogs within the Project site. Effects of off-leash dogs on wildlife would be minimized through the installation of permanent fencing and signage along the edge of the open space and trail system and requiring dogs to be on leash. Trails that occur adjacent to or cross the open space would be fenced on either side, which would further discourage off-leash dogs from leaving the trail. Trails would not be lit and are considered unlikely to be used by people walking dogs during the night, thus minimizing encounters with nocturnal wildlife. **Indirect impacts related to domestic predators would be less than significant.**

Exotic Plant Species

Non-native plants could colonize areas disturbed by construction and extraction and could potentially spread into adjacent native habitats. Many non-native plants are highly invasive and can displace native vegetation (reducing native species diversity), potentially increase flammability and fire frequency, change ground and surface water levels, and potentially adversely affect native wildlife dependent on native plant species. However, the site is already heavily infested by non-native vegetation. The Project would include weed control during operations and the reclamation process as described in the Reclamation Plan (EnviroMINE 2021a), with a focus on highly invasive species. The occurrence of weeds on site would be monitored by quarterly visual inspection during mine operations and removal would be initiated if the inspection reveals that weeds have become, or are becoming, established. The Project includes restoration and rehabilitation of existing riparian habitat within the southwestern portion of the site, revegetation of the expanded Sweetwater River floodplain, and constructed cut slopes at the margins of the expanded floodplain with native riparian and upland habitats. Further, graded pad areas located outside of the expanded floodplain would be revegetated with native or non-invasive plant species that would also minimize the chance for colonization and spread of invasive species into the open space. Successful completion of site reclamation and native restoration and revegetation areas would require achieving success criteria that include the amount of non-native cover on site. Additionally, only non-invasive plant species would be included in the landscape plan for the site (species not listed on the California Invasive Plant Inventory prepared by the California Invasive Plant Council [Cal-IPC; 2020]). Therefore, **indirect impacts related to exotic plant species would be less than significant.**

Occupied Burrowing Owl Habitat (Guideline 9)

The Project site consists of a developed and an abandoned golf course which have historically been subjected to on-going disturbances such as mowing and human visitation. The Project site is also characterized by highly sandy and friable soils which are not suitable for burrowing owls. As such, the site does not support suitable burrowing owl habitat and no burrowing owl or burrowing owl sign was detected within the site during biological surveys. As such, **the Project would have a less than significant impact on burrowing owl.**

Occupied Coastal Cactus Wren Habitat (Guideline 10)

The Project site does not contain suitable habitat (i.e., cacti thickets) for the coastal cactus wren. As such, **the Project would have a less than significant impact on cactus wren.**

Occupied Hermes Copper Butterfly Habitat (Guideline 11)

The Project site does not support Hermes copper butterfly habitat. The species' host plant, spiny redberry (*Rhamnus crocea*), was not observed within the Project site. Therefore, this species is not likely to occur, and **the Project would have a less than significant impact on the Hermes copper butterfly.**

Nesting Success (Guideline 12)

Project construction could impact the nesting success of coastal California gnatcatcher, least Bell's vireo, and tree-nesting raptors, all of which have the potential to nest on and/or within 500 feet of impact areas. **Removal of vegetation during the breeding season could result in significant direct impacts to nesting coastal California gnatcatcher (Impacts BIO-1b and BIO-2d), least Bell's vireo (Impacts BIO-1d and BIO-2d), and tree-nesting raptors (Impacts BIO-2c and BIO-2d).** Noise from such sources as clearing, grading, and mining and reclamation activities could result in a potential significant indirect impact to wildlife. Noise-related impacts would be considered significant if sensitive species (such as coastal California gnatcatcher, least Bell's vireo, and raptors) were displaced from their nests and failed to breed. **If construction or mining activities would be initiated within 500 feet of suitable habitat during the breeding seasons for California gnatcatcher (March 1 to August 15), nesting raptors (January 15 to July 15), or least Bell's vireo (March 15 to September 15), indirect noise effects would be potentially significant (Impact BIO-5).**

2.2.2.2 *Riparian Habitat and Sensitive Natural Communities*

Guidelines for the Determination of Significance

A significant impact to riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the CDFW would occur if:

13. Project-related grading, clearing, construction or other activities would temporarily or permanently remove sensitive native or naturalized habitat (as identified in Table 5 in the County Guidelines for Determining Significance – Biological Resources, excluding those without a mitigation ratio) on or off the Project site.

14. Any of the following would occur to or within jurisdictional wetlands and/or riparian habitats as defined by USACE, CDFW, and County: removal of vegetation; grading; obstruction, or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity, and abundance.
15. The Project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.
16. The Project would cause indirect impacts, particularly at the edge of proposed development adjacent to proposed or existing open space or other natural habitat areas, to levels that would likely harm sensitive habitats over the long term.
17. The Project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.

Guidelines Source

These guidelines are based on the County Guidelines for Determining Significance – Biological Resources (2010a).

Analysis

Vegetation Communities/Habitats (Guideline 13)

The majority of Project impacts would be restricted to disturbed habitat and developed land currently occupied by the Cottonwood Golf Club. The Project would result in impacts to a total of 2.34 acres of riparian habitat or other sensitive natural communities, as shown in Table 2.2-5, *Project Impacts to Vegetation Communities/Habitat Types* and Figure 2.2-8, including 0.55 acre of disturbed wetland (Tier I), 0.44 acre of southern cottonwood-willow riparian forest (including disturbed, Tier I), 0.13 acre of southern willow scrub, 0.01 acre of tamarisk scrub, 0.01 acre of arundo-dominated riparian (Tier I), and 1.2 acres of Diegan coastal sage scrub (including disturbed, Tier II). **Impacts to sensitive natural communities would be considered potentially significant (Impact BIO-7). Potentially significant indirect impacts to riparian habitat or other sensitive vegetation communities could occur through inadvertent intrusion into these adjacent areas by construction vehicles, equipment, and personnel (Impact BIO-8).**

Jurisdictional Wetlands/Waters (Guideline 14)

As addressed under County Guideline 13, the Project would result in impacts to jurisdictional wetlands and riparian habitats as defined by the USACE, CDFW, and/or County. Impacts to jurisdictional wetlands and riparian habitat would occur through mining and reclamation activities. However, mining would not result in direct impacts to the existing Sweetwater River low-flow river channel as the channel would be maintained with banks up to 3.5 feet in height in order to retain existing hydrologic characteristics and maintain water transfers operated by the Sweetwater

Authority. In addition to Project impacts related to extraction and other ground disturbance activities, up to three temporary river crossings would be utilized to transport heavy equipment across the Sweetwater River low-flow river channel during mining operations. Channel crossings would only be used when there is no water flow in the channel. An operating procedure would be established to maintain communication with Sweetwater Authority prior to, and during, water transfers to ensure channel crossings during water flows are avoided. Permanent Project impacts to jurisdictional wetlands would include the construction of three permanent grouted rip-rap drop structures within the expanded Sweetwater River floodplain. Two drop structures would be located along the constructed upland slopes bordering the expanded floodplain: one at the eastern of the site where the Sweetwater River enters the property along the eastern, western-facing slope; and one east of Steele Canyon Road along the southern, north-facing slope where Mexican Canyon Creek flows into the Sweetwater River. These drop structures would protect the slopes against upstream head cutting. A third structure would be located perpendicular to the Sweetwater River on the west side of the Steele Canyon Road bridge and would prevent head cutting of the channel during infrequent, high flow events.

As shown in Table 2.2-6, *Impacts to Jurisdictional Wetlands and Waterways*, impacts to jurisdictional waters and wetlands include 0.60 acres of wetland and 0.36 acre of non-wetland waters of the U.S. (Figure 2.2-10, *Waters of the U.S./Impacts*), 18.20 acres of CDFW jurisdictional areas (including 0.44 acre of southern cottonwood-willow riparian forest, 0.002 acre of freshwater marsh, 0.13 acre of southern willow scrub, 0.56 acre of disturbed wetland, 0.01 acre of arundo-dominated riparian, and 17.06 acres of streambed) (Figure 2.2-11, *CDFW Jurisdictional Areas/Impacts*). **Impacts to jurisdictional waters and wetlands would be considered potentially significant (Impact BIO-9).**

The Proposed Project would also impact 1.14 acres of County RPO wetland (Table 2.2-6; Figure 2.2-12, *County RPO Wetlands/Impacts*); however, the Project is exempt from RPO requirements pursuant to Section 86.605(d) of the RPO, as described above in Section 2.1.1.1 in the local regulatory framework under *Resource Protection Ordinance*, and evaluated in more detail below in Section 2.1.2.5, *Local Policies, Ordinances, and Adopted Plans*, under *County RPO Wetlands (Guideline 27)* in Section 2.1.2.5. The Project would be conditioned as required by the RPO to restore wetland buffer areas and provide a net gain in functional wetlands and riparian habitat that would be conserved in open space post reclamation. No steep slopes occur on site or would be created as a result of mining activities. The final landform is proposed to be a relatively flat plain that gently slopes downward from east to west, with a widened river channel bisecting the length of the site. Graded slopes along the ~~widened~~-expanded Sweetwater River floodplain would be revegetated with coastal sage scrub. Mature riparian woodland² would not be destroyed or reduced in size due to sand, gravel, or mineral extraction. The Proposed Project would not destroy or reduce the size of mature riparian woodland habitat. Therefore, **impacts to County RPO wetlands would be less than significant.**

Mining and reclamation activities would involve ground disturbance, movement of earth material, and use of heavy equipment which have potential to impact on-site and off-site jurisdictional wetlands and riparian habitat through alteration of the Sweetwater River floodplain and associated

² Mature riparian woodland is defined in the RPO as “a grouping of sycamores, cottonwoods, willows, and/or oak trees having substantial biological value, where at least ten of the trees have a diameter of six inches or greater.”

drainage patterns. These impacts were determined to be less than significant as detailed in the Project's Drainage Study (Chang Consultants 2022/2024a), which completed hydraulic models and compared existing and post-Project conditions to evaluate the effects of the proposed mining and reclamation activities on flood conveyance through the Project site, the findings which are summarized below.

Though the Project would impact the jurisdictional wetlands and riparian habitat during mining and reclamation, the bottom of the current Sweetwater River low-flow river channel would not be altered. Extraction activities would be set back at least five feet from the outer edge of each side of the existing low-flow Sweetwater River channel. Mining activities proposed during the rainy season (November through March) would be located away from the river channel to the extent feasible. The existing 3.5-foot-high channel banks would remain in place and continue to accommodate water transfers along its current path during the various mining phases. The maximum 358 cfs transfer flow rate along with concurrent historic levels of precipitation would be accommodated by the Project within this existing channel. This would prevent capture of the water transfer in the extraction areas and preserve the Sweetwater Authority's ability to transfer water from Loveland Reservoir to Sweetwater Reservoir. The post-reclamation condition of the site also would retain the low-flow river channel in its current alignment, but with an expanded floodplain that be slightly higher in elevation than the low-flow river channel. In terms of larger flow events, hydrologic modeling indicates that large flood events such as 100-year floods would extend outside the low-flow river channel across the floodplain in the post-reclamation condition, similar to the existing current condition. As such, the Proposed Project **would have a less than significant impact on flow rates within the Sweetwater River channel.**

Extraction pits that are temporarily created during excavation activities would be progressively backfilled. The final landform of the Project site post-reclamation would be a relatively flat plain that gently slopes downward from east to west, with an expanded floodplain bisecting the length of the site. The expanded floodplain is expected to ~~average approximately 450 to 720 feet in width~~ range in width from approximately 400 to 700 feet and would be slightly higher in elevation than the existing low-flow river channel. ~~Slopes bordering the expanded~~ Banks of the floodplain would slope up to the plain surface at a 3:1 ratio or shallower, with an elevation difference of up to 25 feet between the top of slope and bottom of the expanded floodplain. The expanded floodplain would improve the site's ability to accommodate both natural flows and high flows during storm events and would dissipate water energy during large storm events. As such, the Proposed Project would not result in increased velocities and peak flow rates exiting the Project site and would not cause downstream flooding. Furthermore, restored and revegetated wetland and riparian habitat would reduce the velocity of water flow, and the expanded floodplain would allow peak flows to extend outward from the existing low-flow river channel during overtopping events increasing the carrying capacity and minimizing long-term erosion and sedimentation from the site. In addition, by retaining the existing low-flow river channel within the site, there would be no changes to the location or geometry or the main channel. Further, the primarily non-vegetated low-flow river channel adjacent to the current and previous golf course areas transitions to a natural channel stretching from the west end of the Project site to approximately 2,300 linear feet upstream in the Project site. This on-site reach of river is within a densely vegetated riparian corridor that merges with the wider riparian corridor immediately off site within the SDNWR. Thus, topography within the SDNWR downstream of the Project site is not anticipated to be altered as no changes to the low-flow river channel are proposed and the post-reclamation condition would connect to

existing riparian habitat in SDNWR that is wider than existing and proposed habitat on the Project site. Therefore, the Project **would have a less than significant impact on downstream waters and habitats including those within the SDNWR.**

The Project's Drainage Study determined that the 100-year flow of the on-site reach of the Sweetwater River would be the same under existing and post-reclamation conditions. Therefore, the Proposed Project would not create adverse flooding impacts within the Sweetwater River or off-site areas. Additionally, the 100-year flow velocities within the Project site would generally be low and are considered non-erosive. Velocities over six feet per second (fps) are typically considered erosive. The proposed velocities within the site at the completion of mining are less than six fps, except adjacent to the existing Steele Canyon Road crossing of the channel. However, grouted rip-rap would be installed in this location to prevent erosion associated with upstream headcutting on site. Grouted rip-rap would also be installed at the northeast end of the Project site along the upstream bank of the mining area to prevent upstream headcutting and creation of knickpoints off site to the northeast of the Project. The rip-rap would act as a grade control structure that prevents vertical erosion along the upstream channel, including along the McGinty Mountain Ecological Reserve and upstream private road crossings. Hydraulic modeling was conducted that included the rip-rap grade control structures and determined that the rip-rap would withstand the 100-year flow velocities. Further, to help ensure that the rip-rap is functioning as designed in preventing the formation of headcuts and knickpoints, the mining operator would perform routine inspections during ongoing mining and provide additional erosion protection measures and maintenance, as needed, and as documented in the SWPPP. Therefore, **the Project would have a less than significant impact on the on-site and off-site 100-year floodplain.**

Backfill operations, including those where groundwater is present, would be conducted in a manner so as to reduce the possibility of void space in the lower layers that could settle over time and result in depressions on the floodplain. Approximately 2.5 million cubic yards of material would be imported to the site to meet backfill requirements. This material would consist of excavated soil material from development projects, clean demolition materials, and possibly concrete, asphalt, and rock. The Project would be conditioned to only accept materials suitable for the end use of the site. To reduce the possibility of void space, excavated pits would be limited to five acres in size and backfilled with wash fines, overburden, and imported materials prior to expanding the pit size. Mined-out pit areas would be backfilled to an elevation above groundwater level as the mining phases advance. In areas where excavation extends below the water table, an excavator would be utilized for pit excavation; dewatering would not be required. Backfilling activities will comply with the California Department of Natural Resources Recycling and Recovery regulations as well as State Water Resources Control Board Waste Discharge Regulations. If necessary, geotechnical oversight of backfilling operations would occur and could include compaction testing during grading, or other means to verify the adequacy of backfilling materials and methods.

Potential impacts to on-site and off-site jurisdictional wetlands and riparian habitat resulting from erosion, sedimentation, and Project run-off would be less than significant through compliance with current federal, State, and local regulations as detailed in the Project's Stormwater Quality Management Plan (Chang Consultants ~~2022~~2024b), Groundwater Investigation Report (Geo-Logic Associates 2021), Sediment Load Analysis (Geo-Logic Associates ~~2022a~~2023a), and Water Quality Evaluation Report (Geo-Logic Associates 2022b) and summarized below.

The Project would prepare and submit Storm Water Pollution Prevention Plan (SWPPP) prior to the commencement of construction activities. Best Management Practices (BMPs) to control runoff and prevent erosion and the discharge of sediment to surface waters would be implemented during all Project phases. Erosion control measures may include, but are not limited to, monitoring soil movement, arresting gullies or rills using straw mulch and hay bales, and installing silt fencing, compacting soils with equipment, and re-grading, as necessary. During mining activities, silt fencing would be installed five feet from the outer edge of each side of the existing low-flow Sweetwater River channel, and other areas as needed. Temporary de-siltation basins would be established within the Project site to capture runoff from existing culverts within Willow Glen Drive and to prevent sediment from leaving the site while allowing water to pass through to existing drainage features. Runoff would be directed from the disturbed mining and reclamation areas towards these basins, as necessary, to allow for de-siltation and infiltration. The Project would not result in a substantial increase in impervious surfaces. Stormwater runoff from the new impervious surfaces on Willow Glen Drive would be directed along the southerly curb of Willow Glen Drive and conveyed into tree wells just south of the roadway, thus limiting potential for erosion and siltation.

Based on the results of the studies discussed above, **indirect impacts to critical habitat up or downstream of the Project site resulting from potential changes in hydrology would be less than significant.**

Potentially significant indirect impacts to adjacent jurisdiction waters and wetlands could occur through inadvertent intrusion into these adjacent areas by construction vehicles, equipment, and personnel (Impact BIO-10).

Groundwater table (Guideline 15)

Eight groundwater wells currently occur on the Project site and are used to provide irrigation water for the existing golf course and to fill the man-made ponds. The existing groundwater use by the Cottonwood Golf Club is conservatively estimated to be approximately 803.6 acre-feet per year based on pump ratings and irrigation schedules (EnviroMINE 2021b). The existing wells would be used to provide water for mining operations, but consumption would be substantially reduced. The Project's estimated water usage is estimated at 139.9 acre-feet annually at the maximum annual production rate of 570,000 tons of construction aggregate, which is a reduction of approximately 663.7 acre-feet per year relative to current golf course consumption (Geo-Logic Associates 2021). Water would be required for the washing operation (90 percent of which would be continuously used and recycled), dust suppression, irrigation of landscaping near the site entrance, and supplemental water for revegetation activities. Water demand estimates for the Project considered irrigation usage and evaporation rates associated with the extraction pits and revegetation of the reclaimed areas. The 139.9 acre-feet per year estimated for the Project's total water consumption represents an **82%** percent decrease in the annual groundwater consumption during mining operations than the entire golf club operation (or **65%** percent reduction compared to groundwater use for a single course). Therefore, **Project impacts related to ground water drawdown during mining operations would be less than significant.** Ultimately, wells not proposed for use by Sweetwater Authority for groundwater monitoring and/or by the property owner after mining and reclamation are completed would be properly abandoned in accordance

with County requirements and standards. It is assumed that six of the wells would be abandoned and two would be left in place.

The post-reclamation condition of the Project would include backfilling of excavation areas, widening of the Sweetwater River floodplain, and restoring and revegetating the channel with wetland/riparian vegetation. The groundwater study prepared for the Project calculated the post-reclamation groundwater use associated with these areas, which accounted for loss due to evapotranspiration, at 337-acre feet per year, which is a reduction of approximately 467 acre-feet per year relative to golf course consumption in the baseline condition with both courses in operation (Geo-Logic Associates 2021). Assuming previously recorded groundwater use with both courses in operation is cut in half to account for closure of the western Lakes Course (i.e., approximately 402 acre-feet per year), this would still represent an annual reduction of approximately 65 acre-feet from current conditions with operation of the eastern Ivanhoe Course. This represents a 16 percent decrease in the annual groundwater consumption in the post-reclamation condition compared to existing consumption related to the current golf club operation (Ivanhoe Course only) and a 58 percent decrease in the annual groundwater consumption with both golf courses operating as permitted and historically used. Therefore, **site reclamation and the proposed native habitat restoration and revegetation would have a less than significant effect on groundwater.**

The approximate groundwater elevation is 310 feet amsl at the western end of the site and 354 feet amsl at the eastern end of the site, between 10 and 20 feet below the existing ground surface. The groundwater study prepared for the Project determined that pumping would not lower the water table three-feet below the historical low groundwater level as established from available water level data (Geo-Logic Associates 2021). Therefore, **the Project would not exceed the County's three-foot drawdown threshold below the historical low groundwater level for groundwater-dependent habitat and potential impacts would be less than significant.**

Indirect Impacts (Guideline 16)

As discussed above in Guideline 8, potential significant indirect impacts to sensitive habitat resulting from lighting, dust, human activity, domestic animals, and exotic plant species would be avoided through the following project design features: (1) all Project-related lighting would be required to adhere to Division 9 of the San Diego County Light Pollution Code and lighting within the Proposed Project footprint adjacent to undeveloped habitat (including reclaimed areas) would be of the lowest illumination allowed for human safety, and would be selectively placed, shielded, and directed away from these areas; (2) a Fugitive Dust Plan would be implemented during mining and reclamation activities that would include fugitive dust control measures to minimize dust emissions and meet applicable dust control requirements; (3) permanent fencing would be installed around open space, and signs precluding access to areas outside of established trails would be posted (in accordance with mitigation measure M-BIO-14); (4) off-leash pets would not be allowed on trails or public areas and signs would be posted along trails notifying pet owners of this regulation; (5) weed control measures would be implemented during mining and reclamation activities in accordance with the Project's Reclamation Plan, including monitoring the occurrence of weeds on site would be monitored by quarterly visual inspection during mine operations and initiating removal if the inspection reveals that weeds have become, or are becoming, established; and (6) only non-invasive plant species would be included in the landscape plan for the site (species

not listed on the California Invasive Plant Inventory prepared by the Cal-IPC [2020]). **Indirect impacts related to lighting, dust, human activity, domestic predators, and exotic plant species would be less than significant. Potential significant indirect impacts from construction noise (Impact BIO-5) are discussed under Guideline 12.**

Wetland Buffer (Guideline 17)

The Proposed Project is exempt from the County's BMO (County 2010b) and RPO (County 2012a) requirements pursuant to Section 86.503(a)(9) of the BMO and Section 86.605(d) of the RPO. Therefore, no wetland buffer is required during the extraction process and **impacts to wetland buffers would be less than significant**. A material part of these exemptions requires reclamation of the site following extraction to restore wetland buffers to protect environmental values of adjacent wetlands. As such, the Project would be conditioned to restore wetland buffer areas and provide a net gain in functional wetlands and riparian habitat that would be conserved in open space post reclamation.

2.2.2.3 *Federal Wetlands*

Guideline for the Determination of Significance

A significant impact to federal wetlands would occur if the Proposed Project would:

18. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means.

Guideline Source

This guideline is based on the County Guidelines for Determining Significance – Biological Resources (2010a).

Analysis

As previously stated in Section 2.1.2.2, implementation of the Proposed Project would result in impacts to 0.60 acre of wetland waters of the U.S. and 0.36 acre of non-wetland waters of the U.S. (refer to Table 2.2-6 and Figure 2.2-10). **Impacts to wetland and non-wetland waters of the U.S. would be considered potentially significant (refer to Impact BIO-9).**

2.2.2.4 *Wildlife Movement and Nursery Sites*

Guidelines for the Determination of Significance

A significant impact to wildlife movement or nursery sites would occur if the Proposed Project would:

19. Impede wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.

20. Substantially interfere with connectivity between blocks of habitat or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage.
21. Create artificial wildlife corridors that do not follow natural movement patterns.
22. Increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site-specific analysis of wildlife movement.
23. Not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path.
24. Not maintain adequate visual continuity (i.e., long lines-of-sight) within wildlife corridors or linkages.

Guidelines Source

These guidelines are based on the County Guidelines for Determining Significance – Biological Resources (2010a).

Analysis

Wildlife Access (Guideline 19)

Proposed mining activities would primarily occur within disturbed and developed portions of the Project site already disturbed by golf course development and operations. In addition, mining and reclamation activities would occur incrementally in 20- to 30-acre subphases leaving other, previously disturbed portions of the site, either inactive or in the five-year restoration and revegetation monitoring period, and accessible for wildlife use. Wildlife foraging habitat, breeding habitat, and water sources necessary for reproduction on site generally consists of existing riparian habitat and open water resources located along the Project's southern boundary just east of Steele Canyon Road, and the riparian habitat located in the southwestern portion of the site along the downstream reach of Sweetwater River. These areas would be avoided by mining activities and would be further preserved within the Project's BOS. As such, they would remain available to wildlife during mining and reclamation activities and following Project completion. The patch of riparian habitat located east of Steele Canyon Road is geographically isolated from other habitat areas bounded to the south of residential development, west by roadway, and north and east by the current golf course development. Mining and reclamation activities during Phase 1 would avoid this area leaving it accessible to the north and east by wildlife. Mining and reclamation activities during Phase 2 would occur immediately north of this area temporarily constraining, and possibly impeding, access to this area by land roaming species. However, the area would remain available to other species, including the federally listed least Bell's vireo which was observed in this area during the 2019 and 2022 biological surveys. As such, potential impacts would be less than significant as they would be temporary in nature and habitat would still remain available for use by numerous species. Mining and reclamation activities during Phase 3 and Phase 4 would occur further east and north of this area. Following reclamation of Phase 2, wildlife access to the area

would be improved to the north and west by widening of the Sweetwater River floodplain and planting of native riparian and upland vegetation. The downstream reach of Sweetwater River is contiguous with off-site habitats and preserved lands associated with the SDNWR, and the extreme southwestern portion of the Project site abutting the SDNWR would be avoided and preserved within the Project's BOS. Wildlife would be able to move freely in and out of the Project site in these areas. Therefore, the Project would not impede wildlife access to foraging and breeding habitat within these areas. Further, although it provides little vegetative cover across most of the site, the Sweetwater River channel would remain unobstructed throughout the mining period and could be used (most likely at night) by urban-adapted animals, such as coyotes, traveling east-west across the site through the adjacent mining phase. While wildlife access to different portions of the site would be temporarily constrained during each individual subphase, overall access to areas providing suitable foraging and breeding habitat would not be significantly or permanently constrained. As such, **the Project would not impede wildlife access and impacts would be less than significant.**

In addition, following reclamation, the Project would provide additional, higher quality foraging and breeding habitat for wildlife through widening of the Sweetwater River floodplain, which would be revegetated with native riparian and upland habitats and placed within the Project's BOS.

Local and Regional Wildlife Corridors and Linkages (Guideline 20)

The Project would not substantially interfere with the already constrained linkage between the McGinty Mountain/Sycuan Peak-Dehesa BRCA to the east and the Sweetwater Reservoir/San Miguel Mountain BRCA to the west. The Proposed Project is located within a developed golf course that has been maintained and operated since the 1960s. Though golf play within the Lakes Course in the western portion of the site was discontinued in 2017, the area is still regularly mowed and utilized recreationally by the public as evidenced through observations made during the biological surveys. The Project site is predominately characterized by disturbed and developed areas and contains limited vegetative cover to conceal land-traveling wildlife species that would likely move east to west through the Project site. The most common medium-sized mammal species captured by motion-activated cameras deployed was coyote, which is well adapted to urbanized areas. Other medium-sized species detected, such as bobcat, were captured on only a few occasions and were located at the outer edges of the Project site where the southern boundary abuts undeveloped areas and preserved habitat associated with the SDNWR. Mining and reclamation activities would largely avoid these areas and occur within disturbed and developed areas associated with golf course development. Furthermore, mining would occur incrementally in 20- to 30-acre subphases leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for wildlife use. As part of reclamation, the Project would preserve, rehabilitate, restore, and revegetate native habitat along the expanded Sweetwater River floodplain. The post-reclamation condition of the Project site would restore and substantially improve functional connectivity of the site and the identified linkage to BRCAs and preserved lands to the east, west, and south of the site. The Project would conform to the goals and requirements of the County Subarea MSCP and BMO, including effects on habitat linkages and wildlife corridors. **Impacts associated with habitat linkages and wildlife corridors would be less than significant.**

Artificial Wildlife Corridors (Guideline 21)

The Project does not create artificial corridors. Wildlife movement functions would continue and be substantially improved on the site under post-Project conditions. Adequate upland scrub and riparian habitat associated with favorable topography and cover for target wildlife would be preserved, rehabilitated, and restored as part of the Project site's reclamation following sand extraction operations. The Sweetwater River floodplain would be widened and planted with native riparian vegetation along the channel bottom and coastal sage scrub along the channel's slopes (Figure 2.2-9). The site is already situated along the path of a constrained linkage and the Project would not introduce significant barriers further separating or fragmenting key habitat stands as discussed above. Rather, the Project would restore and improve functional connectivity of the linkage by re-establishing a riparian corridor connecting existing habitat to the east and west of the site, including to areas preserved within the SDNWR. Proposed mining activities would occur within disturbed and developed portions of the Project site already disturbed by golf course development and operations. The Project would preserve adequate space and resources to conserve existing movement patterns and would result in a beneficial effect on species as a result of the site's proposed reclamation. **No artificial corridors would be created, and no adverse impacts associated with artificial corridors would occur.**

Indirect Effects (Guideline 22)

The Project occurs along the path of a constrained linkage that is already subjected to noise and nighttime lighting impacts associated with operation of the Cottonwood Golf Club. The reach of river traversing the Project site currently has low function as a wildlife corridor as it is narrow, lacks suitable vegetative cover to conceal and facilitate wildlife movement, and is situated within the center of developed golf course operations.

Construction-related noise generated from mining and reclamation activities could temporarily impact wildlife. Mining operations and reclamation activities would require the daily use of heavy equipment that would elevate existing noise levels on site. Wildlife may be temporarily displaced from or avoid the Project site during construction activities but would be expected to return to the area as activities have ceased. The proposed mining and reclamation would occur in 20- to 30-acre subphases across the site, rather than the entire project footprint impacted concurrently. This would allow for wildlife, particularly avian species, to continue to use or occupy portions of the site outside of active work areas. Larger wildlife species, such as mule deer or mountain lion, would already be discouraged from utilizing the Project site based on results of biological surveys and wildlife camera surveys, current golf course activity and lack of vegetative cover along the Sweetwater River. Reclamation activities would begin immediately following mining activities and would generally proceed eastwards with Project phasing. Reclamation of the Project site would include widening of the Sweetwater River floodplain and planting the area with native riparian habitat. Reclamation activities would first occur adjacent to existing riparian habitat along the Sweetwater River channel in the western portion of the Project site, followed by the southern portion of the site adjacent to the SDNWR. As mining activities progress eastward and reclamation is completed, active revegetation areas would provide a buffer between later extraction areas and core areas to the west of the Project site reducing potential project-related disturbances to these areas. Therefore, **potential noise related impacts to wildlife corridors or linkages during mining operations and reclamation activities would be less than significant.**

The final post-reclamation condition of the Project site would include a widened and re-established riparian corridor along Sweetwater River through the center of the site. Noise levels post-reclamation are anticipated to be similar to baseline conditions which range between 52.4 to 77.2 dBA across the Project site (HELIX 2021^{ab}). Therefore, **post-reclamation impacts to wildlife corridors or linkages resulting from noise would be less than significant.**

Nighttime lighting is not anticipated to adversely impact the linkage or on-site movement corridors. All Project-related lighting would be required to adhere to Division 9 of the San Diego County Light Pollution Code. Project lighting adjacent to undeveloped habitat (including reclaimed areas) would be of the lowest illumination allowed for human safety, and would be selectively placed, shielded, and directed away from such habitat. **Impact to wildlife corridors or linkages resulting from lighting would be less than significant.**

Adequate Corridor Width (Guideline 23)

The Project would not further constrain existing corridors or linkages in the local area. As discussed above, the Project site occurs along the path of an east-west linkage that is already constrained and fragmented as a result of previous golf course development of the site. The Project would predominately result in impacts to disturbed and developed areas associated with the golf course development; only 2.34 acres (1.1 percent) of the 211.94 acres of the on-site impacts would occur to native or sensitive habitats at the periphery of those habitats. These impacts would occur in 20- to 30-acre subphases during mining and reclamation activities across the site rather than the entire project footprint impacted concurrently. Portions of the Project site located outside of active work areas would still be available for wildlife access and use, particularly areas of higher biological value with direct connectivity to off-site preserved areas associated within the SDNWR to the west and south of the site. As such, potential impacts would be temporary in nature and reduced to areas of active mining and reclamation grading.

The Project would not include the construction or placement of barriers in any wildlife movement paths. Steele Canyon Road crosses the Project site north to south bisecting the entirety of the east-west linkage; therefore, species that are currently accessing the Project site and crossing below the road will continue to be able to do so following Project implementation. No additional road crossings are proposed as part of the Project.

The Project would not narrow the existing wildlife linkage width. As stated above, the Project would widen the proposed post-reclamation condition of the site would consist of an expanded Sweetwater River floodplain that would be restored and revegetated with wetland/riparian habitat. Graded slopes would be created on either side of the channel and planted with coastal sage scrub. This would increase the width of the existing linkage and restore available vegetative cover that would encourage and adequately conceal wildlife movement within the area. The preserved, rehabilitated, and restored riparian habitat along Sweetwater River would be conserved within open space that directly abuts the SDNWR to the west of Project boundary. Biological open space would follow the path of the river across the entire site, extending approximately 10,040 feet from end to end, with widths varying between 450 feet and 720 feet wide and an overall average width of approximately 600 feet. The Project does not propose additional development following reclamation of the site, though select areas outside of the widened river channel would be available for land uses allowed by the existing land use designation and zoning classification (if approved

through a subsequent review process). The Project would restore and greatly improve habitat connectivity and suitability for wildlife through the implementation of the proposed design features and site reclamation and revegetation as described above; therefore, **impacts associated with corridor width would be less than significant.**

Adequate Visual Continuity (Guideline 24)

The Project would not impair visual continuity within corridors or linkages within the local area. The site is currently a developed golf course that lacks sufficient vegetative cover to conceal and encourage wildlife movement through the linkage. The Project would predominantly result in impacts to disturbed and developed areas associated with the golf course development. These impacts would occur in 20- to 30-acre subphases across the site, rather than concurrently impacting the entire Project footprint, during mining and reclamation activities leaving other portions of the Project site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for foraging. Reclamation of the site would include widening of the Sweetwater River floodplain and planting the area with native wetland/riparian habitat. Reclamation activities would first occur adjacent to existing riparian habitat along the Sweetwater River channel in the western portion of the Project site, and adjacent to off-site preserved areas located within the SDNWR. As mining activities progress eastward and reclamation is completed, active revegetation areas would provide a buffer between later extraction areas and existing riparian habitat off site improving visual continuity within the linkage.

The Project would also preserve and rehabilitate existing riparian habitat thereby preserving stepping-stone/archipelago habitat for avian species moving through the area. Although 0.58 acre of riparian habitat would be impacted as part of Project implementation, these impacts are on the outer edges of existing habitat and would not adversely affect visual continuity within the wildlife linkage. As part of the proposed reclamation, the Project would increase topographic complexity of the site by establishing a widened Sweetwater River floodplain with bordered graded slopes and elevated graded pads to the north and south. This would create topographic features more favorable to wildlife or target species along the linkage path and would separate the restored riparian corridor from graded pads located outside of the BOS, and roadways and residential development located north and south of the site. The Project would also increase vegetative cover along the river channel providing adequate coverage for wildlife species that would utilize the linkage. As such, the Project would not impair, but would ultimately improve, visual continuity within corridors or linkages in the local area and **visual continuity impacts would be less than significant.**

2.2.2.5 Local Policies, Ordinances, and Adopted Plans

Guidelines for the Determination of Significance

A significant impact would occur if the Proposed Project would:

25. Impact coastal sage scrub vegetation within lands outside the MSCP in excess of the County's five-percent habitat loss threshold as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.

26. Preclude or prevent the preparation of the subregional NCCP. (If, for example, the Project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.)
27. Impact any amount of wetlands or sensitive habitat lands as outlined in the RPO.
28. Not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the NCCP Guidelines.
29. Not conform to the goals and requirements as outlined in any applicable HCP, Resource Management Plan, Special Area Management Plan, Watershed Plan, or similar regional planning effort.
30. Not minimize impacts to BRCAs within lands in the MSCP, as defined in the Biological Mitigation Ordinance (BMO).
31. Preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
32. Not maintain existing movement corridors and/or habitat linkages, as defined by the BMO.
33. Not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
34. Reduce the likelihood of survival and recovery of listed species in the wild.
35. Result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (MBTA).
36. Result in the take of eagles, eagle eggs or any part of an eagle (~~Bald and Golden Eagle Protection Act~~; BGEPA).

Guidelines Source

These guidelines are based on the County Guidelines for Determining Significance – Biological Resources (2010a).

Analysis

Impact Coastal Sage Scrub in Excess of Five Percent, Preclude/Prevent NCCP, or Not Meet NCCP Requirements (Guidelines 25 and 26)

Implementation of the Project would not preclude or prevent the preparation of the subregional NCCP; the Project is located within the boundaries of the South County MSCP Subarea Plan, which has already been prepared and adopted. The Project would impact 1.2 acres of Diegan coastal sage scrub, all of which would occur within the adopted South County MSCP Subarea

Plan. However, all impacts would be mitigated in accordance with the MSCP and BMO. A such, **no NCCP-related impact would occur.**

County RPO Wetlands (Guideline 27)

The Project would directly impact a total of 2.34 acres of riparian habitat or other sensitive natural communities, including 1.14 acres of County RPO wetlands. However, the Proposed Project is exempt from this guideline pursuant to Section 86.605(d) of the RPO. The Project would be required to include the mitigation measures listed under *San Diego County RPO Wetlands* in Section 2.1.1.1, above, as conditions of the Project's MUP. The Proposed Project would comply with these measures as follows:

- a. Wetland buffer areas surrounding the Sweetwater River, currently consisting of golf course fairways and greens, would be restored as part of the site's reclamation. The Sweetwater River floodplain would be widened with the channel bottom planted with native riparian habitat and the slopes abutting the river planted with coastal sage scrub. Outside of the river, the other RPO wetland on site is the stand of riparian habitat to the east of Steele Canyon Road. This area is located immediately south of the proposed widened river channel which would be vegetated with native coastal sage scrub and riparian habitat, thereby restoring the wetland buffer area.
- b. The site is located within the Sweetwater River floodplain. Reclamation of the site following mining activities would substantially widen the existing Sweetwater River floodplain and revegetate the area with native riparian habitat, resulting in a substantial net gain in functional wetland and riparian habitat.
- c. Native vegetation (i.e., coastal sage scrub) shall be used on sloped lands to revegetate and landscape cut and fill areas in order to substantially restore the original habitat value, and slopes shall be graded to produce contours and soils which reflect a natural landform that is consistent with the surrounding area.
- d. The site contains southern riparian forest meeting the definition of mature riparian woodland. The Proposed Project would result in impacts to approximately 0.44 acre of southern cottonwood-willow riparian forest located in the southwestern portion of the Project site. Impacts to riparian forest would be limited to the perimeter of existing habitat and would not occur as part of extraction activities. Impacts would occur during site reclamation as part of creation of the widened Sweetwater River floodplain. These impacts are required to maintain proper drainage of the widened floodplain and prevent ponding and erosion where the widened floodplain meets existing riparian habitat within the SDNWR. The impacted area would be restored with native riparian habitat following Project activities as part of site reclamation and Project's proposed mitigation. Therefore, the Project would not destroy or reduce the size of mature riparian habitat. Furthermore, the post-reclamation condition of the Project would result in a substantial increase in riparian habitat through widening and revegetation of the Sweetwater River floodplain. The restored and revegetated riparian habitat, and existing stands of riparian habitat would be preserved within open space following reclamation of the site. As such, the Proposed Project would not destroy or reduce the size of mature riparian woodland habitat.

The Project would conform with conditions (a) through (d) of Section 86.605(d) of the RPO; thus, **the Project is exempt from the RPO and no significant impact would occur.**

Coastal Sage Scrub Habitat Loss (Guideline 28)

The Project would impact 1.2 acres of Diegan coastal sage scrub. The Project is located within the adopted South County MSCP Subarea Plan and the loss would be mitigated in accordance with the South County MSCP Subarea Plan and BMO. **Therefore, impacts associated with coastal sage scrub habitat loss would be less than significant.**

Regional Planning Goals and Conformance/Minimization of Impacts (Guidelines 29 and 30)

The Project occurs within the boundaries of the adopted South County MSCP. The Project would impact a total of 9.8 acres of the 16.4 acres of on-site lands designated as PAMA under the County's Subarea MSCP (County 1997), comprising 60 percent of PAMA mapped within the Project site. However, most Proposed Project impacts within PAMA would be in lands that are in existing disturbed and developed land use categories, which together make up 8.8 acres of impact to on-site PAMA (90 percent of on-site PAMA impacts). Project impacts to sensitive vegetation communities in PAMA total 1.0 acre, representing only 10 percent of on-site PAMA impacts. As shown in Table 2.2-7, *PAMA Impacts Summary*, only 13.5 percent of the sensitive vegetation communities within PAMA would be impacted, compared to 97.8 percent of the non-sensitive vegetation communities within PAMA.

Additionally, a total of 7.5 acres of lands within the Minor Amendment Area would be impacted, comprised primarily of disturbed habitat (6.6 acres), non-native vegetation (0.3 acre), and developed lands (less than 0.1 acre) associated with inactive portions of the golf course. A small portion of these impacts also include southern cottonwood-willow riparian forest (0.27 acre), disturbed southern willow scrub (0.13 acre), freshwater marsh (0.002 acre), tamarisk scrub (0.01 acre), arundo-dominated riparian (0.01), and disturbed wetland habitat (0.2 acre). The impacted areas would be restored with native riparian habitat following Project activities as part of site reclamation and the Project's proposed mitigation. The remainder of habitat within the Minor Amendment Area would either be left in place in impact neutral areas (4.9 acres) or would be conserved within open space (32.9 acres, including the 6.5 acres of impacted habitat) and would be restored as part of the Project's proposed mitigation.

The Project minimizes impacts to sensitive habitat, PAMA, and Minor Amendment Area to the greatest extent practicable. Impacts to PAMA and the Minor Amendment Area would largely encompass disturbed habitat and developed lands associated with the golf course development. The Project would preserve existing native habitat within open space and would further restore these areas through removal of exotic, invasive species. As required by the MSCP, development within the Minor Amendment Area would require approval from the USFWS, CDFW, and County. **Therefore, the Project would conform to goals and requirements outlined in the County MSCP Subarea Plan, and no significant impact would occur in regard to regional planning efforts.**

The Project minimizes impacts to BRCA in accordance with the MSCP and BMO. **Impacts to BRCA would be less than significant.**

Connectivity between Areas of High Habitat Values (Guideline 31)

The Project is located within the adopted MSCP and connectivity is evaluated according to the MSCP and BMO. **Impacts related to connectivity between high habitat value areas in the region would be less than significant.**

Maintenance of BMO-identified Corridors (Guideline 32)

The Project site is located within an identified habitat linkage in the South County MSCP. As part of the reclamation process, the Proposed Project would substantially improve the condition of the existing linkage through widening of the Sweetwater River floodplain and planting of riparian habitat. A riparian corridor would be re-established throughout the Project site which would encourage and facilitate wildlife movement within the region. Therefore, the Project would ultimately conserve and enhance the functions and values of the habitat linkage in accordance with the MSCP and BMO. **Impacts to BMO-identified corridors would be less than significant.**

Avoidance of MSCP Narrow Endemic Species (Guideline 33)

Three MSCP narrow endemic species were observed within the Project site (Palmer's goldenbush, peregrine falcon, and least Bell's vireo), and one was determined to have high potential to occur (San Diego ambrosia)

The Project would result in significant impacts to the following MSCP narrow endemic species under the above guideline for the following reasons:

Palmer's goldenbush was observed within the southeastern, south-central, and southwestern portions of the Project site. However, the Project site does not contain a core population of Palmer's goldenbush, the species was observed along the perimeter of the Project site, the species was observed within habitat immediately adjacent to the Project site, and protected populations occur in the local area at McGinty Mountain Ecological Reserve and San Diego National Wildlife Refuge. As such, the Project site does not contain an isolated or significant population of the species, and **Project implementation would not result in significant impacts to a core population of Palmer's goldenbush.** However, **direct Project impacts to 234 individuals of Palmer's goldenbush would be considered potentially significant (Impact BIO-2a).**

The Project site lacks suitable breeding habitat for peregrine falcon but does contain suitable foraging habitat for this species. The Project does not contain a core population of peregrine falcon as the site lacks suitable breeding habitat and observations are limited to foraging individuals. Therefore, **no impact would occur to a core population of peregrine falcon. Impacts would occur to suitable foraging habitat for this species which are considered potentially significant (Impact BIO-2a).**

Least Bell's vireo was detected within the riparian habitat both on site and immediately adjacent to the Project site within the SDNWR. However, the Project does not contain a core vireo population as the Project site contains limited suitable habitat for the species, which would be avoided by the Proposed Project, and multiple vireos were detected within off-site habitat, including the SDNWR located immediately west of the site, indicating that the site does not contain an isolated or significant population of the species. Therefore, **the Project would not result**

significant impacts to a core population of least Bell's vireo. The Project would impact approximately 0.58 acre of riparian habitat, which includes 0.28 acre mapped as least Bell's vireo critical habitat, with potential to support least Bell's vireo. **Direct impacts to occupied vireo habitat would be potentially significant (Impact BIO-1d).**

For the reasons outlined above, **the Project would result in potentially significant impacts to MSCP narrow endemic species (Impact BIO-11).**

The Project would result in no impact to the following MSCP narrow endemic species under the above guideline for the following reasons:

USFWS critical habitat for San Diego ambrosia occurs within the southwestern portion of the site, though the species was not detected within the Project site during rare plant surveys in 2019 and 2022. The Project would result in 0.77 acre of impacts to USFWS critical habitat for the species but would not result in direct impacts to individuals or core populations. Therefore, **the Project would not result in a significant impact to San Diego ambrosia.**

Survival and Recovery of Listed Species in the Wild (Guideline 34)

Two listed species were detected within the Project site: coastal California gnatcatcher and least Bell's vireo. The Project would impact 1.2 acres of disturbed Diegan coastal sage scrub habitat that provides potential foraging habitat for the coastal California gnatcatcher and 0.58 acre of riparian forest with potential to support least Bell's vireo. **Impacts to suitable gnatcatcher and vireo foraging and breeding habitat would not adversely affect the recovery of either species in the wild** as these impacts are minimal and larger blocks of the habitat for the species would be avoided by Project activities and preserved within the Project's BOS. Furthermore, following reclamation the Project would result in a substantial net gain in suitable gnatcatcher and vireo foraging and breeding habitat within the expanded Sweetwater River floodplain contributing to the species recovery. However, removal of vegetation during the breeding season for gnatcatcher (March 1 to August 15) or vireo (March 15 to September 15) could result in significant impacts to nesting gnatcatcher and vireo. Additionally, if mining and reclamation activities took place within 500 feet of suitable gnatcatcher or vireo habitat during the gnatcatcher or vireo breeding season, indirect impacts related to noise to nesting gnatcatchers and vireos would be potentially significant. These impacts **would be considered potentially significant (Impact BIO-12).**

Migratory Bird Treaty Act (Guideline 35)

Implementation of the Project could potentially result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs protected under the MBTA. Project construction could directly impact individuals or cause breeding birds to temporarily or permanently leave their territories, which could lead to reduced reproductive success and increased mortality. **These impacts would be significant (Impact BIO-13).**

Bald and Golden Eagle ~~Treaty~~ Protection Act (Guideline 36)

The Project site does not contain eagle foraging habitat or nesting habitat and it is not within any known golden eagle territory. The surrounding habitat fragmentation and the distance from known eagle territories indicate that the site does not have high value for golden eagle. The surrounding

area is primarily urbanized and new nesting in the vicinity is unlikely. Therefore, **no impacts would occur to golden eagle or its habitat.**

2.2.3 Cumulative Impact Analysis

Guidelines for the Determination of Significance

A significant cumulative impact would occur if the Proposed Project would:

37. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal species.
38. Have impacts that are individually limited, but cumulatively considerable.

Guidelines Source

These guidelines are based on the County Guidelines for Determining Significance – Biological Resources (2010a).

Analysis

Impacts that may not be considered significant on a project-specific level can become significant when viewed in the context of other losses in the vicinity of the Project site. When evaluating cumulative impacts, CEQA states that “lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used” (Section 15130[b][3]). The area of consideration for cumulative biological projects impacts is based on an approximate 5.0-mile radius from the Project site and includes surrounding PAMA connections to the Project site, as well as Preserve areas (i.e., SDNWR, Sweetwater Reservoir, Ranch Jamul Ecological Reserve, McGinty Mountain Preserve), and foothills and canyons abutting the Sweetwater River (refer to Figures 1-15 and 2.2-1). The cumulative study area was chosen because it includes areas with similar biological resources as the Project site, as well as capturing the local watershed for the site. The area of consideration includes lands within a reasonable distance from the Project site that may have a biologically based connection to the site in terms of habitat connectivity and development in the region.

A total of 15 projects (including the Proposed Project) were reviewed for this cumulative analysis (Table 2.2-8, *Cumulative Impacts on Biological Resources*; Figure 1-15). Of these 15 cumulative projects, nine would result in significant or potentially significant cumulative impacts to sensitive biological resources. The remaining six projects either would not result in impacts to sensitive biological resources or information on impacts is not available. The Project has the potential to contribute to the cumulative impact on coastal California gnatcatcher and least Bell’s vireo as discussed below.

Cumulative Impacts to Special Status Species

The cumulative projects with available data would impact 118.78 acres of coastal sage scrub habitat, including impacts from the Proposed Project. The loss of coastal sage scrub habitat would represent a potential cumulative impact on the coastal California gnatcatcher. This impact would be potentially significant. The Proposed Project would result in impacts to 1.2 acres of coastal sage scrub, no portions of which were determined to support coastal California gnatcatcher, which is considered less than cumulatively considerable. Projects are required to implement avoidance measures so that direct, inadvertent take of gnatcatcher individuals is prevented. In addition, projects are required to compensate impacts on coastal sage scrub at a minimum 1:1 ratio, which ensures that the loss of occupied and suitable habitat for the gnatcatcher is fully compensated. The Proposed Project would implement required gnatcatcher avoidance measures and compensate the loss of coastal sage scrub habitat at a 1.5:1 ratio through the on-site preservation of existing and revegetated coastal sage scrub habitat within a BOS easement. The post-reclamation condition of the Project site would result in a biologically superior condition following site reclamation compared to its current condition as developed golf course. The Sweetwater River floodplain would be substantially widened and revegetated with native riparian habitat along the channel's bottom and with coastal sage scrub along the constructed channel slopes. These areas would be placed within an open space easement and would be contiguous with existing native habitat located to the east and west of the site, including preserved areas within the SDNWR. With the implementation of these measures and project design features, the Proposed Project would have a less than significant contribution to the potentially significant cumulative impact on coastal sage scrub habitat or coastal California gnatcatcher.

The cumulative projects would impact 4.36 acres of riparian/wetland habitat, which is the preferred habitat of the least Bell's vireo. The cumulative loss of riparian/wetland habitat would represent a significant cumulative impact on least Bell's vireo. The Proposed Project would result in impacts to 1.14 acres of riparian/wetland habitat, a portion of which was determined to support least Bell's vireo. As with the coastal California gnatcatcher, projects are required to implement avoidance measures so that direct, inadvertent take of vireo is prevented. In addition, projects are required to compensate impacts on riparian/wetland habitat at a minimum 1:1 ratio, which ensures that the loss of occupied and suitable habitat for vireo is fully compensated. The Proposed Project would implement required vireo avoidance measures and compensate the loss of riparian/wetland habitat at a minimum 1:1 ratio through the on-site preservation, rehabilitation, restoration, and revegetation of riparian habitat along the expanded Sweetwater River floodplain. The post-reclamation condition of the Project site would result in a biologically superior condition following site reclamation compared to its current condition as developed golf course. The Sweetwater River floodplain would be substantially widened and revegetated with native riparian habitat along the channel's bottom and coastal sage scrub along the constructed channel slopes that would be contiguous with existing riparian habitat located to the east and west of the Project site, including preserved areas within the SDNWR. Therefore, the Proposed Project would have a less than significant contribution to the potentially significant cumulative impact on riparian/wetland habitat or least Bell's vireo.

As the Proposed Project would ultimately be in conformance with the South County MSCP Subarea Plan and any other projects proposed in the vicinity would also have to follow the South County MSCP Subarea Plan, cumulative impacts would be considered fully mitigated.

Cumulative Impacts to Riparian and Sensitive Habitats

The Proposed Project would result in impacts to 1.14 acres of riparian/wetland habitat and 1.2 acres of Tier II Diegan coastal sage scrub habitat. Project-level impacts would be mitigated in accordance with County and regulatory agency guidelines and requirements. The County-approved mitigation ratios are standardized and not dependent upon the quality of habitat. Rather, the mitigation ratios recognize the regional importance of the habitat, the overall rarity of the habitat, and the number and variety of species it supports. Mitigation for habitat loss is required to compensate for direct impacts as well as cumulative loss of habitat. Impacts to wetland/riparian habitat and sensitive upland communities would be fully mitigated at County-approved ratios through the on-site preservation, rehabilitation, restoration, and revegetation of wetland/riparian habitat and sensitive upland habitat (Diegan coastal sage scrub) along the expanded Sweetwater River floodplain bordering slopes. These areas would be placed within a BOS easement; thus, providing long-term conservation value. Since current regulations require mitigation for wetland impacts to include establishment (i.e., creation) or re-establishment of the same habitat at a minimum 1:1 ratio, coupled with rehabilitation (i.e., restoration), enhancement, and/or preservation of habitat, there ultimately would be no contribution to cumulative loss of the resource. As the Project would be in conformance with County guidelines and mitigation ratios, Project impacts to wetland/riparian habitat and sensitive upland communities would not be cumulatively considerable and **the Proposed Project's contribution to cumulative impacts to sensitive vegetation communities would be less than significant.**

Cumulative Impacts to Jurisdictional Areas

The Proposed Project's impacts to 0.96 acre of USACE jurisdictional areas, comprised of 0.60 acre of wetland waters of the U.S. and 0.36 acre of non-wetland waters, while significant at the project level would be fully mitigated through one or a combination of the following: on- and/or off-site establishment, re-establishment, rehabilitation, enhancement and/or preservation; and/or off-site purchase of mitigation credits at an approved mitigation bank, or other location deemed acceptable by the County, Wildlife Agencies, and Regulatory Agencies. A "no net loss" policy has been established for wetlands by state and federal resource agencies, as well as the County; the Project is required to establish/re-establish jurisdictional habitat at a minimum 1:1 ratio. Other projects within the cumulative study area that may impact wetlands would be required to mitigate impacts as well, at ratios commensurate with the type and location of the impacts, pursuant to the MSCP and regulatory agency requirements, thereby ensuring that cumulative impacts would result in no net loss of wetlands. Accordingly, implementation of the Project and other cumulative projects would not result in the net loss of jurisdictional resources, and **the Project would not result in a cumulatively considerable contribution to loss of sensitive jurisdictional habitat and impacts would be less than significant.**

Cumulative Impacts to Wildlife Movement and Nursery Sites

The cumulative projects are located in existing urbanized areas of El Cajon, Rancho San Diego and Jamul within the unincorporated County, or on the fringes of urbanization. A cumulative impact on wildlife movement has already occurred in the local area where commercial and residential development and major roadways (such as SR 94, SR 54, and Steele Canyon Road) has constrained available areas for wildlife movement. Primary wildlife use areas in the local area are

located in the McGinty Mountain/Sycuan Peak-Dehesa and Sweetwater Reservoir/San Miguel Mountain BRCAs, generally associated with the SDNWR, Sweetwater River and Sweetwater Mountain Ecological Reserve, McGinty Mountain Ecological Reserve, and McGinty Mountain Preserve. These resources provide wildlife movement areas for a wide range of species known to the region. As described in Section 2.2.1.1 under Habitat Connectivity and Wildlife Corridors, and in Section 2.2.2.4 under Guideline 19, the current function of the Project site as a linkage/corridor for wildlife movement is considered low based on previous golf course development, on-going disturbances related to golf course maintenance and operations, and lack of sufficient habitat cover to conceal wildlife movement through the site. As such, the Project is not expected to substantially interfere with the movement of wildlife species or impede the use of nursery sites.

The Project would comply with the requirements of the BMO and MSCP, including preserve design criteria related to corridors and linkages. In addition, the Project would improve habitat quality and connectivity compared to the site's current state as a golf course. The Project's proposed reclamation would preserve, rehabilitate, and restore native riparian and upland habitats along the Sweetwater River. This would result in widened riparian corridor that re-establishes functional connectivity to BRCAs located to the east and west of the Project site, including the SDNWR. The contribution of the Project to the cumulative impact on wildlife movement would not be cumulatively considerable and would be less than significant.

Cumulative Impacts to Local Policies, Ordinances, and Adopted Plans

The Project would comply with the requirements of the MBTA, RPO, BGEPA, BMO, and MSCP. All currently proposed and future projects within the cumulative study area also would be required to comply with these regulations, thus **no significant cumulative impacts with respect to local policies, ordinances, and adopted plans would occur.**

2.2.4 Significance of Impacts Prior to Mitigation

The following significant impacts related to biological resources would occur with Project implementation (refer to Table 2.2-9, *Summary of Vegetation Communities Impact and Mitigation Acreages*):

Impact BIO-1a Direct impacts to occupied coastal California gnatcatcher habitat would be potentially significant.

Impact BIO-1b If mining and reclamation activities take place within 500 feet of suitable coastal California gnatcatcher habitat during the gnatcatcher breeding season (March 1 to August 15), indirect impacts related to noise to nesting gnatcatchers would be potentially significant.

Impact BIO-1c Direct impacts to potentially occupied least Bell's vireo habitat would be potentially significant.

Impact BIO-1d If mining and reclamation activities take place within 500 feet of suitable least Bell's vireo habitat during the vireo breeding season (March 15 to September 15), indirect noise impacts to nesting vireos would be potentially significant.

- Impact BIO-2a** Direct impacts to 234 individuals of Palmer's goldenbush, a County List B plant species, would be considered potentially significant.
- Impact BIO-2b** Direct impacts to potential breeding, wintering, and foraging habitat to the following County Group 1 animal species and/or state Species of Special Concern during mining and reclamation activities would be potentially significant: coastal California gnatcatcher, least Bell's vireo, Cooper's hawk, Lawrence's goldfinch, loggerhead shrike, oak titmouse, peregrine falcon, red-shouldered hawk, sharp-shinned hawk, turkey vulture, vermilion flycatcher, white-tailed kite, yellow-breasted chat, yellow warbler, two-striped garter snake, western spadefoot, Mexican long-tongued bat, Townsend's big-eared bat, western mastiff bat, and western red bat.
- Impact BIO-2c** Direct impacts to nesting Cooper's hawk, red-shouldered hawk, white-tailed kite, and other raptors, and/or indirect noise impacts to nesting raptors within 300 feet of construction, mining, or reclamation areas would be potentially significant.
- Impact BIO-2d** Direct impacts to nesting coastal California gnatcatcher, Cooper's hawk, least Bell's vireo, Lawrence's goldfinch, loggerhead shrike, oak titmouse, red-shouldered hawk, vermilion flycatcher, white-tailed kite, yellow-breasted chat, and yellow warbler individuals would be considered potentially significant.
- Impact BIO-2e** Direct impacts to special status reptile and amphibian species, including two-striped garter snake and western spadefoot, not covered under the South County MSCP Subarea Plan would be considered potentially significant.
- Impact BIO-2f** Direct impacts to County Group 1 roosting bats, including Mexican long-tongued bat and western red bat would be considered potentially significant.
- Impact BIO-3a** Direct impacts to the following County List D plant species during mining and reclamation activities would be considered potentially significant: five San Diego County viguiera, two San Diego sagewort, and three southwestern spiny rush.
- Impact BIO-3b** Direct impacts to potential breeding, wintering, or foraging habitat to the following County Group 2 animal species during mining and reclamation activities would be considered potentially significant: barn owl, California horned lark, Canada goose, great blue heron, green heron, merlin, western bluebird, monarch butterfly, Belding's orange-throated whiptail, small-footed myotis, and Yuma myotis.
- Impact BIO-3c** Direct impacts to nesting barn owl, California horned lark, Canada goose, great blue heron, green heron, western bluebird, small-footed myotis, Yuma myotis, and yellow warbler individuals would be considered potentially significant.

- Impact BIO-3d** Direct impacts to County Group 2 roosting bats, including small-footed myotis and Yuma myotis, would be considered potentially significant.
- Impact BIO-4** Direct impacts to sensitive habitats located in lands designated as a biological core resource area during mining and reclamation activities would be considered potentially significant.
- Impact BIO-5** If construction or mining activities would be initiated within 500 feet of suitable habitat during the breeding seasons for California gnatcatcher (March 1 to August 15), nesting raptors (January 15 to July 15), or least Bell's vireo (March 15 to September 15), indirect noise effects would be potentially significant.
- Impact BIO-6** If protective measures are not implemented to control human access into open space areas, direct and indirect impacts to sensitive habitat and species located in the BOS be potentially significant.
- Impact BIO-7** Implementation of the Proposed Project would result in direct impacts to approximately 2.34 acres of sensitive vegetation communities made up of 0.55 acre of disturbed wetland (Tier I), 0.44 acre of southern cottonwood-willow riparian forest (including disturbed, Tier I), 0.13 acre of disturbed southern willow scrub, 0.01 acre of tamarisk scrub, 0.01 acre of arundo-dominated riparian (Tier I), and 1.2 acres of Diegan coastal sage scrub (including disturbed; Tier II). Impacts to sensitive natural communities would be considered potentially significant.
- Impact BIO-8** Inadvertent intrusion into riparian habitat or other sensitive habitats located adjacent to work areas by construction vehicles, equipment, and personnel during mining and reclamation activities would be considered potentially significant.
- Impact BIO-9** The Project would result in impacts to jurisdictional wetlands and riparian habitats as defined by the USACE, CDFW, and/or County. Impacts to jurisdictional waters and wetlands include 0.60 acres of wetland and 0.36 acre of non-wetland waters of the U.S. and 18.20 acres of CDFW jurisdictional areas (including 0.44 acre of southern cottonwood-willow riparian forest, 0.002 acre of freshwater marsh, 0.13 acre of southern willow scrub, 0.56 acre of disturbed wetland, 0.01 acre of arundo-dominated riparian, and 17.06 acres of streambed) Impacts to jurisdictional waters and wetlands would be considered potentially significant.
- Impact BIO-10** Inadvertent intrusion into jurisdictional waters and wetlands located adjacent to work areas by construction vehicles, equipment, and personnel during mining and reclamation activities would be considered potentially significant.
- Impact BIO-11** Implementation of the Proposed Project would result in potentially significant impacts to MSCP narrow endemic species during mining and reclamation activities.

Impact BIO-12 Implementation of the Proposed Project would result in potentially significant impacts to federally and/or state listed species during mining and reclamation activities.

Impact BIO-13 Direct impacts to nesting birds protected under the Migratory Bird Treaty Act would be considered potentially significant.

2.2.5 Mitigation

The following mitigation measures would reduce Project impacts to below a level of significance (refer to Table 2.2-10, *Summary of Biological Resources Mitigation Measures*).

M-BIO-1 Mitigation for impacts to 1.2 acres of potential foraging habitat for coastal California gnatcatcher, comprised solely of Diegan coastal sage scrub, shall occur at a 1.5:1 ratio for a total mitigation requirement of 1.8 acres. Mitigation shall occur through on-site preservation of 0.6 acre of Diegan coastal sage scrub and on-site revegetation of 11.3 acres of Diegan coastal sage scrub for a total of 11.9 acres of Diegan coastal sage scrub to be preserved within the biological open space easement.

M-BIO-2 ~~Grading or clearing of vegetation within 500 feet of occupied Diegan coastal sage scrub during the breeding season of the coastal California gnatcatcher (March 1 to August 15) shall be avoided to the extent feasible. All grading permits, improvement plans, and the final map shall state the same. If clearing or grading would occur within 500 feet of suitable coastal California gnatcatcher habitat during the gnatcatcher breeding season (March 1 to August 15) for the gnatcatcher,~~ a qualified biologist shall conduct a pre-construction survey no more than three days (72 hours) prior to commencement of activities to determine whether gnatcatchers occur within 500 feet of the proposed impact area(s). If there are no gnatcatchers nesting (includes nest building or other breeding/nesting behavior) within that area, grading and clearing shall be allowed to proceed. If any gnatcatchers are observed nesting or displaying breeding/nesting behavior during the pre-construction survey or additional surveys within the area, construction shall be postponed within 500 feet of any location at which gnatcatchers have been observed until a qualified biologist has determined that all nesting (or breeding/nesting behavior) has ceased or until after August 15.

M-BIO-3 Mitigation for impacts to 0.58 acre of potential nesting and foraging habitat for least Bell's vireo (southern cottonwood-willow riparian forest, disturbed southern willow scrub, and tamarisk scrub) shall occur at a minimum 3:1 ratio with at least 1:1 creation (establishment/re-establishment) for a total mitigation requirement of 1.74 acres. Mitigation shall occur through on-site preservation of 13.86 acres of wetland and riparian habitat, on-site rehabilitation of 7.36 acres of riparian habitat, and on-site re-establishment and revegetation of 107.62 acres of riparian habitat for a total of 128.84 acres of wetland riparian habitat to be preserved within the biological open space easement.

- M-BIO-4** ~~Grading or clearing of riparian habitat during the breeding season of the least Bell's vireo (March 15 through September 15) shall be avoided to the extent feasible. All grading permits, improvement plans, and the final map shall state the same. If clearing or grubbing must occur within 500 feet of suitable least Bell's vireo habitat during the least Bell's vireo breeding season (March 15 to September 15),~~ a qualified biologist shall conduct a pre-construction survey no more than three days (72 hours) prior to commencement of activities to determine whether vireos occur within 500 feet of proposed impact area(s). Impacts to occupied habitat shall be avoided. If there are no vireos nesting (includes nest building or other breeding/nesting behavior) within that area, grading and clearing shall be allowed to proceed. If any vireos are observed nesting or displaying breeding/nesting behavior during the pre-construction survey or additional surveys within that area, construction shall be postponed within 500 feet of any location at which vireos have been observed until a qualified biologist has determined that all nesting (or breeding/nesting behavior) has ceased or until after September 15.
- M-BIO-5** If operation of construction or excavation equipment is initiated within 500 feet of suitable habitat during the breeding seasons for the coastal California gnatcatcher (March 1 to August 15), nesting raptors (January 15 to July 15), or least Bell's vireo (March 15 to September 15), pre-construction survey(s) shall be conducted by a qualified biologist to determine whether these species occur within the areas potentially impacted by noise, with the final survey occurring within three days (72 hours) of the proposed start of construction, mining, or reclamation activities. If it is determined at the completion of pre-construction survey(s) that active nests belonging to these sensitive species are absent from the potential impact area, activities shall be allowed to proceed. If pre-construction surveys determine the presence of active nests belonging to these sensitive species, then activities shall: (1) be postponed until a qualified biologist determines the nest(s) is no longer active or until after the respective breeding season; or (2) not occur until a temporary noise barrier or berm is constructed at the edge of the impact footprint and/or around the piece of equipment to ensure that noise levels are reduced to below 60 dBA or ambient, whichever is greater. The type(s) and location(s) of noise barrier(s) shall be provided to the County and Wildlife Agencies along with the associated noise measurements demonstrating compliance with required noise level reductions. Decibel output would be confirmed by a County-approved noise specialist and intermittent monitoring by a qualified biologist to ensure that noise levels remain below 60 dBA at occupied areas.
- M-BIO-6** Impacts to 234 individuals of Palmer's goldenbush shall be mitigated at a 1:1 ratio. Mitigation shall occur through planting and/or seeding of the species within on-site native revegetation areas in accordance with a revegetation plan to be approved by the County and Wildlife Agencies (USWFS and CDFW).
- M-BIO-7** ~~Grubbing or clearing of vegetation during the general avian breeding season (February 15 through August 31) or raptor breeding season (January 15 through July 15) shall be avoided to the extent feasible. If grubbing, clearing, or grading would occur during the general avian breeding season (February 15 through~~

August 31) within 300 feet of general bird nesting habitat or during the raptor breeding season (January 15 through July 15) within 500 feet of nesting raptor habitat, a qualified biologist shall conduct a pre-construction survey no more than three days (72 hours) prior to the commencement of activities to determine if active bird nests are present in the affected areas. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within this area, clearing, grubbing, and grading shall be allowed to proceed. Furthermore, if construction activities are to resume in an area where they have not occurred for a period of seven or more days during the breeding season, an updated survey for avian nesting will be conducted. If active nests or nesting birds are observed within the area, the biologist shall flag the active nests and construction activities shall avoid active nests until a qualified biologist has determined that nesting behavior has ceased, nests have failed, or young have fledged.

M-BIO-8 Upon completion of all extraction activities, reclamation, and final grading to establish the final landform shall occur in accordance with the approved Reclamation Plan. Revegetation with native species will occur within the expanded Sweetwater River floodplain and constructed bordering slopes according to a revegetation plan to be approved by the County and Wildlife Agencies (USWFS and CDFW).

M-BIO-9 Mitigation for impacts to 0.44 acre of southern cottonwood-willow riparian forest, 0.13 acre of disturbed southern willow scrub, 0.01 acre of tamarisk scrub, 0.01 acre of arundo-dominated riparian, and 0.55 of disturbed wetland shall occur at a 3:1 ratio with at least 1:1 creation for a total mitigation requirement of 3.42 acres. Mitigation shall occur through on-site preservation of 13.856 acres of wetland and riparian habitat, on-site rehabilitation of 7.36 acres of riparian habitat, and on-site re-establishment and revegetation of 107.632 acres of riparian habitat for a total of 128.84 acres of wetland riparian habitat to be preserved within the biological open space easement.

M-BIO-10 Mitigation for 1.2 acres of impacts to Diegan coastal sage scrub shall occur at a 1.5:1 ratio through the on-site preservation of 1.8 acres of Tier II or Tier I habitat in the South County MSCP area within a biological resource core area. Mitigation shall occur through on-site preservation of 0.6 acre of Diegan coastal sage scrub and on-site revegetation of 11.3 acres of Diegan coastal sage scrub for a total of 11.9 acres of Tier II Diegan coastal sage scrub to be preserved within the biological open space easement.

M-BIO-11 Prior to any vegetation removal, grading, and/or other ground disturbing activities, a qualified biologist familiar with special status reptile and amphibian species behavior and life history shall conduct a pre-construction survey no more than two weeks prior to commencement of activities to determine whether reptile and amphibian species designated as sensitive by CDFW, but not covered under the County's MSCP, occur within proposed impact area(s). If special status reptile or amphibian species are detected during the pre-construction survey, consultation

with CDFW shall be initiated to prepare species-specific protocols for proper handling and relocation procedures.

M- BIO-12 If western spadefoot toads, tadpoles, or egg masses are identified within the proposed impact area(s), the following measures shall be implemented: (1) A suitable relocation site(s) outside the proposed impact area(s) shall be identified by a qualified biologist. The relocation site(s) shall be located a minimum of 50 feet outside of the proposed impact area(s), or 100 feet if available, and shall be approved by CDFW; (2) All western spadefoot adults, tadpoles, and egg masses encountered in the proposed impact area(s) shall be collected and released in the identified relocation site(s); (3) The relocation site(s) shall be monitored annually for five years during and immediately following peak breeding season (late winter to March), such that surveys can be conducted for adults as well as for egg masses and tadpoles. The results of annual monitoring shall be provided to CDFW in an annual report.

M- BIO-13 Prior to the removal of mature trees or existing buildings/structures with potential to support roosting bats, a qualified biologist shall conduct an initial pre-construction survey no more than 30 days and no less than two weeks prior to commencement of tree removal or demolition activities to determine if roosting bats are present in the proposed impact area(s). A letter report summarizing the survey methods and results of the survey, including negative findings, shall be submitted to the County and CDFW for review at least two weeks prior the commencement of Project activities. If bats are detected within the proposed impact area(s) during the initial pre-construction survey, the letter report will identify measures to be implemented to avoid and minimize potential direct and indirect impacts to roosting bats, including those identified in this measure. A final pre-construction survey shall be conducted no more than three days (72 hours) prior to tree removal or demolition activities within the proposed impact area(s). If bats are not detected during the final pre-construction survey or determined to be absent from the proposed impact area, construction activities shall be allowed to proceed, and no additional measures would be necessary. If bats are detected during the final pre-construction survey, the following avoidance measures shall be implemented, depending on the time of year, including additional measures identified in the letter report. If an active maternity roost is detected during the bat maternity season (April 15 through August 15), the biologist shall flag the active roost site and construction activities shall avoid the roost site until after the maternity season (August 16), or until the qualified biologist has determined young are self-sufficiently volant (able to fly). If bats are detected and determined to be roosting within the proposed impact area(s) outside of the bat maternity season (August 16 through April 14), the biologist shall flag the active roost site and construction activities shall avoid roost sites until bats are no longer determined to be roosting as determined by the qualified bat biologist. Exclusion of roost sites, where feasible, outside of the bat maternity season may be conducted with approval of the County and CDFW. Methods of roost exclusion shall be determined in consultation with the County and CDFW.

- M-BIO-14** The applicant shall dedicate ~~150.71~~149.0 acres of biological open space to be managed by a long-term manager approved by the County in accordance with a Resource Management Plan. The biological open space easement shall include native habitat revegetation areas located within the expanded Sweetwater River floodplain and bordering constructed slopes. Permanent open space fencing and signage shall be installed around the perimeter of the biological open space as detailed in the final Resource Management Plan.
- M-BIO-15** The Project requires preparation of a Resource Management Plan (RMP) for on-site biological open space to be approved by the County and Wildlife Agencies (USFWS and CDFW). The RMP would provide direction for the permanent preservation and management of the on-site biological open space in accordance with County regulations.
- M-BIO-16** To help ensure errant impacts to sensitive vegetation communities outside of the impact footprint are avoided during construction, temporary environmental fencing (including silt fencing where determined necessary by the SWPPP), would be installed at the edges of the impact limits prior to initiation of grading. All construction staging shall occur within the approved limits of construction.
- M-BIO-17** A qualified biologist shall monitor the installation of environmental fencing wherever it would abut sensitive vegetation communities, jurisdictional waters or wetlands, or open space. Prior to the installation of temporary fencing, the placement design should carefully consider potential impacts to wildlife movement patterns between the upstream and downstream riparian habitats adjacent to the Project site. The biologist also would conduct a pre-construction environmental training session for construction personnel prior to all phases of construction to inform them of the sensitive biological resources on site and avoidance measures to remain in compliance with Project approvals. The biologist shall monitor initial vegetation clearing, grubbing, and grading activities to ensure that activities occur within the approved limits of work and avoid impacts to nesting birds. The biologist shall periodically monitor the limits of construction and mining operations to ensure that mining and avoidance areas are delineated with temporary fencing and that fencing remains intact.
- M-BIO-18** Impacts to 0.60 acre of U.S. Army Corps of Engineers (USACE) wetland waters of the U.S. shall be mitigated a minimum 3:1 ratio and 0.36 acre of USACE non-wetland waters of the U.S. shall be mitigated at a minimum 1:1 ratio through one or a combination of the following: on- and/or off-site establishment, re-establishment, rehabilitation, and/or enhancement of 2.16 acres waters of the U.S.; and/or off-site purchase of waters of the U.S. credits at an approved mitigation bank, or other location deemed acceptable by the USACE. Any mitigation completed through purchase of mitigation credits shall be provided prior to issuance of a grading permit, and prior to use of the premises in reliance of this permit. Any applicant-initiated mitigation must be implemented prior to or concurrent with impacts to waters of the U.S. Impacts to waters of the U.S. would require issuance of a Section 404 CWA permit from the USACE prior to impacts.

- M-BIO-19** Impacts to 1.14 acres of California Department of Fish and Wildlife (CDFW) jurisdictional riparian habitat (0.44 acre of southern cottonwood-willow riparian forest, 0.13 acre of southern willow scrub, 0.002 acre of freshwater marsh, 0.01 acre of arundo-dominated riparian, and 0.56 acre of disturbed wetland) shall be mitigated at a 3:1 ratio, totaling 3.42 acres of riparian habitat mitigation. Impacts to 17.06 acres of CDFW streambed shall be mitigated at a minimum 1:1 ratio through one or a combination of the following: on- and/or off-site establishment, re-establishment, rehabilitation, and/or enhancement of 17.06 acres of riparian and/or stream habitat; and/or off-site purchase of riparian and/or stream credits at an approved mitigation bank, or other location deemed acceptable by the CDFW. Combined mitigation for CDFW riparian habitat and streambed totals 20.48 acres. Any mitigation completed through purchase of mitigation credits shall be provided prior to the issuance of a grading permit, and prior to use of the premises in reliance of this permit. Any applicant-initiated mitigation must be implemented prior to or concurrent with impacts to CDFW habitat. Impacts to CDFW jurisdictional habitat would require issuance of a CFG Code Section 1602 Streambed Authorization Agreement from the CDFW prior to impacts.
- M-BIO-20** The Project requires preparation of a wetland mitigation plan for impacts to wetland habitat and jurisdictional waters to be approved by the County (wetland impacts only) and U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB) (impacts to waters of the U.S. and State, and CDFW riparian habitat and streambed), as applicable. Approval of the plan and/or acceptance of mitigation bank credits by the USACE, CDFW, and RWQCB shall be a condition of the associated wetland permits for the Project.

2.2.6 Conclusion

Project implementation would result in potentially significant impacts to federally and state listed animal species, state Species of Special Concern animals, County Group 1 and Group 2 animal species, County List B and D plant species, and raptors with the potential to nest and/or forage over the Project site and immediate vicinity. Potential significant impacts would result from direct disturbance, loss of habitat, and noise. Implementation of mitigation measures M-BIO-1 through M-BIO-15 would reduce impacts to less-than-significant levels through implementation of breeding season avoidance and/or pre-construction surveys to avoid direct and indirect impacts to sensitive birds and raptors; pre-construction surveys to avoid direct and indirect impacts to special status amphibian and reptile species not covered under County's MSCP Subarea plan; pre-construction surveys to avoid direct and indirect impacts to roosting bats; mitigation for direct impacts to suitable habitat for the coastal California gnatcatcher; mitigation for direct impacts to suitable habitat for least Bell's vireo; mitigation for direct impacts to Palmer's goldenbush, a County List B plant species; habitat-based mitigation for direct impacts to sensitive vegetation communities with potential to support special status plant and animal species; reclamation of the Project site following completion of mining activities; placement of preserved, restored, and revegetated native habitat within BOS; and long-term management of the BOS areas in accordance with a County-approved RMP.

The Project would also result in potentially significant impacts to sensitive natural communities and riparian habitat; however, a combination of avoidance through project design, proposed open space, and mitigation measures to fully compensate the loss of habitat would reduce impacts to below a level of significance, and there would be no net loss of sensitive natural communities and riparian habitat. Mitigation is proposed at ratios consistent with those required by the County, Wildlife Agencies, and Resource Agencies. With the implementation of mitigation measures M-BIO-9, M-BIO-10, and M-BIO 16 through M-BIO-18, impacts on sensitive natural communities, including riparian habitat, would be less than significant.

Implementation of the Project would result in significant impacts to USACE wetland and non-wetland waters of the U.S. The Project would also result in significant impacts to RWQCB wetland and non-wetland waters of the State and CDFW-jurisdictional riparian habitat and streambed. Mitigation measures M-BIO-16 through M-BIO-18, and M-BIO-20 would reduce potential impacts to a less-than-significant level; final mitigation measures will be determined in consultation with the USACE, RWQCB, and CDFW.

Impacts to jurisdictional areas would require permitting through the appropriate regulatory agencies, as discussed below. Securing necessary wetland permits prior to issuance of a grading permit would be required. Anticipated wetland permits include a CWA Section 404 permit from the USACE, CWA Section 401 Water Quality Certification or State Porter-Cologne Water Quality Control Act Waste Discharge requirements from the RWQCB, and CFG Code Section 1602 Streambed Alteration Agreement from CDFW. Final mitigation requirements would be determined through consultation with the USACE, RWQCB, and CDFW, and would reduce impacts to less than significant.

With the Project's proposed open space, incorporation of design features, and implementation of the measures listed above, impacts to wildlife movement, corridors and linkages, and nursery sites would be less than significant and no additional mitigation measures are required.

Implementation of the Project would result in potentially significant impacts to MSCP narrow endemic species (Palmer's goldenbush, peregrine falcon, and least Bell's vireo), federally listed species (coastal California gnatcatcher and least Bell's vireo), and breeding migratory birds. Implementation of mitigation measures M-BIO-1 through M-BIO-8 would reduce these impacts to below a level of significance.

Although the Project is exempt from the RPO as discussed in the local regulatory framework under *Resource Protection Ordinance* in Section 2.1.1.1, and *County RPO Wetlands (Guideline 27)* in Section 2.1.2.5, above, mitigation measures M-BIO-9, and M-BIO-18 through M-BIO-20, would compensate for habitat loss to these areas and mitigate potential impacts associated with local policies, ordinances, and adopted plans to less than significant.

With the Project's proposed open space, incorporation of design features, compliance with the requirements of the MBTA, RPO, BGEPA, BMO, and MSCP, and implementation of the measures listed above, cumulative impacts would be less than significant and no additional mitigation measures are required to address potential cumulative impacts.

**Table 2.2-1
EXISTING VEGETATION COMMUNITIES/LAND USE TYPES**

Vegetation Community ¹	Within MUP (Acres) ²	Outside MUP (Acres) ²	Total (Acres) ²
Tier I³			
Disturbed Wetland (11200)	10.25	0	10.25
Freshwater Marsh (52400)	0.22	0	0.22
Southern Cottonwood-willow Riparian Forest (61330)	9.43	2.42	11.85
Southern Cottonwood-willow Riparian Forest - disturbed (61330)	0.87	0.15	1.02
Southern Willow Scrub - disturbed (63320)	4.82	0	4.82
Tamarisk Scrub (63810)	1.20	0.03	1.23
Open Water (64140) ⁴	1.68	0	1.68
Arundo-dominated Riparian (65100)	0.48	0.08	0.56
Tier II			
Diegan Coastal Sage Scrub (32500)	0.8	0.5	1.3
Diegan Coastal Sage Scrub –disturbed (32500)	0.5	<0.1	0.5
Tier IIIB			
Non-native Grassland (42200)	0	0.2	0.2
Tier IV			
Non-native Woodland (79000)	1.5	0.2	1.7
Eucalyptus Woodland (79100)	2.1	0.5	2.6
Non-native Vegetation (11000)	6.6	0.9	7.5
Disturbed Habitat (11300)	79.0	12.3	93.1
N/A			
Artificial Pond (64140) ⁴	3.0	0	3.0
Developed Land (12000)	122.0	14.9	136.9
TOTAL	244.45	32.18	276.63

Source: HELIX 2023a2025

¹ Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008).

² Upland habitats are rounded to the nearest 0.1 acre, while wetland habitats are rounded to the nearest 0.01; thus, total reflects rounding.

³ County Subarea Habitats and Tiers within the Multiple Species Conservation Program (MSCP).

⁴ The numerical Holland/Oberbauer code refers to Fresh Water which describes year-round bodies of fresh water in the form of lakes, streams, ponds, or rivers and is the most appropriate vegetation community that represents these areas.

MUP = Major Use Permit

**Table 2.2-2
WATERS OF THE U.S. – EXISTING CONDITIONS**

Waters of the U.S.	Acreage ¹
Wetland Waters	
Disturbed Wetland	9.98
Freshwater Marsh	0.19
Open Water	1.67
Riparian Forest (including disturbed)	6.54
Southern Willow Scrub (including disturbed)	4.34
Tamarisk Scrub	1.10
<i>Subtotal</i>	23.82

Non-wetland Waters	
Streambed	0.55
<i>Subtotal</i>	<i>0.55</i>
TOTAL	24.37

Source: HELIX ~~2023a~~2025

¹ Acres rounded to the nearest hundredth. Total reflects rounding.

**Table 2.2-3
 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION –
 EXISTING CONDITIONS**

Habitat Type	Acreage¹
Riparian-Vegetated Streambed	
Arundo-dominated Riparian	0.56
Disturbed Wetland	10.26
Freshwater Marsh	0.22
Open Water	1.67
Riparian Forest (including disturbed)	12.87
Southern Willow Scrub (included disturbed)	4.82
Tamarisk Scrub	0.94
<i>Subtotal</i>	<i>31.35</i>
Unvegetated Streambed	
Streambed	18.98
<i>Subtotal</i>	<i>18.98</i>
TOTAL	50.33

Source: HELIX ~~2023a~~2025

¹ Acres rounded to the nearest hundredth.

**Table 2.2-4
 COUNTY RESOURCE PROTECTION ORDINANCE WETLANDS –
 EXISTING CONDITIONS**

Habitat Type	Acreage¹
Arundo-dominated Riparian	0.56
Disturbed Wetland	10.26
Freshwater Marsh	0.22
Open Water	1.68
Riparian Forest (including disturbed)	12.87
Southern Willow Scrub (including disturbed)	4.82
Tamarisk Scrub	0.94
TOTAL	31.35

Source: HELIX ~~2023a~~2025

¹ Acres rounded to the nearest hundredth.

**Table 2.2-5
PROJECT IMPACTS TO VEGETATION COMMUNITIES/HABITAT TYPES**

Vegetation Community ²	Impact Neutral Areas (Acres) ¹	Project Impacts (Acres) ¹					Road Improvement Impacts (Acres) ¹			Total Impacts (Acres) ¹		
		Phase 1	Phase 2	Phase 3	Phase 4	Total	On-Site	Off-Site	Total	On-Site	Off-Site	Total
Sensitive Vegetation Communities												
Tier I³												
Disturbed Wetland (11200)	0	0.16	0.26	0.13	0	0.55	0	0	0	0.55	0	0.55
Freshwater Marsh (52400)	0	0	0	0	0	0	0	0	0	0	0	0
Southern Cottonwood-willow Riparian Forest – including disturbed (61330)	0.30	0.27	0.12	0.05	0	0.44	0	0	0	0.44	0	0.44
Southern Willow Scrub – including disturbed (63320)	0	0.13	0	0	0	0.13	0	0	0	0.13	0	0.13
Tamarisk Scrub (63810)	0.02	0.01	0	0	0	0.01	0	0	0	0.01	0	0.01
Open Water (64140)	0	0	0	0	0	0	0	0	0	0	0	0
Arundo-dominated Riparian (65100)	0.07	0.01	0	0	0	0.01	0	0	0	0.01	0	0.01
Tier II												
Diegan Coastal Sage Scrub – including disturbed (32500)	0.1	0.2	0	0.9	0	1.1	0	0.1	0.1	1.1	0.1	1.2
Tier IIIB												
Non-native Grassland (42200)	<0.1	0	0	0	0	0	0	0	0	0	0	0
<i>Subtotal Sensitive Communities</i>	<i>0.49</i>	<i>0.78</i>	<i>0.38</i>	<i>1.08</i>	<i>0</i>	<i>2.24</i>	<i>0</i>	<i>0.1</i>	<i>0.1</i>	<i>2.24</i>	<i>0.10</i>	<i>2.34</i>
Non-Sensitive Vegetation Communities												
Tier IV												
Non-native Woodland (79000)	0	0	0	1.7	0	1.7	0	0	0	1.7	0	1.7
Eucalyptus Woodland (79100)	0.4	<0.1	0	2.1	0	2.1	0	<0.1	<0.1	2.1	<0.1	2.1
Non-native Vegetation (11000)	0.4	3.2	0.6	1.5	1.2	6.5	<0.1	2.0	2.0	6.5	2.0	8.5
Disturbed Habitat (11300)	5.6	71.8	1.8	2.4	0	76.0	<0.1	0.1	0.1	76.0	0.1	76.1
N/A												
Artificial Pond (64100)	0	2.2	0	0.4	0.1	2.7	0	0	0	2.7	0	2.7
Developed Land (12000)	14.8	0.5	47.3	64.8	7.9	120.5	0.2	2.6	2.8	120.7	2.6	123.3
<i>Subtotal Non-Sensitive Communities</i>	<i>21.2</i>	<i>77.7</i>	<i>49.7</i>	<i>72.9</i>	<i>9.2</i>	<i>209.5</i>	<i>0.2</i>	<i>4.8</i>	<i>4.9</i>	<i>209.7</i>	<i>4.7</i>	<i>214.4</i>
TOTAL	21.69	78.48	50.08	73.98	9.20	211.74	0.2	4.8	5.0	211.94	4.8	216.74

Source: HELIX 2023a2025

¹ Upland habitats are rounded to the nearest 0.1 acre, while wetland habitats are rounded to the nearest 0.01; thus, total reflects rounding.

² Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008).

³ County Subarea Habitats and Tiers within the MSCP.

Table 2.2-6
IMPACTS TO JURISDICTIONAL WETLANDS AND WATERWAYS (acre[s])¹

Habitat	Waters of U.S.	CDFW	County RPO
Wetland Waters/Riparian			
Disturbed Wetland	0.51	0.56	0.56
Freshwater Marsh	<0.01	<0.01	<0.01
Southern Cottonwood-Willow Riparian Forest (including disturbed)	0.09	0.44	0.44
Southern Willow Scrub (disturbed)	0	0.13	0.13
Arundo-dominated Riparian	0	0.01	0.01
<i>Subtotal</i>	<i>0.60</i>	<i>1.14</i>	<i>1.14</i>
Non-wetland Waters			
Streambed	0.36	17.06	0
TOTAL	0.96	18.20	1.14

Source: HELIX 2023a2025

¹ Areas are presented in acre(s) rounded to the nearest 0.01.

CDFW = California Department of Fish and Wildlife; RPO = Resource Protection Ordinance

Table 2.2-7
PAMA IMPACTS SUMMARY

Category of Impacts	Acreage		Percent Impacted ³
	Existing PAMA On-Site	Proposed Impacts in PAMA On-Site	
Sensitive Vegetation Community ¹	7.4	1.0	13.5
Non-sensitive Vegetation Community/Land Use Type ²	9.0	8.8	97.8
TOTAL	16.4	9.8	59.8

Source: HELIX 2023a2025

¹ Percent impacted represents impacts relative to the impact category, not total impacts.

² Disturbed wetland, freshwater marsh, open water, southern cottonwood-willow riparian forest (including disturbed), disturbed southern willow scrub, and Diegan coastal sage scrub (including disturbed).

³ Eucalyptus woodland, non-native woodland, non-native vegetation, disturbed habitat, and developed land.
PAMA = Pre-approved Mitigation Area

Table 2.2-8
CUMULATIVE IMPACTS ON BIOLOGICAL RESOURCES

Project Number	Project Name	Resource Riparian / Wetland Impacts	Resource Riparian / Wetland Mitigation	CSS ¹ Impacts	CSS ¹ Mitigation
PDS2004-TM-5289; PDS2004-ER-03-19-04; PDS2004-3100-5289	Jamul Highlands Subdivision	3.04	--	0.31	--
PDS2002-TPM 20628; PDS2002-3200-20628	Yacoo Minor Subdivision	0	0	1.44	1.56
PDS2004-TPM-20868; PDS2004-ER-91-19-038A; PDS2004-3200-20868	Steinbarth Minor Subdivision	0	0	0.86	0.86

Project Number	Project Name	Resource Riparian / Wetland Impacts	Resource Riparian / Wetland Mitigation	CSS ¹ Impacts	CSS ¹ Mitigation
PDS2002-TPM 20594; PDS2002-3200-20594	Pioneer Minor Subdivision	--	0.44	0.03	0.03
PDS2005-MUP-05-010; PDS2005-3300-05-010	St. Gregory of Nyssa Greek Orthodox Church	--	--	--	--
PDS2005-TM 5460; PDS2005-TM-5460TE; PDS2005-ER-3910-05-19-023; PDS2005-3100-5460	Simpson Farms Major Subdivision	0.14	0.42	95.0	95.0
PDS2018-TM-5629; PDS2018-GPA-18-005; PDS2018-REZ-18-004; PDS2018-STP-18-016	Ivanhoe Ranch	--	--	--	--
N/A	Cuyamaca College Master Plan Revisions	--	--	--	--
PDS2014-GPA-14-003; PDS2014-REZ-14-003; PDS2014-TM-5588; PDS2014-STP-14-015	Sweetwater Place	0	0	0.64	0.68
PDS2015-MUP-15-006; PDS 2015-ER-15-19-002	College Preparatory Middle School	0	0	0	0
PDS2016-GPA-16-005; PDS2016-REZ-16-003; PDS2016-ER-16-19-001 PDS2016-MUP-16-003	Skyline Retirement Center	0	0	4.4	--
PDS2018-TPM-21262; PDS-2018-MUP-18-008	Jamul Commercial	--	--	--	--
PDS2015-ER-89-19-015I; PDS2015-REZ-15-008; PDS2015-TM-5608; PDS2015-SPA-15-002; PDS2015-STP-15-016; PDS2015-MUP-89-015W4; PDS2015-GPA-15-006	Sweetwater Vistas	0.04	0.04	14.9	22.4
PDS2018-SPA-18-002; PDS2018-GPA-18-004; PDS2018-REZ-18-002; PDS2018-STP-18-013; MUP-70-299W1M32; PDS2018-ER-18-19-003; PDS2018-TM-5627	Aventine at Sweetwater Springs	0	0	0	0
Subtotal		3.22	0.9	117.58	120.53
PDS2018-MUP-18-023 PDS2018-RP-18-001 PDS2018-ER-18-19-007	Cottonwood Sand Mine (Proposed Project)	1.14	3.42	1.2	1.8
TOTAL		4.36	4.32	118.78	122.33

Source: HELIX 2023a-2025

¹ This column combines all sage scrub habitat variants and ecotones (e.g., coastal sage-chaparral scrub, flat-topped buckwheat scrub, coyote brush scrub, etc.)

ER = Environmental Review; GPA = General Plan Amendment; MUP = Major Use Permit; REZ = Rezone;
RP = Reclamation Plan; SPA = Specific Plan Amendment; STP = Site Plan; TM = Tentative Map; TPM = Tentative Parcel Map;
-- = Information Not Available or Not Applicable; CSS=coastal sage scrub

**Table 2.2-9
SUMMARY OF VEGETATION COMMUNITIES IMPACT AND MITIGATION ACREAGES¹**

Vegetation Community/Habitat ²	Total Existing	Total Impacts ³	Mitigation			Preserved in Excess of Required Mitigation
			Ratio ⁴	Required	Preserved On-Site ⁵	
Tier I						
Streambed (Emergent Wetland) (52440)	0	0	3:1	0	9.58	9.58
Disturbed Wetland (11200)	10.25	0.55		1.65 ⁶	0	0
Freshwater Marsh (52400)	0.22	0		0	0.22	0.22
Southern Cottonwood-willow Riparian Forest - including disturbed (61330)	12.87	0.44		1.32 ⁶	26.48 ⁶	23.45 ^{8,7}
Southern Willow Scrub – including disturbed (63320)	4.82	0.13		0.39	90.88	90.49
Tamarisk Scrub (63810)	1.23	0.01		0.03	0	0
Open Water (64140)	1.68	0		0	1.68	1.68
Arundo-dominated Riparian (65100)	0.56	0.01		0.03 ⁶	0	0
Subtotal	31.63	1.14	--	3.42	128.84	125.42
Tier II						
Diegan Coastal Sage Scrub – including disturbed (32500)	1.8	1.2	1.5:1	1.8	11.85	10.05
Subtotal	1.8	1.2	--	1.8	11.85	10.05
Tier IIIB						
Non-native Grassland (42200)	0.2	0	0.5:1	0	0.15	0.15
Subtotal	0.2	0	--	0	0.15	0.15
Tier IV						
Non-native Woodland (79000)	1.7	1.7	N/A	0	0	0
Eucalyptus Woodland (79100)	2.6	2.1		0	0.02	0.02
Non-native Vegetation (11000)	7.5	8.5		0	0.46	0.46
Disturbed Habitat (11300)	91.3	76.1		0	7.67	7.67
Subtotal	103.1	88.4	--	0	8.15	8.15
N/A						
Artificial Pond (64140)	3.0	2.7	N/A	0	0	0
Developed Land (12000)	136.9	123.3		0	1.750 ⁷	1.750 ⁷
Subtotal	139.9	126.0	--	0	1.750	1.750
TOTAL	276.63	216.74	--	5.22	150.74148.9	145.52143.77
					2	

Source: HELIX 2023a2025

¹ Area presented in acre(s) rounded to the nearest hundredth for wetlands and the nearest tenth for uplands. Totals reflect rounding.

² Vegetation categories and numerical codes are from Oberbauer (2008)

³ Includes both on- and off-site impacts.

- ⁴ Proposed mitigation ratios are consistent with those contained in the South County MSCP Subarea Area (County 1997) and Biological Mitigation Ordinance (County 2010c) and assume that impacts and mitigation shall occur within Biological Resource Core Areas.
- ⁵ In Biological Open Space.
- ⁶ Mitigation location for impacts to wetland habitats to be determined through consultation with USACE, RWQCB, CDFW, and the County.
- ⁷ ~~Consists of grouted rip rap.~~
- ⁸—Includes 1.65 acres of mitigation for impacts to 0.55 acre of disturbed wetland, 0.03 acre of mitigation for 0.1 acre of tamarisk scrub, and 0.03 acre of mitigation for impacts to 0.01 acre of arundo-dominated riparian.

**Table 2.2-10
 SUMMARY OF BIOLOGICAL RESOURCES MITIGATION MEASURES**

Proposed Mitigation	Level of Significance After Mitigation	Guideline Number
<p>M-BIO-1 Mitigation for impacts to 1.2 acres of potential foraging habitat for coastal California gnatcatcher, comprised solely of Diegan coastal sage scrub, shall occur at a 1.5:1 ratio for a total mitigation requirement of 1.8 acres. Mitigation shall occur through on-site preservation of 0.6 acre of Diegan coastal sage scrub and on-site revegetation of 11.3 acres of Diegan coastal sage scrub for a total of 11.9 acres of Diegan coastal sage scrub to be preserved within the biological open space easement.</p>	<p>Less than significant (Impacts BIO-1a, BIO-12)</p>	<p>1 2 34</p>
<p>M-BIO-2 Grading or clearing of vegetation within 500 feet of occupied Diegan coastal sage scrub during the breeding season of the coastal California gnatcatcher (March 1 to August 15) shall be avoided to the extent feasible. All grading permits, improvement plans, and the final map shall state the same. If clearing or grading would occur within 500 feet of suitable coastal California gnatcatcher habitat during the gnatcatcher breeding season (March 1 through August 15) for the gnatcatcher a qualified biologist shall conduct a pre-construction survey no more than three days (72 hours) days prior to commencement of activities to determine whether gnatcatchers occur within 500 feet of the proposed impact area(s). If there are no gnatcatchers nesting (includes nest building or other breeding/nesting behavior) within that area, grading and clearing shall be allowed to proceed. If any gnatcatchers are observed nesting or displaying breeding/nesting behavior during the pre-construction survey or additional surveys within the area, construction shall be postponed within 500 feet of any location at which gnatcatchers have been observed until a qualified biologist has determined that all nesting (or breeding/nesting behavior) has ceased or until after August 15.</p>	<p>Less than significant (Impacts BIO-1b, BIO-2c, BIO-5, BIO-12)</p>	<p>1 2 12 34 35</p>
<p>M-BIO-3 Mitigation for impacts to 0.58 acre of potential nesting foraging habitat for least Bell's vireo (southern cottonwood-willow riparian forest, disturbed southern willow scrub, and tamarisk scrub) shall occur at a minimum 3:1 ratio with at least 1:1 creation (establishment/re-establishment) for a total mitigation requirement of 1.74 acres. Mitigation shall occur through on-site preservation of 13.856 acres of wetland and riparian habitat, on-site rehabilitation of 7.36 acres of riparian habitat, and on-site re-establishment and revegetation of 107.632 acres of riparian habitat for a total of 128.84 acres of wetland riparian habitat to be preserved within the biological open space easement.</p>	<p>Less than significant (Impacts BIO-1c, BIO-12)</p>	<p>1 2 33 34</p>

Proposed Mitigation	Level of Significance After Mitigation	Guideline Number
<p>M-BIO-4 Grading or clearing of riparian habitat during the breeding season of the least Bell's vireo (March 15 through September 15) shall be avoided to the extent feasible. All grading permits, improvement plans, and the final map shall state the same. If clearing or grubbing must occur within 500 feet of suitable <u>least Bell's vireo</u> habitat during the <u>least Bell's vireo</u> breeding season (March 15 through September 15), a qualified biologist shall conduct a pre-construction survey no more than three days (72 hours) prior to commencement of activities to determine whether vireos occur within 500 feet of proposed impact area(s). Impacts to occupied habitat shall be avoided. If there are no vireos nesting (includes nest building or other breeding/nesting behavior) within that area, grading and clearing shall be allowed to proceed. If any vireos are observed nesting or displaying breeding/nesting behavior during the pre-construction survey or additional surveys within that area, construction shall be postponed within 500 feet of any location at which vireos have been observed until a qualified biologist has determined that all nesting (or breeding/nesting behavior) has ceased or until after September 15.</p>	<p>Less than significant (Impacts BIO-1d, BIO-2c, BIO-5, BIO-11, BIO-12)</p>	<p>1 2 12 33 34 35</p>
<p>M-BIO-5 If operation of construction or excavation equipment is initiated within 500 feet of suitable habitat during the breeding seasons for the coastal California gnatcatcher (March 1 to August 15), nesting raptors (January 15 to July 15), or least Bell's vireo (March 15 to September 15), pre-construction survey(s) shall be conducted by a qualified biologist to determine whether these species occur within the areas potentially impacted by noise, with the final survey occurring within three days (72 hours) of the proposed start of construction, mining, or reclamation activities. If it is determined at the completion of pre-construction survey(s) that active nests belonging to these sensitive species are absent from the potential impact area, activities shall be allowed to proceed. If pre-construction surveys determine the presence of active nests belonging to these sensitive species, then activities shall: (1) be postponed until a qualified biologist determines the nest(s) is no longer active or until after the respective breeding season; or (2) not occur until a temporary noise barrier or berm is constructed at the edge of the development footprint and/or around the piece of equipment to ensure that noise levels are reduced to below 60 dBA or ambient, whichever is greater. The type(s) and location(s) of noise barrier(s) shall be provided to the County and Wildlife Agencies along with the associated noise measurements demonstrating compliance with required noise level reductions. Decibel output would be confirmed by a County-approved noise specialist and intermittent monitoring by a qualified biologist to ensure that noise levels remain below 60 dBA at occupied areas.</p>	<p>Less than significant (Impacts BIO-1b, BIO-1d, BIO-2b, BIO-2c, BIO-3b, BIO-5, BIO-12)</p>	<p>1 2 8 12 16 33 34 35</p>

Proposed Mitigation	Level of Significance After Mitigation	Guideline Number
<p>M-BIO-6 Impacts to 234 individuals of Palmer’s goldenbush shall be mitigated at a 1:1 ratio. Mitigation shall occur through planting and/or seeding of the species within on-site native revegetation areas in accordance with a revegetation plan to be approved by the County and Wildlife Agencies (USWFS and CDFW).</p>	<p>Less than significant (Impact BIO-2a)</p>	<p>2 35</p>
<p>M-BIO-7 Grubbing or clearing of vegetation during the general avian breeding season (February 15 through August 31) or raptor breeding season (January 15 through July 15) shall be avoided to the extent feasible. If grubbing, clearing, or grading would occurs during the general avian breeding season (February 15 through August 31) within 300 feet of general nesting bird habitat or during the raptor breeding season (January 15 through July 15) within 500 feet of nesting raptor habitat, a qualified biologist shall conduct a pre-construction survey no more than three days (72 hours) prior to the commencement of activities to determine if active bird nests are present in the affected areas. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within this area, clearing, grubbing, and grading shall be allowed to proceed. Furthermore, if construction activities are to resume in an area where they have not occurred for a period of seven or more days during the breeding season, an updated survey for avian nesting will be conducted. If active nests or nesting birds are observed within the area, the biologist shall flag the active nests and construction activities shall avoid active nests until the qualified biologist has determined that nesting behavior has ceased, nests have failed, or young have fledged.</p>	<p>Less than significant (Impacts BIO-2b, BIO-2c, BIO-2d, BIO-3c, BIO-5, BIO-11, BIO-13)</p>	<p>1 2 3 12 16 33 34 35</p>
<p>M-BIO-8 Upon completion of all extraction activities, reclamation, and final grading to establish the final landform shall occur in accordance with the approved Reclamation Plan. Revegetation with native species will occur within the expanded Sweetwater River floodplain and constructed bordering slopes according to a revegetation plan to be approved by the County and Wildlife Agencies (USWFS and CDFW).</p>	<p>Less than significant (Impacts BIO-2a, BIO-3b, BIO-4, BIO-7, BIO-12)</p>	<p>1 2 3 7 8 13 16 33 34</p>
<p>M-BIO-9 Mitigation for impacts to 0.44 acre of southern cottonwood-willow riparian forest, 0.13 acre of disturbed southern willow scrub, 0.01 acre of tamarisk scrub, 0.01 acre of arundo-dominated riparian, and 0.55 acre of disturbed wetland shall occur at a 3:1 ratio with at least 1:1 creation (establishment/re-establishment) for a total mitigation requirement of 3.42 acres. Mitigation shall occur through on-site preservation of 13.856 acres of wetland and riparian habitat, on-site rehabilitation of 7.36 acres of riparian habitat, and on-site re-establishment and revegetation of 107.632 acres of riparian habitat for a total of 128.84 acres of wetland riparian habitat to be preserved within the biological open space easement.</p>	<p>Less than significant (Impacts BIO-2a, BIO-3b, BIO-4, BIO-7)</p>	<p>1 2 3 7 13</p>

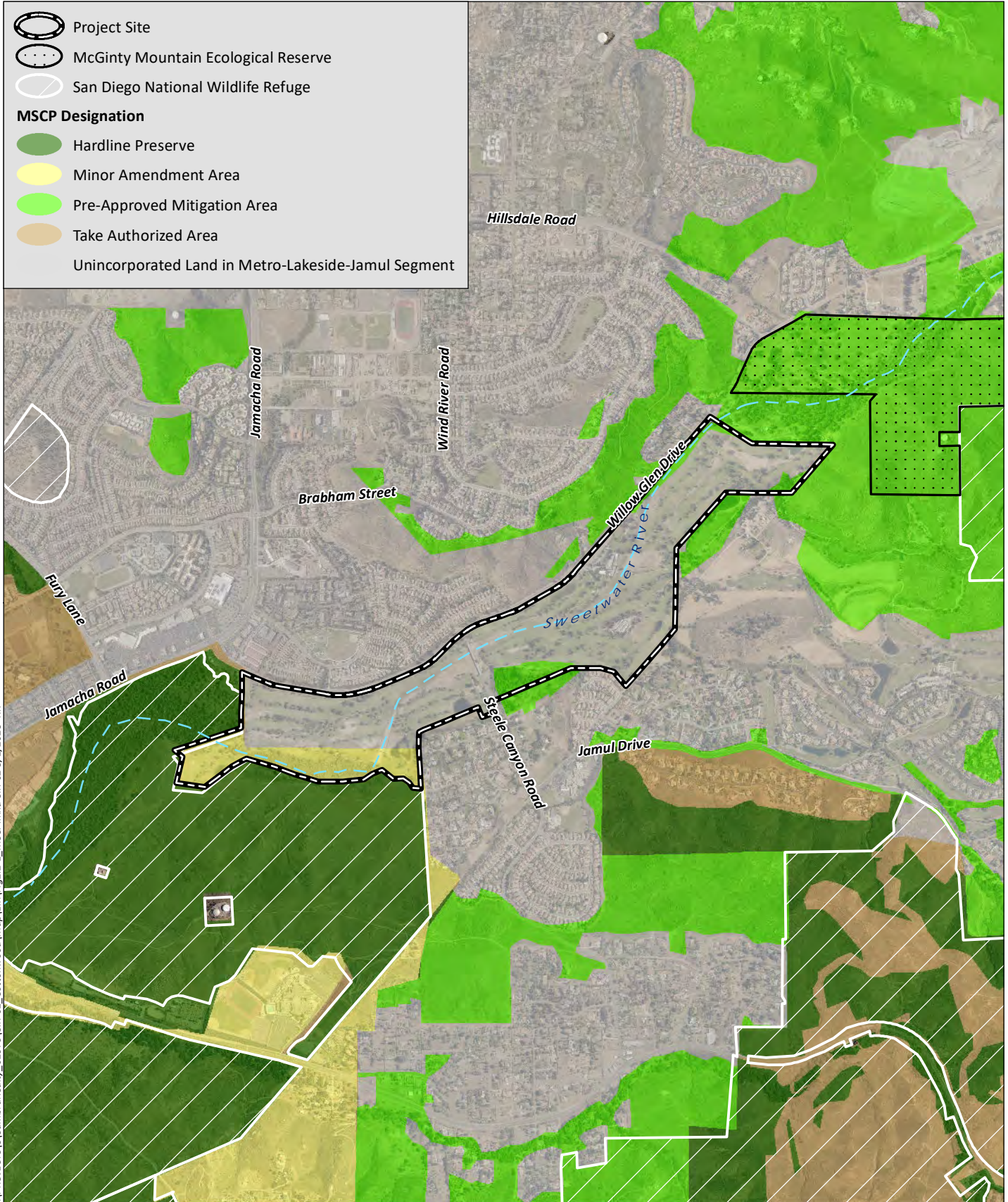
Proposed Mitigation	Level of Significance After Mitigation	Guideline Number
<p>M-BIO-10 Mitigation for 1.2 acres of impacts to Diegan coastal sage scrub shall occur at a 1.5:1 ratio through the on-site preservation of 1.8 acres of Tier II or Tier I habitat in the South County MSCP area within a biological resource core area. Mitigation shall occur through on-site preservation of 0.6 acre of Diegan coastal sage scrub and on-site revegetation of 11.3 acres of Diegan coastal sage scrub for a total of 11.9 acres of Tier II Diegan coastal sage scrub to be preserved within the biological open space easement.</p>	<p>Less than significant (Impacts BIO-2a, BIO-3a, BIO-3b, BIO-4, BIO-7)</p>	<p>1 2 3 7 13 28</p>
<p>M-BIO-11 Prior to any vegetation removal, grading, and/or other ground disturbing activities, a qualified biologist familiar with special status reptile and amphibian species behavior and life history shall conduct a pre-construction survey no more than two weeks prior to commencement of activities to determine whether reptile and amphibian species designated as sensitive by CDFW, but not covered under the County's MSCP, occur within proposed impact area(s). If special status reptile or amphibian species are detected during the pre-construction survey, consultation with CDFW shall be initiated to prepare species-specific protocols for proper handling and relocation procedures.</p>	<p>Less than significant (Impact BIO-2e)</p>	<p>2</p>
<p>M-BIO-12 If western spadefoot toads, tadpoles, or egg masses are identified within the proposed impact area(s), the following measures shall be implemented: (1) A suitable relocation site(s) outside the proposed impact area(s) shall be identified by a qualified biologist. The relocation site(s) shall be located a minimum of 50 feet outside of the proposed impact area(s), or 100 feet if available, and shall be approved by CDFW; (2) All western spadefoot adults, tadpoles, and egg masses encountered in the proposed impact area(s) shall be collected and released in the identified relocation site(s); (3) The relocation site(s) shall be monitored annually for five years during and immediately following peak breeding season (late winter to March), such that surveys can be conducted for adults as well as for egg masses and tadpoles. The results of annual monitoring shall be provided to CDFW in an annual report.</p>	<p>Less than significant (Impact BIO-2e)</p>	<p>2</p>

Proposed Mitigation	Level of Significance After Mitigation	Guideline Number
<p>M-BIO-13 Prior to the removal of mature trees or existing buildings/structures with potential to support roosting bats, a qualified biologist shall conduct an initial pre-construction survey no more than 30 days and no less than two weeks prior to commencement of tree removal or demolition activities to determine if roosting bats are present in the proposed impact area(s). A letter report summarizing the survey methods and results of the survey, including negative findings, shall be submitted to the County and CDFW for review at least two weeks prior the commencement of Project activities. If bats are detected within the proposed impact area(s) during the initial pre-construction survey, the letter report will identify measures to be implemented to avoid and minimize potential direct and indirect impacts to roosting bats, including those identified in this measure. A final pre-construction survey shall be conducted no more than three days (72 hours) prior to tree removal or demolition activities within the proposed impact area(s). If bats are not detected during the final pre-construction survey or determined to be absent from the proposed impact area, construction activities shall be allowed to proceed, and no additional measures would be necessary. If bats are detected during the final pre-construction survey, the following avoidance measures shall be implemented, depending on the time of year, including additional measures identified in the letter report. If an active maternity roost is detected during the bat maternity season (April 15 through August 15), the biologist shall flag the active roost site and construction activities shall avoid the roost site until after the maternity season (August 16), or until the qualified biologist has determined young are self-sufficiently volant (able to fly). If bats are detected and determined to be roosting within the proposed impact area(s) outside of the bat maternity season (August 16 through April 14), the biologist shall flag the active roost site and construction activities shall avoid roost sites until bats are no longer determined to be roosting as determined by the qualified bat biologist. Exclusion of roost sites, where feasible, outside of the bat maternity season may be conducted with approval of the County and CDFW. Methods of roost exclusion shall be determined in consultation with the County and CDFW.</p>	<p>Less than significant (Impacts BIO-2b, BIO-2f, BIO-3d)</p>	<p>2 3</p>
<p>M-BIO-14 The applicant shall dedicate 450.7<u>149.0</u> acres of biological open space to be managed by a long-term manager approved by the County in accordance with a Resource Management Plan. The biological open space easement shall include native habitat revegetation areas located within the expanded Sweetwater River floodplain and bordering constructed slopes. Permanent open space fencing and signage shall be installed around the perimeter of the biological open space as detailed in the final Resource Management Plan.</p>	<p>Less than significant (Impacts BIO-4, BIO-6, BIO-7)</p>	<p>1 2 3 7 8 13 16 33</p>

Proposed Mitigation	Level of Significance After Mitigation	Guideline Number
<p>M-BIO-15 The Project requires preparation of a Resource Management Plan (RMP) for on-site biological open space to be approved by the County and Wildlife Agencies (USFWS and CDFW). The RMP would provide direction for the permanent preservation and management of the on-site biological open space in accordance with County regulations.</p>	<p>Less than significant (Impacts BIO-4, BIO-6, BIO-7)</p>	<p>1 2 3 7 8 13 16 33</p>
<p>M-BIO-16 To help ensure errant impacts to sensitive vegetation communities outside of the impact footprint are avoided during construction, environmental fencing (including silt fencing where determined necessary by the SWPPP), would be installed at the edges of the impact limits prior to initiation of grading. All construction staging shall occur within the approved limits of construction.</p>	<p>Less than significant (Impacts BIO-7, BIO-8, BIO-9, BIO-10)</p>	<p>13 14 18</p>
<p>M-BIO-17 A qualified biologist shall monitor the installation of environmental fencing wherever it would abut sensitive vegetation communities, jurisdictional waters or wetlands, or open space. Prior to the installation of temporary fencing, the placement design should carefully consider potential impacts to wildlife movement patterns between the upstream and downstream riparian habitats adjacent to the Project site. The biologist also would conduct a pre-construction environmental training session for construction personnel prior to all phases of construction to inform them of the sensitive biological resources on site and avoidance measures to remain in compliance with Project approvals. The biologist shall monitor initial vegetation clearing, grubbing, and grading activities to ensure that activities occur within the approved limits of work and avoid impacts to nesting birds. The biologist shall periodically monitor the limits of construction and mining operations to ensure that mining and avoidance areas are delineated with temporary fencing and that fencing remains intact.</p>	<p>Less than significant (Impacts BIO-7, BIO-8, BIO-9, BIO-10)</p>	<p>13 14 18</p>
<p>M-BIO-18 Impacts to 0.60 acre of U.S. Army Corps of Engineers (USACE) wetland waters of the U.S. shall be mitigated a minimum 3:1 ratio and 0.36 acre of USACE non-wetland waters of the U.S. shall be mitigated at a minimum 1:1 ratio through one or a combination of the following: on-and/or off-site establishment, re-establishment, rehabilitation, and/or enhancement of 2.16 acres waters of the U.S.; and/or off-site purchase of waters of the U.S. credits at an approved mitigation bank, or other location deemed acceptable by the USACE. Any mitigation completed through purchase of mitigation credits shall be provided prior to issuance of a grading permit, and prior to use of the premises in reliance of this permit. Any applicant-initiated mitigation must be implemented prior to or concurrent with impacts to waters of the U.S. Impacts to waters of the U.S. would require issuance of a Section 404 CWA permit from the USACE prior to impacts.</p>	<p>Less than significant (Impact BIO-9)</p>	<p>14 18</p>

Proposed Mitigation	Level of Significance After Mitigation	Guideline Number
<p>M-BIO-19 Impacts to 1.14 acres of California Department of Fish and Wildlife (CDFW) jurisdictional riparian habitat (0.44 acre of southern cottonwood-willow riparian forest, 0.13 acre of southern willow scrub, 0.002 acre of freshwater marsh, 0.01 acre of arundo-dominated riparian, and 0.56 acre of disturbed wetland) shall be mitigated at a 3:1 ratio, totaling 3.42 acres of riparian habitat mitigation. Impacts to 17.06 acres of CDFW streambed shall be mitigated at a minimum 1:1 ratio through one or a combination of the following: on- and/or off-site establishment, re-establishment, rehabilitation, and/or enhancement of 17.06 acres of riparian and/or stream habitat; and/or off-site purchase of riparian and/or stream credits at an approved mitigation bank, or other location deemed acceptable by the CDFW. Combined mitigation for CDFW riparian habitat and streambed totals 20.48 acres. Any mitigation completed through purchase of mitigation credits shall be provided prior to the issuance of a grading permit, and prior to use of the premises in reliance of this permit. Any applicant-initiated mitigation must be implemented prior to or concurrent with impacts to CDFW habitat. Impacts to CDFW jurisdictional habitat would require issuance of a CFG Code Section 1602 Streambed Authorization Agreement from the CDFW prior to impacts.</p>	<p>Less than significant (Impact BIO-9)</p>	<p>13 14 18</p>
<p>M-BIO-20 The Project requires preparation of a wetland restoration plan for impacts to wetland habitat and jurisdictional waters to be approved by the County (wetland impacts only) and U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB) (impacts to waters of the U.S. and State, and CDFW riparian habitat and streambed), as applicable. Approval of the plan and/or acceptance of mitigation bank credits by the USACE, CDFW, and RWQCB shall be a condition of the associated wetland permits for the Project.</p>	<p>Less than significant (Impact BIO-9)</p>	<p>13 14 18</p>

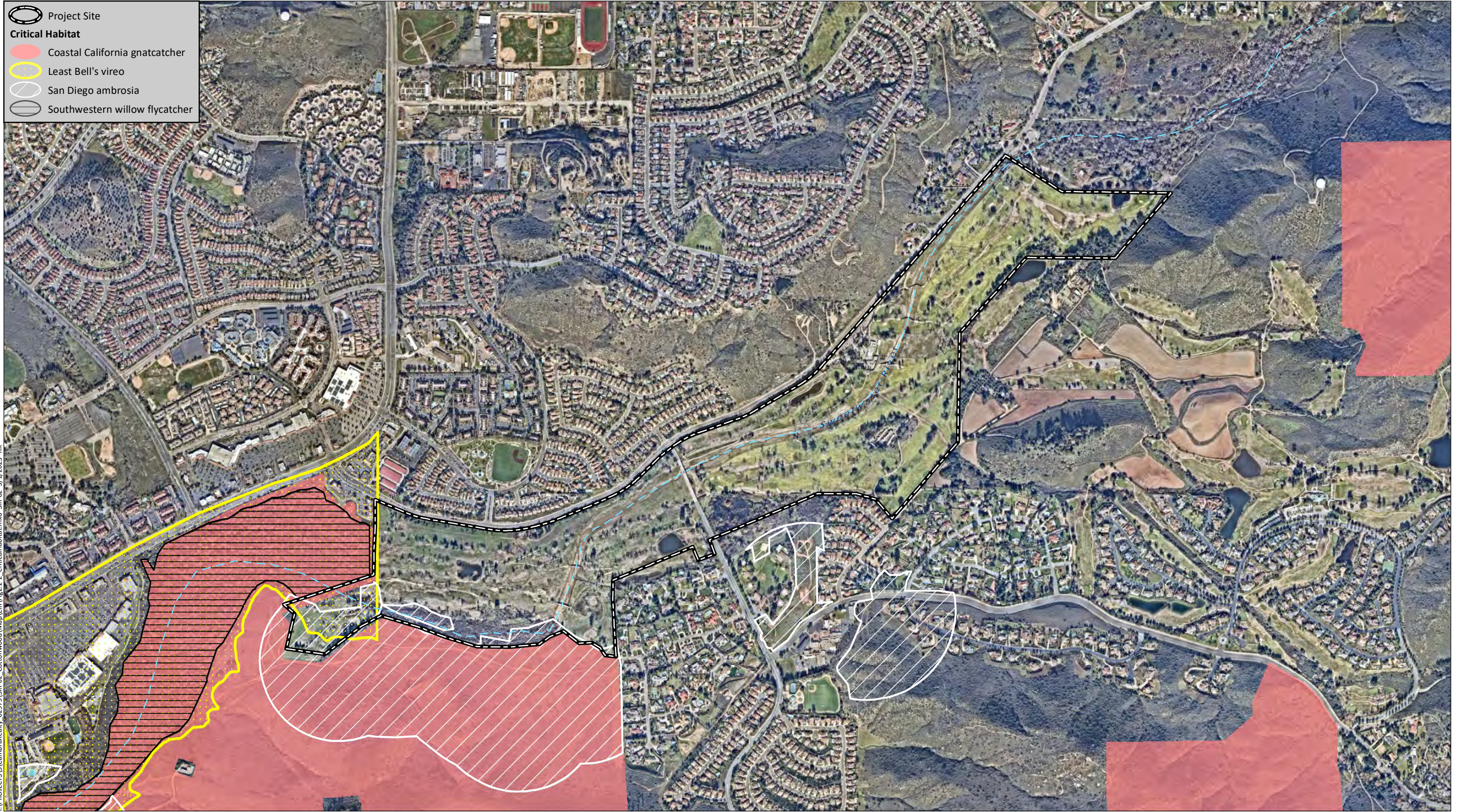
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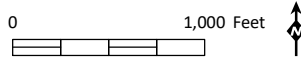
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Source: Aerial (SanGIS 2017); MSCP (County of San Diego, Department of Planning and Land Use 2015); NWR (U.S. Fish and Wildlife Service 2016); Ecological Reserves (CDFW 2013)

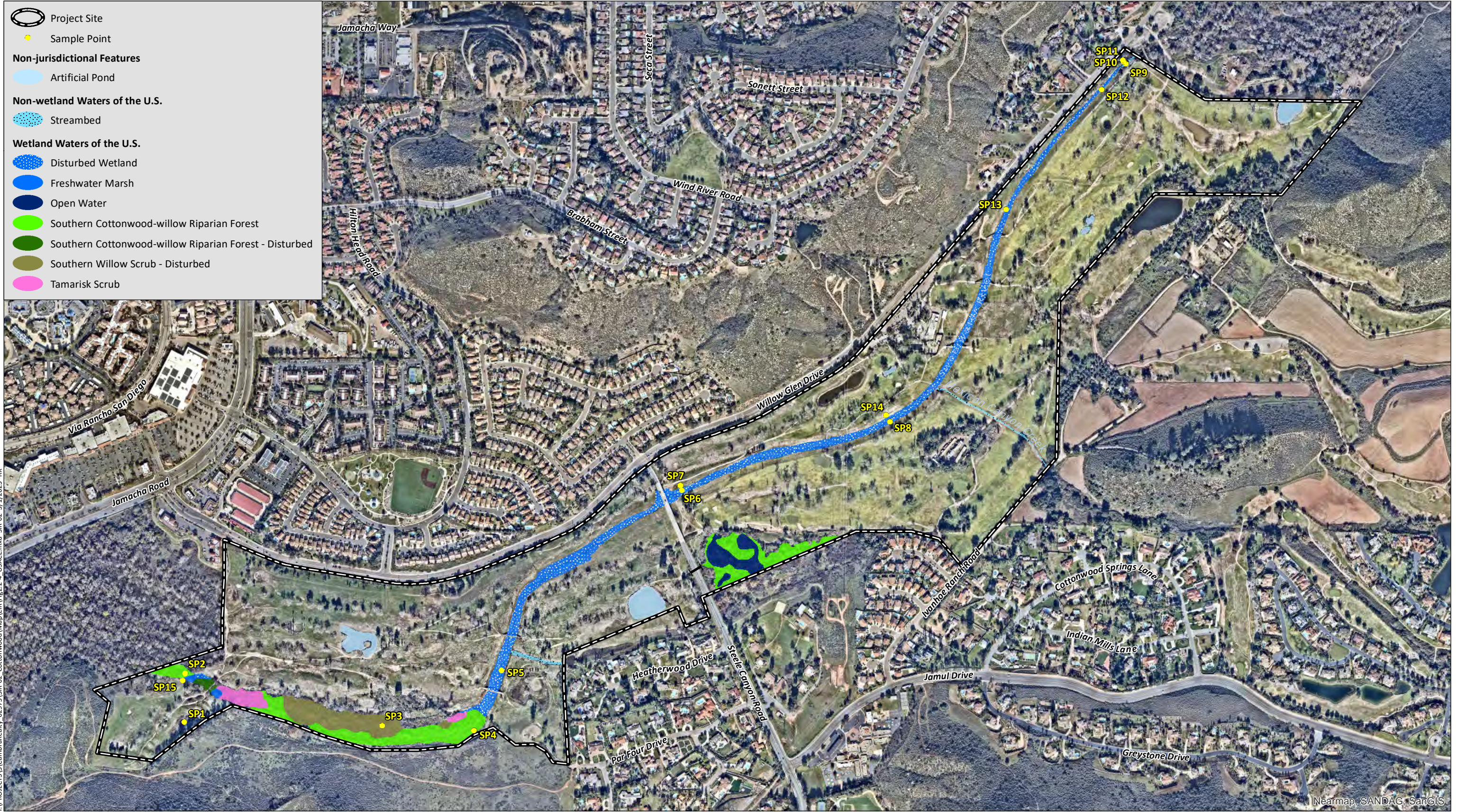
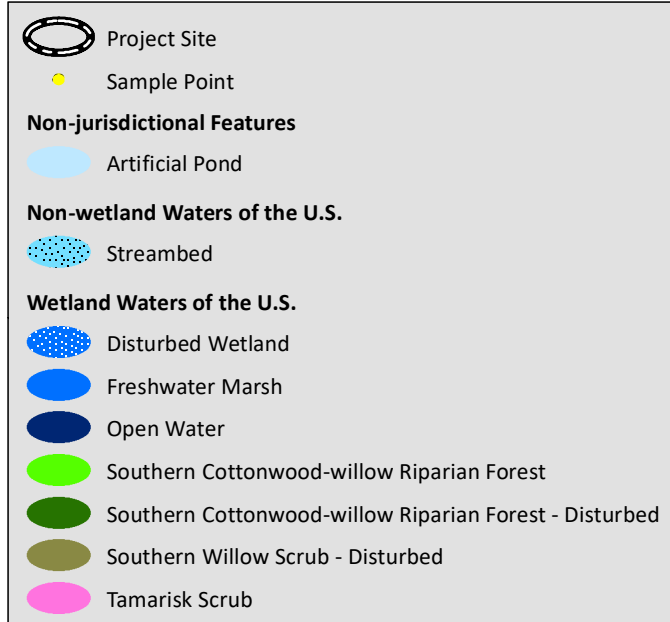
-  Project Site
- Critical Habitat**
-  Coastal California gnatcatcher
-  Least Bell's vireo
-  San Diego ambrosia
-  Southwestern willow flycatcher



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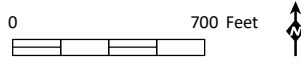






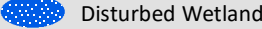
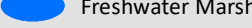

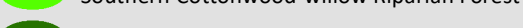
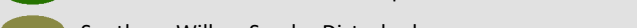
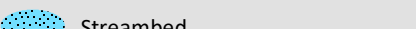


Source: Aerial (SanGIS 2019)

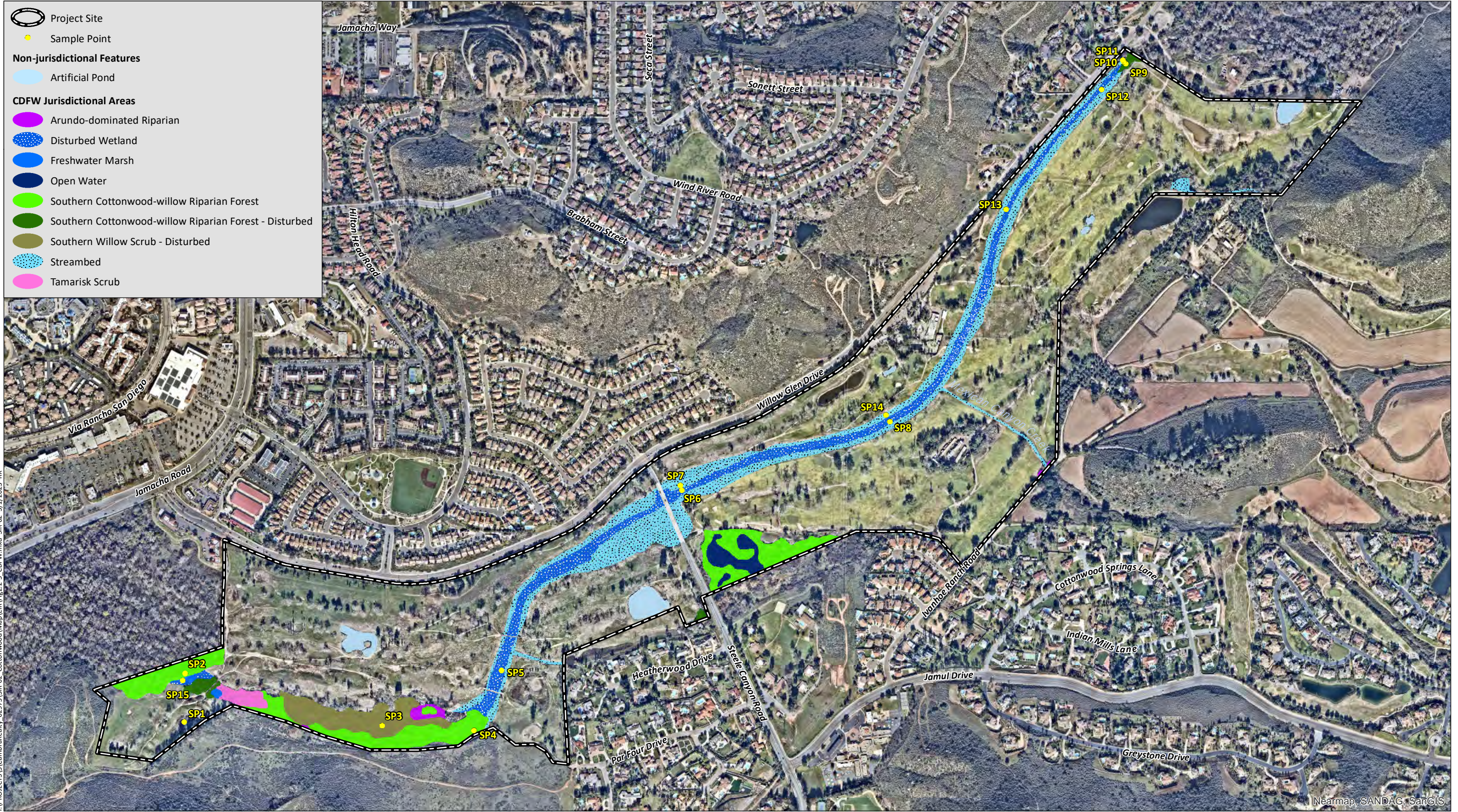


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Source: Aerial (SanGIS, 2019)



-  Project Site
-  Sample Point
- Non-jurisdictional Features**
-  Artificial Pond
- CDFW Jurisdictional Areas**
-  Arundo-dominated Riparian
-  Disturbed Wetland
-  Freshwater Marsh
-  Open Water
-  Southern Cottonwood-willow Riparian Forest
-  Southern Cottonwood-willow Riparian Forest - Disturbed
-  Southern Willow Scrub - Disturbed
-  Streambed
-  Tamarisk Scrub

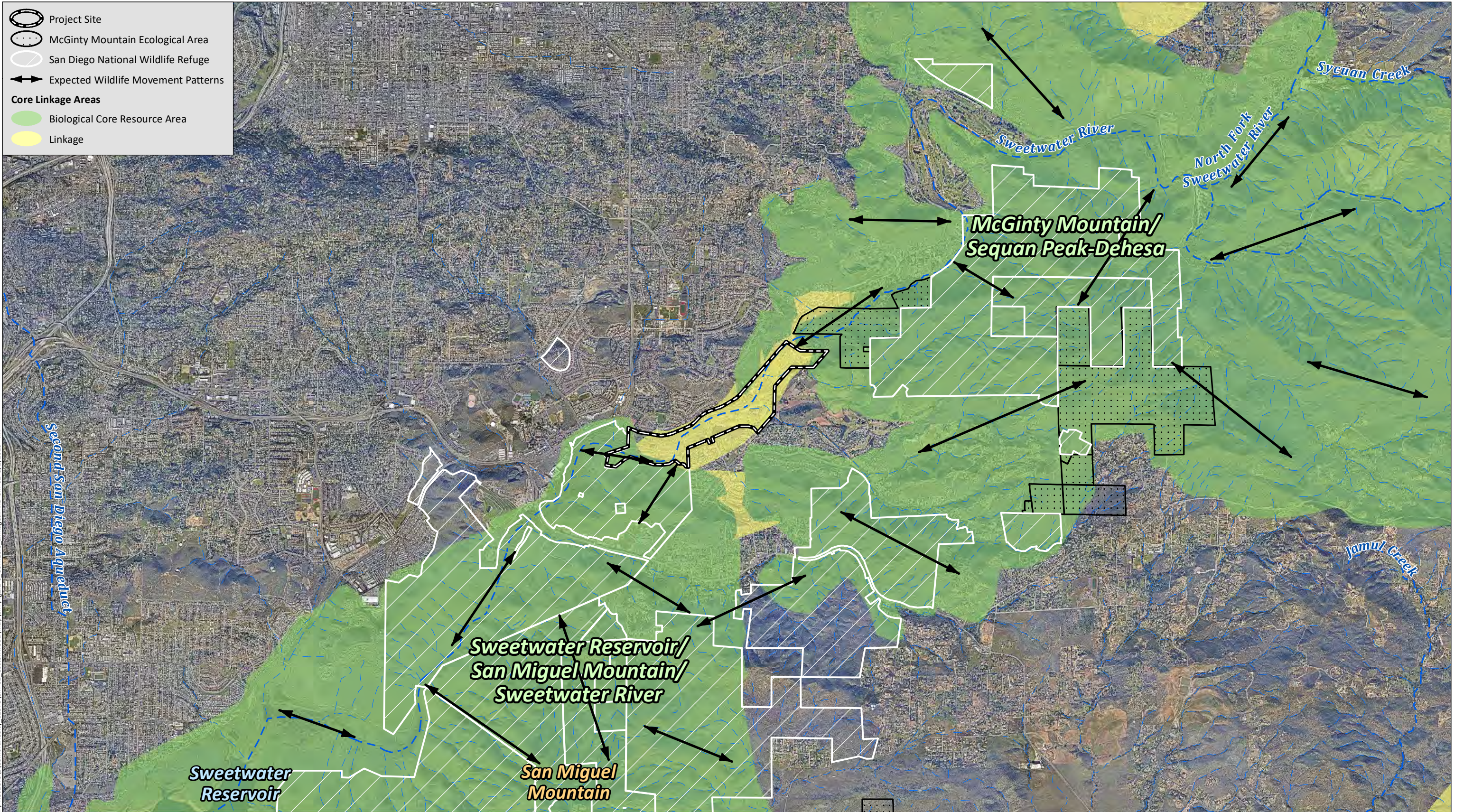


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Source: Aerial (SanGIS, 2019)

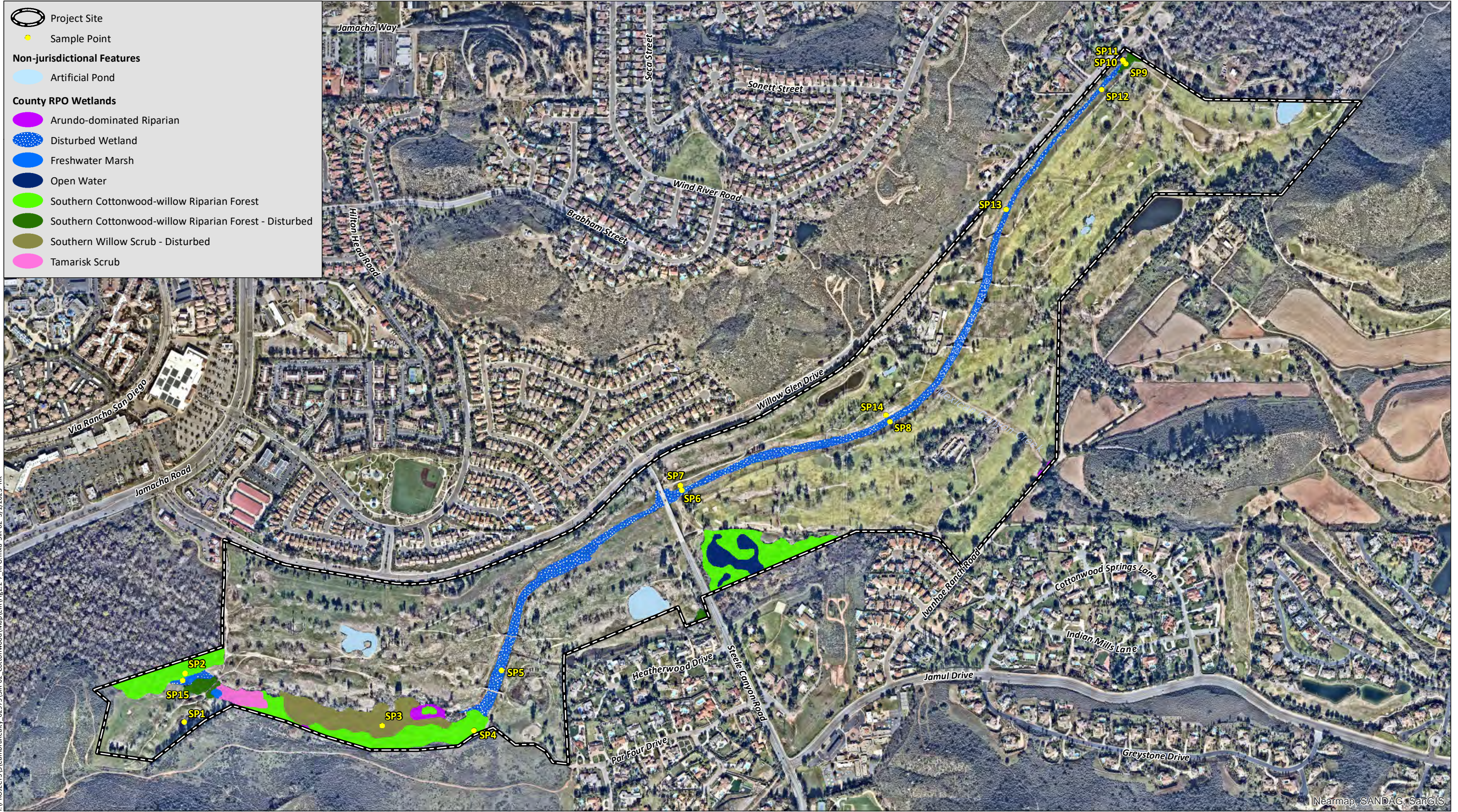
-  Project Site
-  McGinty Mountain Ecological Area
-  San Diego National Wildlife Refuge
-  Expected Wildlife Movement Patterns
- Core Linkage Areas**
-  Biological Core Resource Area
-  Linkage



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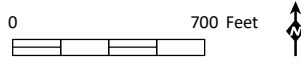
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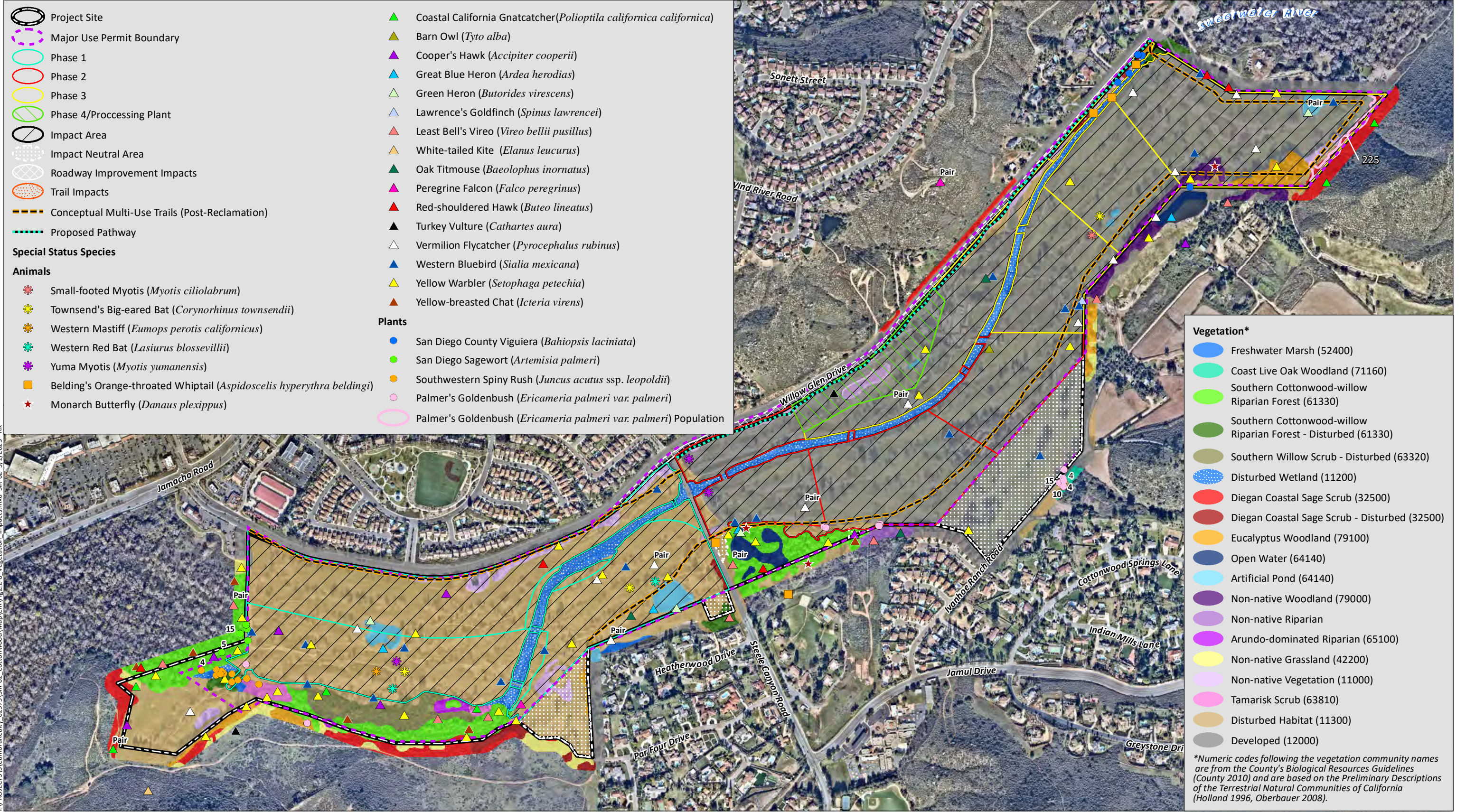
Project Site
 Sample Point
Non-jurisdictional Features
 Artificial Pond
County RPO Wetlands
 Arundo-dominated Riparian
 Disturbed Wetland
 Freshwater Marsh
 Open Water
 Southern Cottonwood-willow Riparian Forest
 Southern Cottonwood-willow Riparian Forest - Disturbed
 Southern Willow Scrub - Disturbed
 Tamarisk Scrub















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Source: Aerial (SanGIS, 2019)

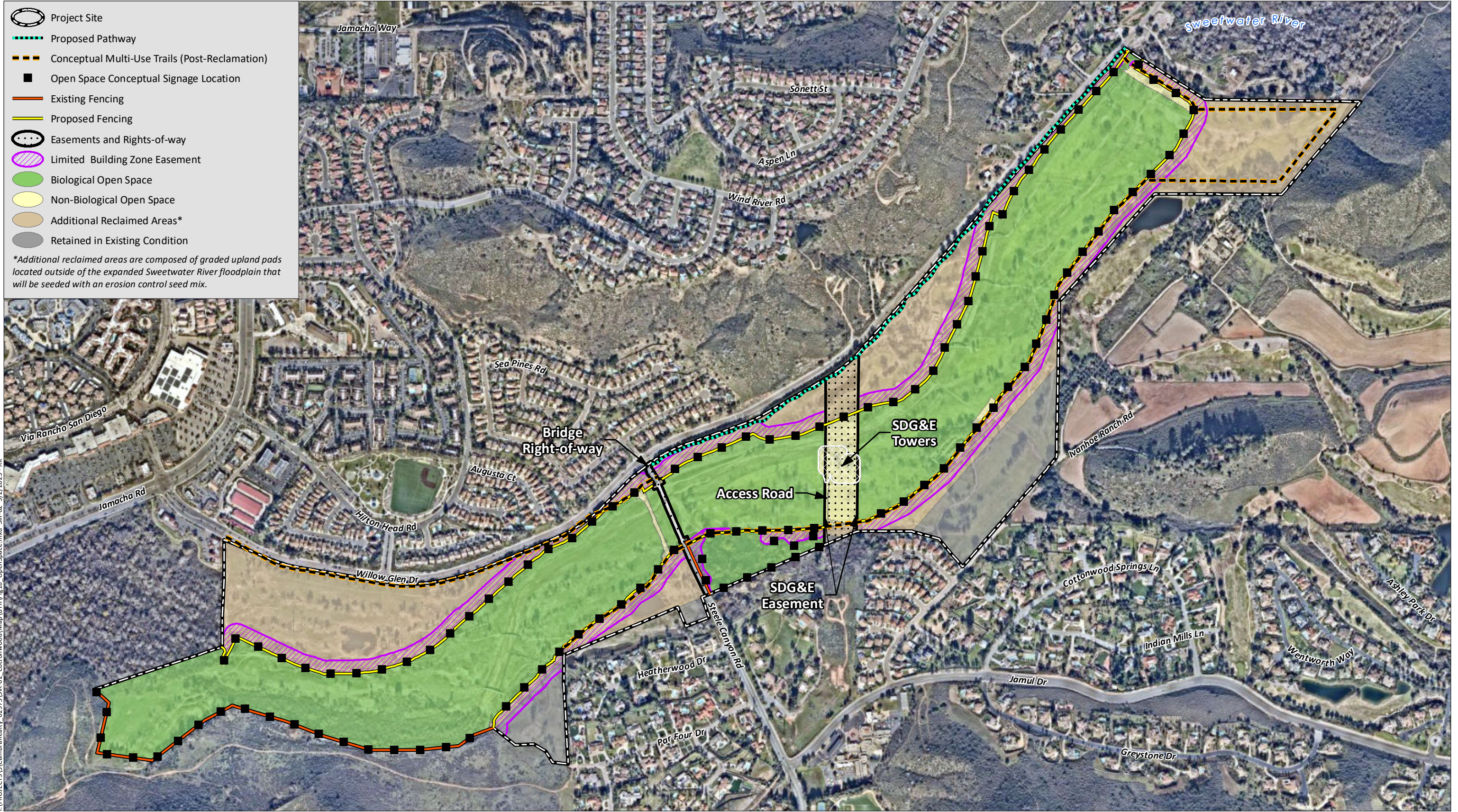




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-  Project Site
-  Proposed Pathway
-  Conceptual Multi-Use Trails (Post-Reclamation)
-  Open Space Conceptual Signage Location
-  Existing Fencing
-  Proposed Fencing
-  Easements and Rights-of-way
-  Limited Building Zone Easement
-  Biological Open Space
-  Non-Biological Open Space
-  Additional Reclaimed Areas*
-  Retained in Existing Condition

**Additional reclaimed areas are composed of graded upland pads located outside of the expanded Sweetwater River floodplain that will be seeded with an erosion control seed mix.*



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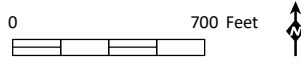
Source: Aerial (SanGIS, 2019)

- Project Site
- Impact Area
- Impact Neutral Area
- Roadway Improvement Impacts
- Sample Point
- Non-jurisdictional Features**
- Artificial Pond
- Non-wetland Waters of the U.S.**
- Streambed
- Wetland Waters of the U.S.**
- Disturbed Wetland
- Freshwater Marsh
- Open Water
- Southern Cottonwood-willow Riparian Forest
- Southern Cottonwood-willow Riparian Forest - Disturbed
- Southern Willow Scrub - Disturbed
- Tamarisk Scrub

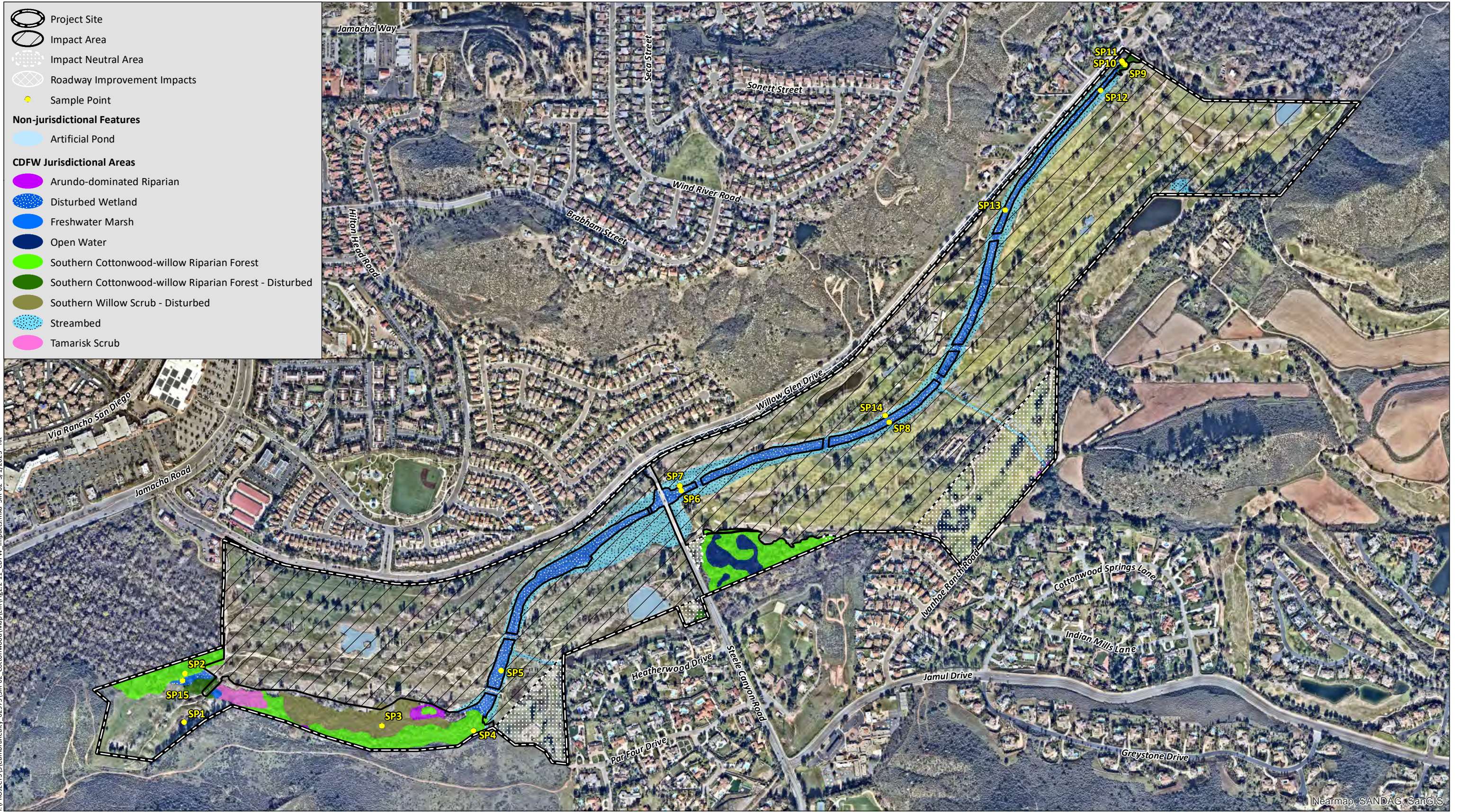


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Source: Aerial (SanGIS, 2019)

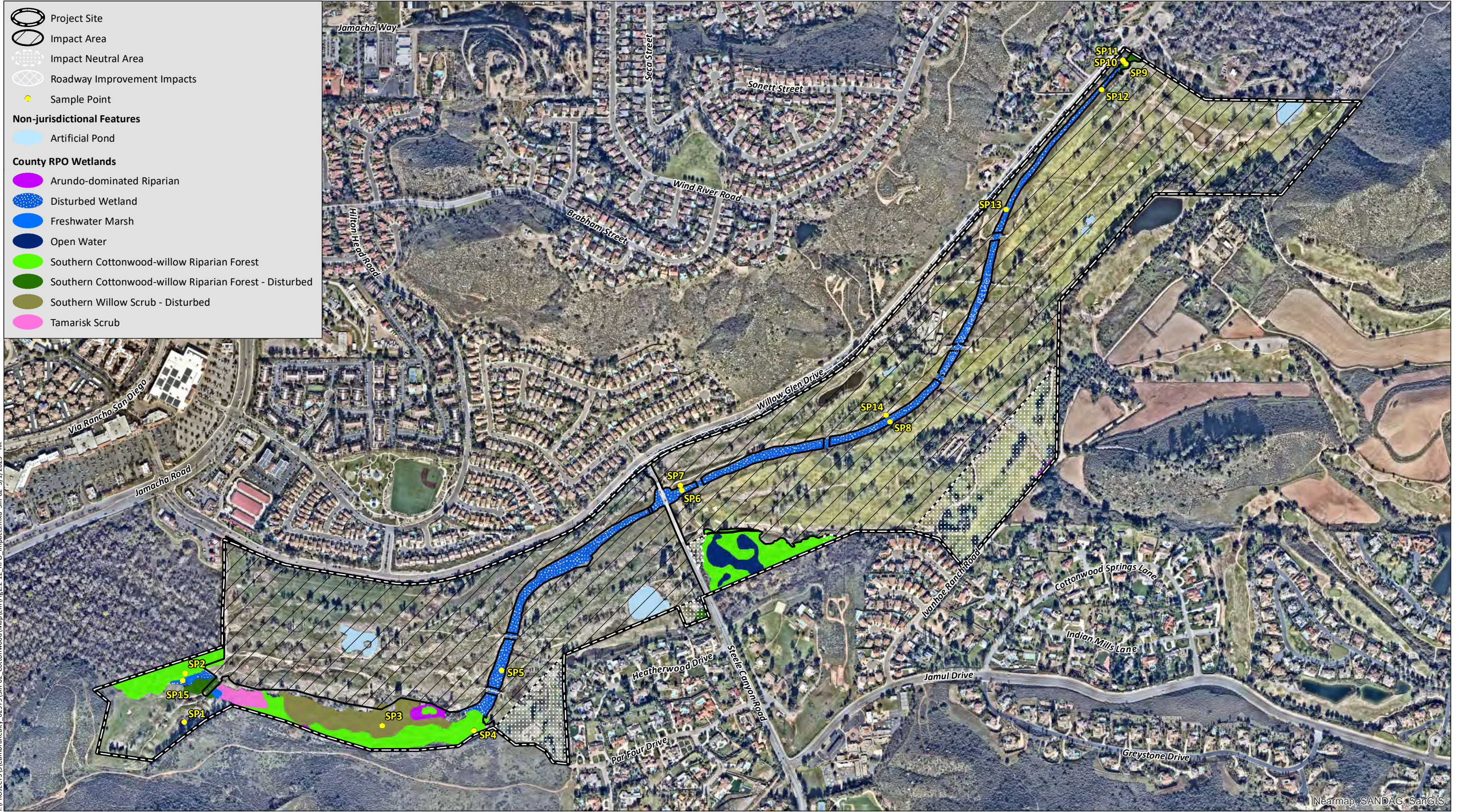
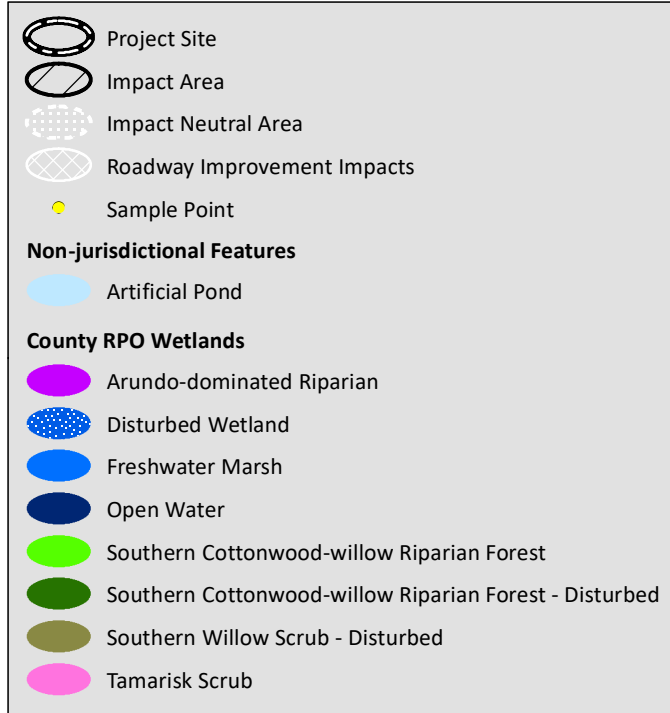


- Project Site
- Impact Area
- Impact Neutral Area
- Roadway Improvement Impacts
- Sample Point
- Non-jurisdictional Features**
- Artificial Pond
- CDFW Jurisdictional Areas**
- Arundo-dominated Riparian
- Disturbed Wetland
- Freshwater Marsh
- Open Water
- Southern Cottonwood-willow Riparian Forest
- Southern Cottonwood-willow Riparian Forest - Disturbed
- Southern Willow Scrub - Disturbed
- Streambed
- Tamarisk Scrub



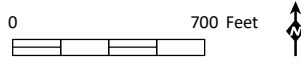
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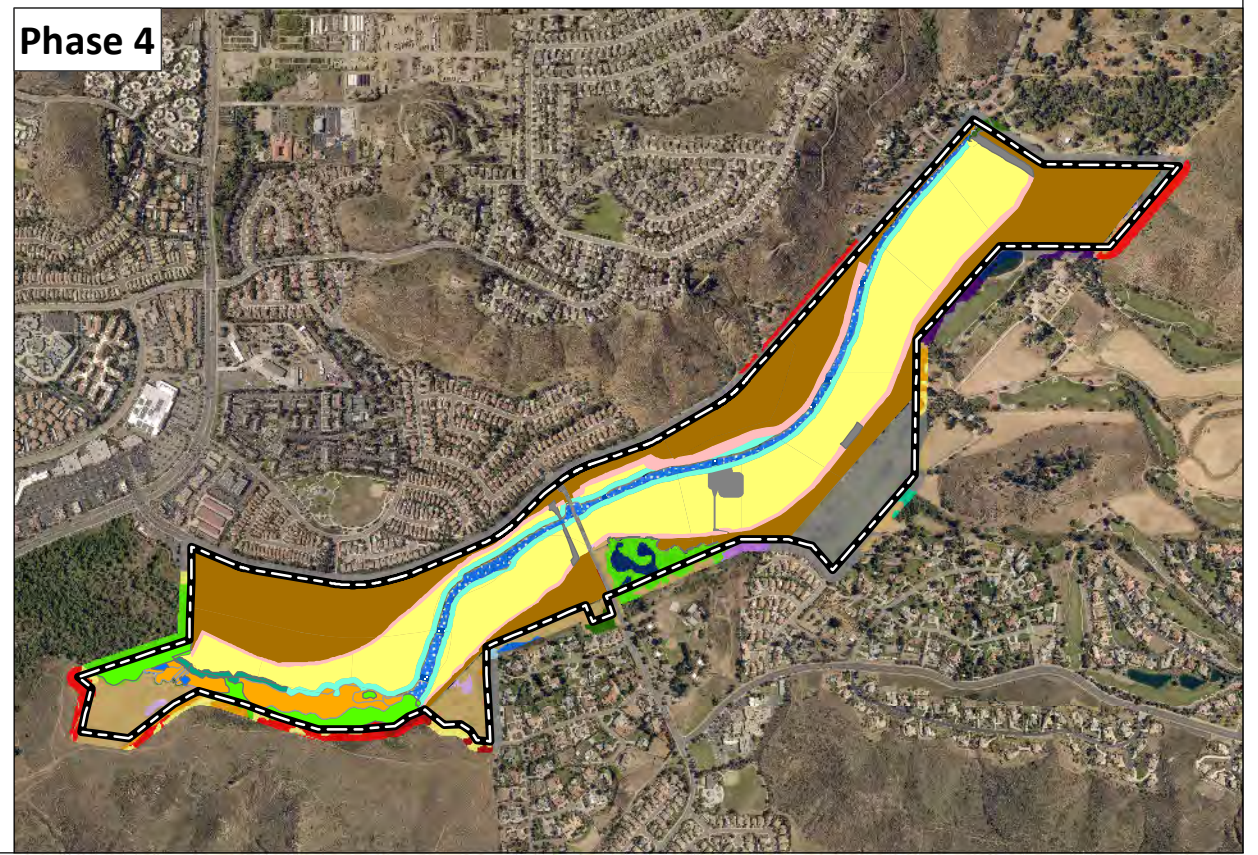
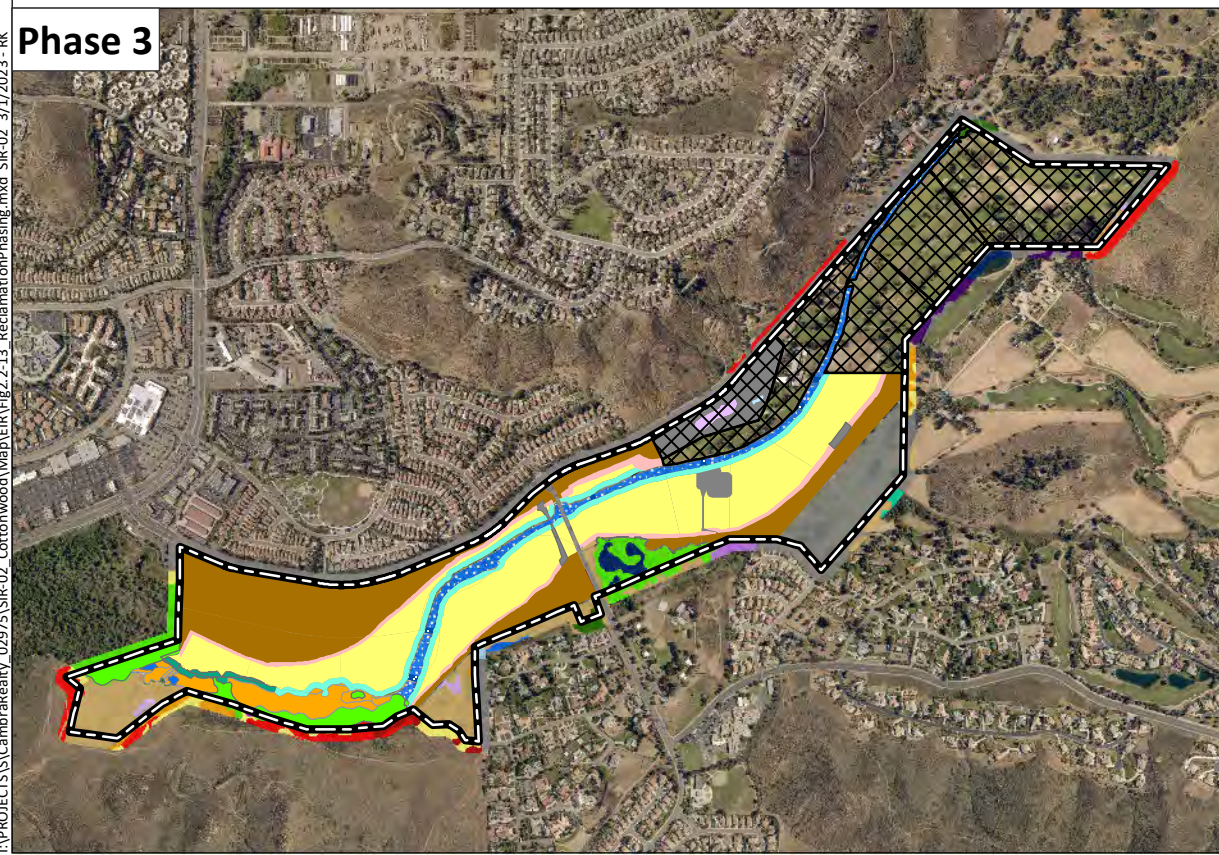
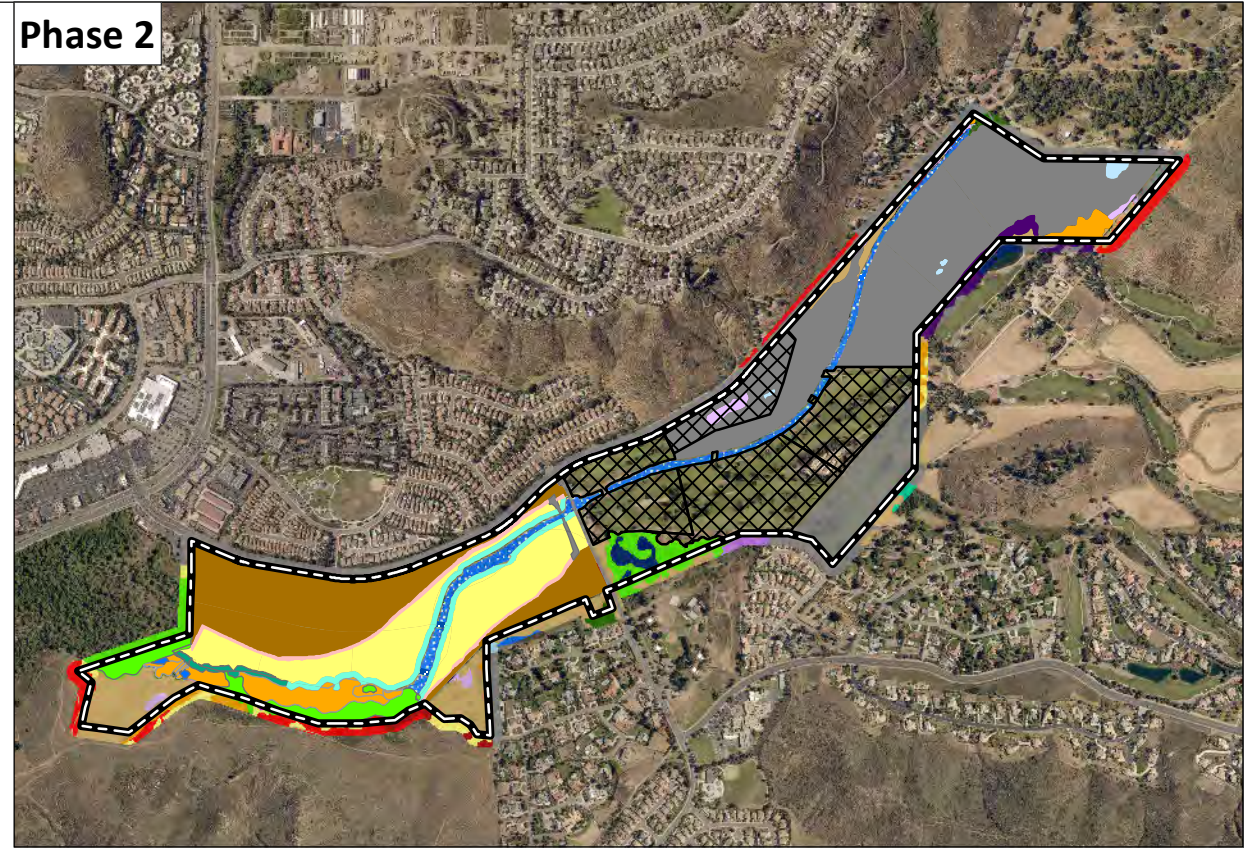
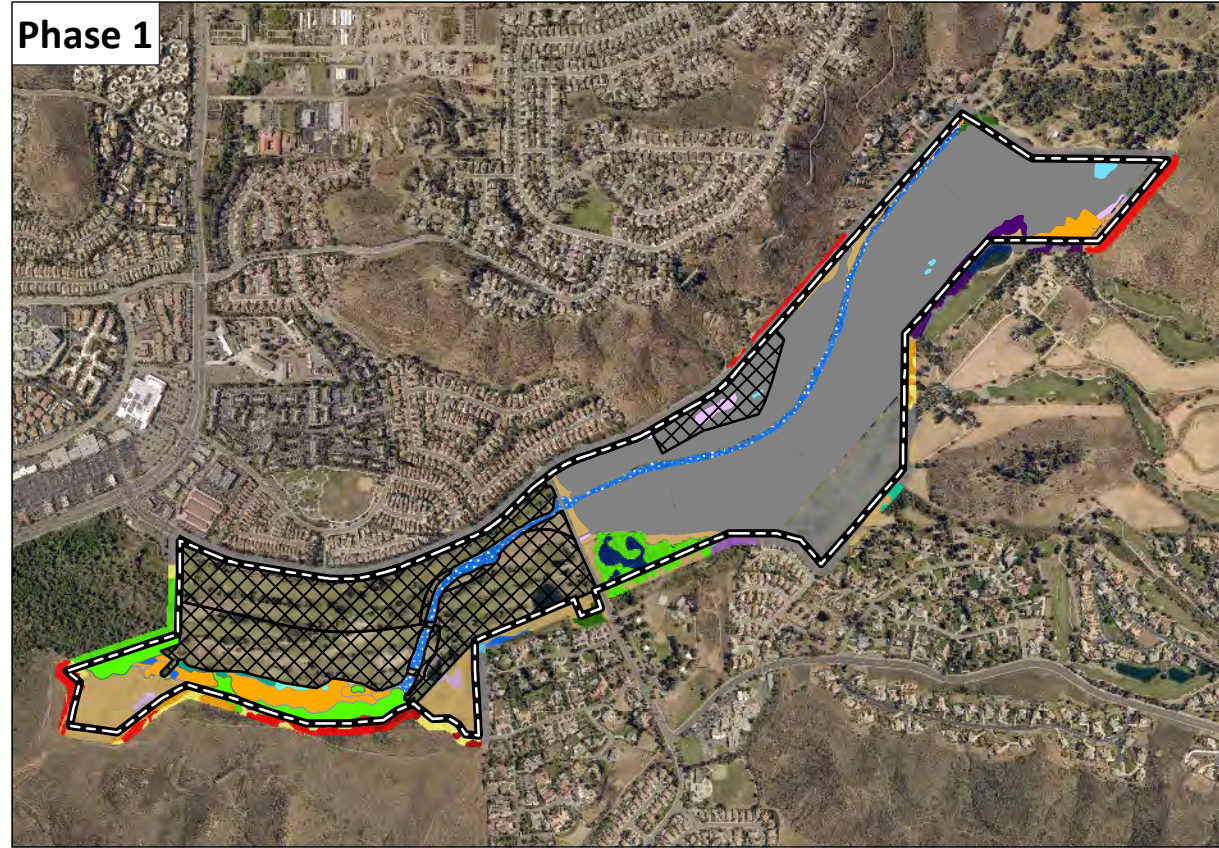
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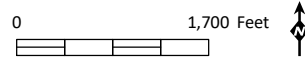
Source: Aerial (SanGIS, 2019)





- Project Site
- Disturbance Area
- Conceptual Reclamation Revegetation**
- Streambed
- Riparian Scrub
- Riparian Forest
- Coastal Sage Scrub
- Additional Reclaimed Areas
- Conceptual Compensatory Mitigation**
- Wetland Waters Re-establishment
- Riparian Forest
- Riparian Rehabilitation
- Riparian Scrub
- Vegetation**
- Freshwater Marsh (52400)
- Coast Live Oak Woodland (71160)
- Southern Cottonwood-willow Riparian Forest (61330)
- Southern Cottonwood-willow Riparian Forest - Disturbed (61330)
- Southern Willow Scrub - Disturbed (63320)
- Disturbed Wetland (11200)
- Diegan Coastal Sage Scrub (32500)
- Diegan Coastal Sage Scrub - Disturbed (32500)
- Eucalyptus Woodland (79100)
- Open Water (64140)
- Artificial Pond (64140)
- Non-native Woodland (79000)
- Non-native Riparian
- Arundo-dominated Riparian (65100)
- Non-native Grassland (42200)
- Non-native Vegetation (11000)
- Tamarisk Scrub (63810)
- Disturbed Habitat (11300)
- Developed (12000)

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Source: Aerial (SanGIS, 2017)