

### **2.3 Biological Resources**

This section describes the biological resources on the project site and in the surrounding area, and identifies impacts to those resources that would result from implementation of the proposed project. The project site and an associated 100-foot buffer surrounding the project site were analyzed as the biological study area (BSA) for the proposed project.

The analyses in this section are based on a review of project documents, existing available information for the BSA, and field surveys conducted for the proposed project. Project documents include the Biological Resources Report (ESA 2018a), El Monte Valley Tree Assessment Memorandum (ESA 2015a), Least Bell's Vireo Survey Memorandum (ESA 2015b), and Coastal California Gnatcatcher Survey Memorandum (ESA 2015c) which are included in Appendix G; the Jurisdictional Delineation Report (ESA 2018b) which is included in Appendix H; the Conceptual Revegetation Plan (ESA, 2018c) which is included in Appendix I; and the Reclamation Plan (ESA 2018d) which is included as Appendix J of this EIR.

Additional available background information that was reviewed for biological resource analyses conducted for this project includes the following:

- Proposed project grading plans, site plans, plot plans, and designs
- El Capitan Golf Course Project EIR (EnviroMINE 1999)
- El Monte Nature Park Biological Technical Report (EDAW Inc., 2007)
- Draft El Monte Valley Mining, Reclamation, and Groundwater Recharge Project (ESA 2011a)
- USGS San Diego River Least Bell's Vireo Summary Report (Lynn et al. 2009)
- El Monte Valley Oak Tree Assessment (ESA 2011b)
- Jurisdictional Determination and Wetland Delineation (ESA 2011)
- Focused Surveys for Least Bell's Vireo (ESA 2010)
- Summary of focused herpetological surveys conducted by USGS for El Monte Valley, (Richmond et al. 2016).

Available information on regional data resources that were reviewed include the following:

- Aerial photography covering the project site and surrounding area
- National Wetlands Inventory (NWI 2011) and USGS topographic maps (USGS 2011)
- Soils survey information within the BSA (Bowman 1973)

- the County's Comprehensive List of Sensitive Species
- California Natural Diversity Data Base (CNDDB) information regarding species potential to occur within the BSA and 5-mile radius (CDFW 2015)
- United States Fish and Wildlife Service (USFWS) species database regarding federally listed species' potential to occur within the BSA and 5-mile radius (USFWS 2015a)
- USFWS Designated Critical Habitat data (USFWS 2015b) within a 5-mile radius of the proposed project

Sensitive species were then evaluated for their potential to occur within the BSA based on species' habitat requirements, habitat conditions onsite, known species distribution, and recorded observations.

Field surveys of the BSA were conducted in 2006, 2010, 2011, 2015, 2016, and 2017 to document the existing site conditions, map vegetation types, and determine the presence or absence of rare plants and target wildlife species.

Reconnaissance surveys were conducted on foot throughout the BSA in 2006, 2010, and 2015 using walking transects, with focused survey effort conducted in areas of suitable habitat specifically for rare plants, coastal California gnatcatcher (*Polioptila californica californica*) and least Bell's vireo (*Vireo bellii pusillus*). Additionally, although it was ultimately determined at the conclusion of surveys that suitable Quino checkerspot butterfly (*Euphydryas editha quino*; Quino) habitat does not occur on the site, a focused habitat assessment was conducted in 2017 because the project site occurs within the Quino survey area designated by the USFWS. All plant and wildlife species observed were recorded (see the Biological Resources Report in Appendix G). Binoculars and field guides were used for identification, as necessary.

Vegetation classification mapping was conducted for the BSA in 2006, 2010, and 2016. Vegetation classification based on the composition and structure of the dominant vegetation observed at the time field reconnaissance was conducted. Habitat types are based on Oberbauer et.al. (2008).

Focused surveys were conducted for least Bell's vireo, a state and federally-listed endangered species and a County Group 1 species, in 2010 and 2015, and focused surveys were conducted for coastal California gnatcatcher, a federally threatened species, a California Species of Special Concern, and a County Group 1 species, in 2015. The purpose of the survey was to determine the presence or absence of least Bell's vireo and coastal California gnatcatcher in potentially suitable habitat within the survey area. Coastal California gnatcatcher was detected within the BSA during 2015 surveys. Least Bell's vireo was detected during the 2010 and 2015 protocol surveys. ESA delineated jurisdictional resources in 2010 and 2016 according to general methodology detailed in the 1987 United States Army Corps of Engineers (USACE) Manual and

the 2008 Arid West Supplement. Both the USACE Manual and Arid West Supplement were used for the determination and evaluation of any normal circumstances, atypical situations, and problem area wetlands.

In addition, the Conceptual Revegetation Plan prepared for this proposed project also incorporates riparian habitat mitigation required for impacts that occurred on the property in 2005 to disturbed riparian habitat (tamarisk scrub). In 2005, grading that had been underway on the El Monte project site for a previously approved golf course project was halted and the golf course project was not completed. As a result, 200.56 acres of the El Monte mine project site was disturbed by the grading activities, 91.86 acres of which are located within the currently proposed mine impact area and 108.7 which are located outside of the currently proposed mine impact area. As part of the entitlement process for the golf course project, biological resource-related EIR mitigation measures (as documented in the EIR for the golf course project) and golf course project conditions of approval were adopted and were required to be implemented to mitigate golf course-related grading impacts to onsite biological resources. The EIR mitigation measures and conditions of approval were never implemented, and as a result, are now being included with the biological resource mitigation measures for the proposed mine project. A total of 0.18 acre of disturbed riparian scrub was impacted by the golf course project grading outside of the proposed mine impact area which requires mitigation, and the balance of the golf course-related grading impacts outside of the mine impact area were to agricultural land which does not require mitigation. Golf course-related grading biological resource impacts to the area currently proposed for the mine area are covered by the proposed mine project biological resource mitigation measures. The previous golf course-related impact to 0.18 acre of disturbed riparian scrub is now being incorporated in this Revegetation Plan and mitigated at the current County of San Diego 3:1 replacement ratio (for impacts to riparian scrub habitat) through the restoration of 0.54 acre of riparian scrub onsite. This golf course-related grading impact and mitigation measure has been incorporated into the proposed mine project Revegetation Plan, Reclamation Plan and biological resources EIR section.

### **2.3.1 Existing Conditions**

#### **2.3.1.1 Existing Setting**

##### Land Uses

Existing land uses on the project site are designated by the County of San Diego General Plan as Public Agency Lands (County of San Diego 2011) and include disturbed and undisturbed vacant land. Existing land uses surrounding the project area include low-density residential housing, agricultural lands, dairy farming, public utilities, and undeveloped steep slopes. Informal trails established by equestrians and hikers occur throughout the project site and surrounding area. Crops typically grown in the area include bamboo shoots, chives, and snow

peas. Areas north of the river include farmland, residences, an active dairy farm, and undeveloped steep slopes. The San Diego River channel runs from east to west along the central portion of the property.

### Onsite Vegetation Communities and Land Cover Types

Eleven vegetation communities/land cover types as defined by the Holland classification system as modified by Oberbauer (Holland 1986, Oberbauer et al. 2008) were recorded within the BSA, including four riparian/wetland habitats (southern cottonwood-willow riparian forest, southern willow scrub, tamarisk scrub, and non-vegetated channel), four upland habitats (Diegan coastal sage scrub, southern mixed chaparral, non-native grassland, eucalyptus woodland) and three other cover types (agriculture, disturbed habitat, and developed areas). In addition to these vegetation communities defined by Holland/Oberbauer, mature riparian woodland, which is defined in the County of San Diego Resource Protection Ordinance (RPO), was mapped as an overlay atop the Holland/Oberbauer mapping. Figure 2.3-1 shows the vegetation communities, and Table 2.3-1 lists the acreages of each habitat and vegetation type, within the BSA. Most of these onsite communities were noticeably degraded or recovering from past disturbances. Approximately 23.93 acres of the total 479.5-acre project site consist of native habitat types. The most abundant land cover type within the BSA is disturbed habitat. Each of these habitats and land cover types is described in more detail in the Biological Resources Report in Appendix G.

### Jurisdictional Delineation

Federal, State, and County jurisdictional waters are present onsite (Figure 2.3-2). Federal jurisdiction is limited to the low flow channels within the San Diego River Channel. Adjacent riparian communities were not considered to be under the jurisdiction of the USACE due to the lack of hydrology indicators.

All channels and riparian habitat within the San Diego River were considered to be California Department of Fish and Wildlife (CDFW) and County jurisdictional wetland habitat. The tamarisk scrub outside the channel on the adjacent flats outside the 100-year floodplain was not considered to be CDFW or County wetland habitat due to the lack of a streambed setting. The small pond near the northeastern corner of the property shown on Figure 2.3-2 was considered to be County, State, and Federal jurisdictional wetlands based on its source being a stream and its proximity to regulated features within the San Diego River.

Jurisdictional riparian habitat varies in quality along the river. Areas of tamarisk scrub range from moderately dense to relatively sparse with more bare ground and smaller less developed habitat structure within the less dense areas. The native riparian habitats onsite are all in a disturbed condition but do provide relatively high quality habitat especially when compared to the tamarisk scrub onsite. Prior to the 2015 focused species surveys, least Bell's vireo were

observed in the most extensive patches of native habitats and were primarily associated with the disturbed cottonwood-willow forest found onsite.

The Jurisdictional Delineation Report (Appendix H) concluded that wetland function related to hydrologic and biogeochemical functions are limited due to the lack of regular or substantial flooding and short residence time due to sandy and highly impervious soils. When flooding and flow do occur, this reach of the San Diego River functions as a losing stream and would be expected to contribute to groundwater recharge, and to a limited extent, flood control.

Wetland value and anthropomorphic benefits such as commercial enterprise, recreation and waste assimilation, and non-market values (e.g., aesthetics, uniqueness, and heritage) are not high due to limited access to the public, the lack of current commercial use, and the nonnative status of the majority of the riparian and streambed habitat onsite.

### Plant Species

The majority of the plant species within the BSA are non-native species. This is consistent with the prevalence of non-native communities that are disturbance-related and typically dominated by exotic, invasive plant species. Of the approximately 564.65-acre BSA, approximately 526.01 acres consists of non-native habitats and urban/developed land cover types, including disturbed habitat (259.31 acres), developed land cover type (17.82 acres), agriculture land cover type (1.59 acres), non-native grassland (151.75 acres), tamarisk scrub (92.22 acres), and eucalyptus woodland (3.32 acres). Native habitats including southern cottonwood-willow riparian forest, southern willow scrub, nonvegetated channel, coastal sage scrub, and chaparral account for approximately 38.64 acres of the BSA. In 2010, coast live oak trees were mapped onsite. Although the oak trees were not dense enough to be classified as an oak woodland community or forest community, these individual trees provide nesting habitat for raptors and a variety of other native bird species. A total of seven oak trees have been documented within the limits of disturbance. A complete list of plant species observed within the proposed BSA is presented in Appendix D of the Biological Resource Assessment, in which is Appendix G of this Draft EIR.

### *Sensitive Plant Species*

Appendix C of the Biological Resources Report (Appendix G) lists the names, conservation status, and habitat requirements for special-status plant species that are known to occur or that have the potential to occur within the BSA and surrounding area, as well as an assessment of the overall potential for those species to be present. The Biological Resource Report evaluated special-status plant species for their potential to occur within or adjacent to the BSA. Two plant species, San Diego sagewort (*Artemisia palmeri*), and decumbent goldenbrush (*Isocoma menziesii* var. *decumbens*), were evaluated to have a high potential to

occur based on significant suitable habitat present. An additional species, a single Palmer's goldenbrush (*Ericameria palmeri* var. *palmeri*) was present in 2010 and 2015. The remaining species were determined to have low potential to occur based on the overall degraded nature of the suitable habitats within the BSA.

Palmer's goldenbrush is a California Rare Plant Rank (CRPR) 1B.1, Narrow Endemic, and San Diego County List B sensitive plant species. During 2015 surveys, a single Palmer's goldenbrush shrub was observed within the BSA in the central portion of the riverbed interspersed with non-native grasses. This shrub is located within the area mapped as Mature Riparian Woodland, which would be avoided by the proposed project. Because only one shrub was found, this occurrence is not considered to be locally or regionally significant.

San Diego sagewort is a CRPR 4.2, San Diego County List D plant species. Although San Diego sagewort was not observed within the BSA, there is a high potential for this species to occur for the following reasons: 1) there is suitable upland and riparian habitat within the BSA; 2) the BSA includes appropriate sandy soils; and 3) this species was observed in 2010 and 2015 just downstream of the BSA.

Decumbent goldenbrush is a CRPR 1B.2 San Diego County List A sensitive plant species. Although decumbent goldenbrush was not observed within the BSA, there is a high potential for this species to occur for the following reasons: 1) there is suitable upland habitat within the BSA, 2) the BSA includes appropriate sandy soils; 3) this species often occurs within disturbed sites; 4) this species has been documented from less than one-mile north of the BSA.

### Wildlife Species

The BSA contains habitats suitable for a variety of wildlife commonly observed in areas that have undergone modification and/or degradation, such as in the disturbed areas, non-native grassland and tamarisk scrub. Common wildlife observed during field surveys included house finch (*Carpodacus mexicanus*), common raven (*Corvus corax*), mourning dove (*Zenaida macroura*), California towhee (*Pipilo crissalis*), side-blotched lizard (*Uta stansburiana*), western fence lizard (*Sceloporus occidentalis*), California ground squirrel (*Spermophilus beecheyi*), and Audubon's cottontail (*Sylvilagus audubonii*).

There are a number of resident bat species that could occur within the BSA based on the presence of riparian habitat and open water in the vicinity. Most bats with the potential to occur are either inactive during the winter (hibernate) or migrate south to warmer climates. Common bat species with the potential to forage within the BSA include California myotis (*Myotis californicus*), big brown bat (*Eptesicus fuscus*), and Brazilian free-tailed bat (*Tadarida brasiliensis*). Indirect observations of various larger species, which include visible scat and

prints, indicate that coyote (*Canis latrans*) and bobcat (*Lynx rufus*) are present onsite. Larger mammals that may occur within the BSA include raccoon (*Procyon lotor*), western spotted skunk (*Spilogale gracilis*), striped skunk (*Mephitis mephitis*), mountain lion (*Felis concolor*), and mule deer (*Odocoileus hemionus*). A complete list of wildlife observed onsite is presented in Appendix D of the Biological Resources Report (Appendix G of this EIR), which includes recent observations made by USGS biologists (Richmond et al. 2016), ESA biologists (2016) and past observations (2006, 2010).

### *Sensitive Wildlife Species*

Appendix C of the Biological Resources Report (Appendix G), lists the names, conservation status, and habitat requirements for special-status wildlife species that are known to occur or that have the potential to occur within or adjacent to the BSA, as well as an assessment of the overall potential for those species to be present. Based on field surveys and the literature review, the Biological Resources Report evaluated 33 special-status wildlife species for their potential to occur within or adjacent to the BSA (2 invertebrates, 11 amphibian and reptiles, 15 birds, and 5 mammals). Twenty-one special-status wildlife species were observed within the BSA throughout all three survey years. These include western spadefoot toad (*Spea hammondi*), orange-throated whiptail (*Aspidoscelis hyperythrus*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), coast horned lizard (*Phrynosoma blainvillei*), southern California legless lizard (*Anniella stebbinsi*), San Diego banded gecko (*Coleonyx variegatus abbotti*), coast patch-nosed snake (*Salvadora hexalepis virgulata*), glossy snake (*Arizona elegans*), red-diamond rattlesnake (*Crotalus ruber*), Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), red-shouldered hawk (*Buteo lineatus*), turkey vulture (*Cathartes aura*), osprey (*Pandion haliaetus*), yellow warbler (*Setophaga petechia*), white-tailed kite (*Elanus leucurus*), yellow-breasted chat (*Icteria virens*), loggerhead shrike (*Lanius ludovicianus*), coastal California gnatcatcher, least Bell's vireo, and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). Two wildlife species have a **high potential** to occur within the BSA based on suitable habitat present onsite; these include two-striped garter snake (*Thamnophis hammondi*) and golden eagle (*Aquila chrysaetos*). Five wildlife species have a **moderate potential** to occur within the BSA due to the presence of marginally suitable habitat onsite; these include southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Swainson's hawk (*Buteo swainsoni*), pallid bad (*Antrozous pallidus*), Yuma myotis (*Myotis yumanensis*), and big free-tailed bat (*Nyctinomops macrotis*). The remaining 56 species evaluated were considered to have a moderate or low to unlikely potential to occur within the BSA due to a lack of suitable habitat, such as piñon-juniper woodlands or coastal habitats.

The western spadefoot toad is a state Species of Special Concern and a San Diego County Group II species. This nocturnal species prefers soil soft

enough for burrowing, found within grasslands, scrub, chaparral, and oak woodlands (Lemm 2006). Its distribution occurs at elevations from sea level to approximately 4,650 feet. This species was detected during USGS surveys; while it was noted generally that amphibian diversity was relatively low with three species, western spadefoot toad was the second most detected amphibian with at least 48 observations (Richmond et al. 2016).

The orange-throated whiptail is a state Species of Special Concern and a San Diego County Group II species. This species prefers washes and other sandy areas in coastal sage scrub and chaparral, with patches of brush and rocks for cover. A limiting factor to the species' range is the availability of its primary food item, the termite (*Reticulitermes hesperus*). The orange-throated whiptail was observed predominately in coastal sage scrub habitat during the 2006, 2010, and 2015 surveys. It was also detected in abundance with 173 captures during USGS herpetofaunal surveys of the property (Richmond et al. 2016).

Coastal whiptail is a state Special Animal and a San Diego County Group II species. In San Diego County, this species is found from the coast to the mountains with an estimated elevational range of sea level to approximately 5,000 feet (Lemm 2006). It is found in various habitats including sage scrub, chaparral, riparian areas, oak and pine woodlands, pinyon juniper woodlands, and rocky foothills. Coastal whiptail was the fifth most captured lizard species during the USGS study with 29 observations (Richmond et al. 2016).

The southern California legless lizard is a state Species of Special Concern. It is primarily found in oak woodland, chaparral, coastal sage scrub, pinyon-juniper woodland, and urban areas, and occasionally found in desert flats, dunes, and beaches. It occurs within an elevational range extending from sea level to 5,940 feet (Lemm 2006). It is a burrower, so it spends most of its time underground. This species was detected during the USGS study, with 17 observations (Richmond et al. 2016).

The glossy snake is a state Species of Special Concern. This species occurs primarily throughout Southern California in deserts and interior Coast Ranges, but has been found as far north as Mount Diablo near San Francisco (Zeiner et al., 1988-1990). It is most often found in desert habitats but also occurs in chaparral, sagebrush and annual grasslands. The glossy snake prefers open, sandy areas, but is also found in rocky areas. It takes cover in abandoned animals' burrows, in rock outcrops and, less often, beneath debris. Its primary source of food is lizards, including juvenile desert iguanas, side-blotched lizards, and zebra-tailed lizards. The glossy snake has been recorded within the BSA during 2015 and 2016 surveys conducted by USGS, with a total of 23 observations (Richmond et al., 2016).



The northern red diamond rattlesnake is state Species of Special Concern and a San Diego County Group II species. It is often found in chaparral, coastal sage scrub, along creek banks, and in rock outcrops or piles of debris. This species prefers dense vegetation in rocky areas with a supply of burrowing rodents for prey. The northern red diamond rattlesnake is restricted to southern California and Baja California from Morongo Pass to the tip of the Baja Peninsula, with the majority of its California range in western Riverside County and San Diego County. It occurs from sea level to 3,000 feet in elevation. Suitable habitat is prevalent within the BSA, and three observations were made during the USGS study (Richmond et al. 2016).

The coast horned lizard is a state Species of Special Concern and a San Diego County Group II species. This lizard ranges from coastal southern California to the desert foothills and into Baja California, Mexico. In San Diego County, it has a wide range but spotty distribution. This species can be locally abundant in areas where it occurs, with densities near 20 adults per acre. Adults are active from late March to late August, and young are active from August to November or December. They are largely dependent upon native harvester ants (*Pogonomyrmex* sp.) for food. Populations along the coast and inland have been severely reduced by loss of habitat. The coast horned lizard was observed within the BSA in 2015 in tamarisk scrub habitat during the 2015 biological surveys.

The Cooper's hawk is a state Special Animal, and San Diego County Group I species. The nesting sites of this species are considered sensitive by the CDFW. This hawk mainly breeds in oak and willow riparian woodlands but will also use eucalyptus trees. Breeding occurs from March to July. This hawk forages primarily on medium-sized birds but is also known to eat small mammals, such as chipmunks and other rodents (Rosenfeld and Bielefeldt, 1993). The Cooper's hawk has been observed in 2006, 2010, and 2015 within the BSA in the vicinity of the riparian habitat along the San Diego River corridor.

The sharp-shinned hawk is a state Special Animal, and San Diego County Group I species. The nesting sites of this species are considered sensitive by the CDFW. It is a woodland hawk that requires a certain amount of dense cover, but this species can be localized and scattered through relatively open country. The sharp-shinned hawk was observed within the BSA in 2010 in the vicinity of riparian habitat along the San Diego River corridor.

The red-shouldered hawk is a San Diego County Group I species. This species occurs in riparian forest and oak woodland habitat, as well as eucalyptus groves and residential areas. The red-shouldered hawk builds a stick nest in sycamore, coast live oak, and eucalyptus trees, and occasionally in palm trees. This species frequently reuses its nests in successive years and takes over old nests of other hawks. The red-shouldered hawk was observed within the BSA in 2010 in the vicinity of riparian habitat along the San Diego River corridor.

The turkey vulture is a San Diego County Group I species. Rather than building nests, this species lays its eggs in rock crevices, caves and hollow logs. The turkey vulture is a scavenger, feeding primarily on carrion which it finds with its acute sense of smell, but it will also occasionally eat garbage and rotten vegetation. Mammals are the most common source of carrion; however, birds, amphibians and reptiles are also eaten. Within the BSA, this species was observed in 2006, 2010 and 2015 soaring overhead throughout the site.

The osprey is a County Group I species. It is a long-range migrant breeding in North America and migrating to South America in the winter. This species is associated with large bodies of clear, open water. Its diet consists almost entirely of live fish, but will also occasionally prey on small mammals, birds, reptiles, and amphibians. The osprey is known to consume over 80 species of fresh and saltwater fish in North America. Nesting occurs at the top of large snags and dead trees up to twelve miles from fishing areas; however, nests most commonly occur within one mile of open water (Polite 1990). Occasionally, this species will nest on the ground. In North America, breeding typically occurs along the coast and near large inland lakes. This species was observed within the BSA near Hanson Pond during the 2015 surveys; no nests or breeding behavior was observed. However, Hanson Pond and nearby Lake Jennings provide appropriate habitat for prey and habitat onsite is appropriate as a potential nesting site.

The yellow warbler is state Species of Special Concern within its nesting habitat and a San Diego County Group II species. It occupies marshes, swamps, streamside groves, willow and alder thickets, open woodlands with thickets, orchards, gardens, and open mangroves. In San Diego County the yellow warbler is a common breeding species but is localized to suitable riparian woodland habitats. In 2006 and 2015 the yellow warbler (*Dendroica petechia*) was detected within the riparian woodland along the edge of Hanson Pond just outside of the BSA, and within the tamarisk scrub northeast of the pond.

The white-tailed kite is a state Fully Protected species, and its nesting sites are considered sensitive by the CDFW. It is also a San Diego County Group I species. White-tailed kite populations in southern California have declined as a result of the loss of nesting and foraging habitat. The species nests in trees of variable height in riparian or oak woodland habitats adjacent to grasslands, agricultural areas, and other open vegetation. Within the BSA, the white-tailed kite was detected in 2006 in disturbed habitat just east of Dairy Road and northeast of Hanson Pond.

The yellow-breasted chat is a state Species of Special Concern and a San Diego County Group I species. Within San Diego County, this species occurs in coastal lowlands in riparian woodland habitat. The yellow-breasted chat (*Icteria virens*) was detected in 2006 within the river channel in the eastern portion of the BSA.

The loggerhead shrike is a state Species of Special Concern and a County Group I species. In southern California, loggerhead shrikes inhabit grasslands, agricultural fields, chaparral, and desert scrub. Loggerhead shrike populations are declining, likely as a result of urbanization and loss of habitat as well as, to a lesser degree, pesticide use. Within the BSA, the loggerhead shrike was detected in the disturbed area near Dairy Road.

The coastal California gnatcatcher is federally threatened, a state Species of Special Concern, and a County Group I species. The coastal California gnatcatcher is a local year-round resident found primarily in coastal sage scrub communities in southern California. This species typically forages beyond their nesting sites in habitats of varying quality, including open patches of disturbed coastal sage scrub and adjacent chaparral and grassland areas. The coastal California gnatcatcher was detected in or adjacent to the BSA within three disconnected patches of coastal sage scrub. One of these patches, located just south of Willow Road to the north of Hanson Pond, is highly disturbed and dominated by California buckwheat and non-native grasses and forbs. A second occupied patch is located due south of this location just north of Hanson Pond. This area consists of a thin, very dense strip of California sagebrush that has grown along an existing unpaved access road. Although this area is outside of the BSA, it is within approximately 1,000 feet of the impact area. The third patch is a very small, highly disturbed fragment dominated by California buckwheat and non-native grasses and forbs, located within the impact area of the BSA southeast of Hanson Pond, just north of El Monte Road.

Least Bell's vireo is a state and federally endangered and San Diego County Group I species. This small songbird occurs in riparian forest, scrub, and woodland habitats. The least Bell's vireo is a summer resident in Southern California that typically resides in willow-dominated habitat. This species was detected during the 2010 and 2015 protocol surveys in the riparian woodland habitat along the eastern edge of Hanson Pond, just outside of the BSA. In 2010, it was also observed in two locations in the riparian habitat along the San Diego River channel within and adjacent to the BSA. The potential for this species to nest onsite is considered high.

The San Diego black-tailed jackrabbit is a state Species of Special Concern and is a San Diego County Group II species. The black-tailed jackrabbit is strictly herbivorous, preferring habitat with ample forage such as grasses and forbs. Declines in San Diego black-tailed jackrabbit populations are due to loss of suitable habitat as a result of urban development. This species was observed regularly during 2006 surveys in the upland oak/sandy dune area, but was not observed during 2010 or 2015 surveys.

The two-striped garter snake is a state Species of Special Concern and a County Group I species. The species is found in permanent and semi-permanent

waterways from the coast to the desert. It is frequently found in oak woodlands, brushlands, and sparse coniferous forests. Suitable habitat is prevalent within the BSA along the river channel, especially during the wet season when water is present, indicating high potential for the species to occur onsite.

The golden eagle is a federally protected species under the Bald and Golden Eagle Protection Act, a state Fully Protected species and Species of Special Concern, and a San Diego County Group I species. The nesting population in San Diego County is concentrated in the foothill zone and coastal lowlands. Golden eagles nest on cliffs, boulders, or in large trees. This species requires vast foraging areas to prey upon small mammals. Golden Eagles forage close to and far from their nests, as far as 3.7 miles from the center of their territories, but have been observed to move 5.6 miles from the center of their territories in favorable habitat. Ideal foraging habitat includes vegetation communities such as of grassland, open chaparral, or coastal sage scrub. There is abundant foraging habitat within the BSA, although much of it is moderate to low quality because of the abundant invasive plant species cover, which may not support a robust small mammal prey base. However, recent golden eagle surveys conducted by USGS in San Diego County suggest that two adjacent golden eagle territories may overlap with the BSA (SDMMP 2016). Therefore, a moderate potential exists for the species to occur within the BSA for foraging, although suitable nesting habitat is not present onsite.

### Wildlife Corridors/Linkages

The BSA runs mainly in an east-west direction along an approximately 2.7-mile portion of the San Diego River. Existing adjacent land uses bordering the site consist of open space, agriculture, grazing lands, and equestrian and residential development. The riparian vegetation surrounding and within the river floodplain includes thick to sparse stands of both native willow and cottonwood communities and nonnative tamarisk scrub, which functions to a limited extent as a feasible habitat for smaller species, such as passerine birds, rodents and reptiles, as well as larger species such as mule deer or bobcats. The densest regions of riparian scrub habitats are bordered by generally open areas of nonnative grassland, or otherwise open and disturbed vegetation. Most of the outskirts of the project area abut fenced residential and agricultural developments that would likely constrict wildlife use or direct larger animals longitudinally across the BSA. The site does offer function as east-west and north-south corridor across and through the western portion of El Monte Valley, including access across the valley to Lake Jennings.

A potential habitat linkage connecting the open, natural areas to the north and south of the site exists approximately in the middle of the BSA where the undeveloped north-facing hills on the south side of El Monte Road are linked to the south-facing slope on the north side of Willow Road via the vegetated BSA.

The hills to the south of El Monte Road are covered mainly in grassland and sparse chaparral vegetation, while the south-facing slopes to the north of Willow Road possess high quality scrub habitat. The region on the north side is connected to larger, relatively undisturbed regions of abundant coastal sage scrub. The region within the recognized linkage area between the riparian area immediately south of Willow road in the middle of the BSA and to the east of Hanson Pond currently consists of disturbed habitat and nonnative grassland. Because habitats such as nonnative grassland generally do not offer the types of dense vegetation cover preferred by large animals for safe passage between native habitats, the effectiveness of the area as a viable north-south habitat linkage could be improved by revegetation and restoration by converting nonnative, structurally limited vegetation to native scrub vegetation.

### **2.3.1.2 Regulatory Framework**

#### Federal

##### *Federal Endangered Species Act*

The Federal Endangered Species Act (FESA) protects proposed and listed or endangered species and provides a program for the conservation of habitat for threatened or endangered species that has been designated as critical in the Federal Register. The FESA defines an “endangered” species as a species in risk of extinction throughout all or a substantial portion of its range, and a “threatened” species as a species likely to become endangered in the near future. Section 7 of the FESA directs USFWS to use its existing authority to conserve threatened and endangered species and, in consultation with federal agencies, ensure that any action authorized, funded, or carried out by such agency does not jeopardize the continued existence of a federally listed species or destroy or adversely modify designated critical habitat. Section 7 applies to management of federal lands and to other federal actions that may affect federally listed species, such as federal approval of private activities through the issuance of federal permits, licenses, grants, or other actions.

##### *Migratory Bird Treaty Act*

The federal Migratory Bird Treaty Act (MBTA) restricts the killing, taking, collecting, and selling or purchasing of native bird species or their parts, nests, or eggs. Certain gamebird species are allowed to be hunted for specific periods determined by federal and state governments. The intent of the MBTA is to eliminate any commercial market for migratory birds, feathers, or bird parts, especially for eagles or other birds of prey. Although no permit is issued under the MBTA, if vegetation removal within the project area occurs during the breeding season for raptors and migratory birds (February 1 through September 15) the USFWS typically requires surveys to locate active nests in project areas prior to commencing the activities. If active nests are detected, avoidance buffers

and nest monitoring may be required. Project activities may also be temporarily halted until migratory birds are no longer at risk of being killed or injured.

#### *The Bald and Golden Eagle Protection Act*

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940 and amended several times, prohibits anyone, without a permit issued by the Secretary of the Interior, from “taking” bald eagles, including their parts, nests, or eggs. The Act provides criminal and civil penalties for persons who “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle, or any golden eagle], alive or dead, or any part, nest, or egg thereof.” In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle’s return, such alterations agitate or bother an eagle to a degree that injures an eagle or substantially interferes with normal breeding, feeding, or sheltering habits and causes, or is likely to cause, a loss of productivity or nest abandonment.

#### *Section 404 of the Clean Water Act*

Section 404 of the CWA is the primary federal statute regulating activities in jurisdictional waters (which includes wetlands). Section 404 of the CWA prohibits the discharge of dredged or fill materials into waters of the U.S. without a permit from the USACE. Projects that include such activities must be reviewed by the USACE and receive technical input from the EPA, USFWS, the State Historic Preservation Office (SHPO), and other agencies as applicable. In California, the Regional Water Quality Control Board (RWQCB) must issue Water Quality Certification under Section 401 before the USACE can permit action under Section 404.

#### *Section 401 of the Clean Water Act*

Section 401 of the CWA requires certification from the State in which a discharge into federal jurisdictional waters will originate that the proposed project is in compliance with established water quality standards. Projects that have the potential to discharge pollutants are required to comply with established water quality objectives. In California, the RWQCB has primary authority for permit and enforcement activities under the Porter Cologne Water Quality Control Act (Cal. Water Code 13000 13999.10) and Section 401 of the CWA.

The RWQCB reviews a project to determine whether the activity would comply with State water quality objectives and, subsequently, either issues a certification with conditions or denies the certification. No license or permit may be issued by a federal agency until certification required by Section 401 has been granted. Under the CWA, Section 404 permits are subject to RWQCB Section 401 water

quality regulation. The USACE cannot issue an individual or nationwide 404 permit until a 401 certification has been obtained from the RWQCB.

## State

### *California Fish and Game Code*

The California Fish and Game Code (CFGF) regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as natural resources such as wetlands and waters of the state. Applicable sections of the CFGF are discussed below.

### *Section 1600 Et Seq. – Streambed Alteration Agreement*

Pursuant to Section 1600 et seq. of the CFGF, the CDFW regulates activities of an applicant's project that would substantially alter the flow, bed, channel, or bank of streams or lakes, unless certain conditions outlined by CDFW are met by the applicant. The limits of CDFW jurisdiction are defined in CFGF Section 1600 et seq. as the "bed, channel, or bank of any river, stream,<sup>1</sup> or lake designated by CDFW in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit."<sup>2</sup> However, in practice, the CDFW usually extends its jurisdictional limit and assertion to the top of a bank of a stream, the bank of a lake, or outer edge of the riparian vegetation, whichever is wider.

In some cases, drainage ditches and retention ponds<sup>3</sup> can be potentially considered under the regulatory administration of the CDFW. The CDFW provides specific guidance concerning its regulatory administration in California Code of Regulations (CCR) Title 14 Section 720 (Designation of Waters of Department Interest):

For the purpose of implementing Sections 1601 and 1603 of the CFGF, which requires submission to the department of general plans sufficient to indicate the nature of a project for construction by or on behalf of any person, governmental agency, state or local, and any public utility, of any project which will divert, obstruct, or change the natural flow or bed of any river, stream, or lake designated by the department, or will use material from the streambeds designated by the department, all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams, and streambeds, which may have intermittent flows of water, are hereby designated for such purpose.

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<sup>1</sup> Title 14 CCR 1.72 defines a stream as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation."

<sup>2</sup> This also includes the habitat upon which they depend for continued viability (California Fish and Game Code Division 5, Chapter 1, Section 45, and Division 2, Chapter 1, Section 711.2[a]).

<sup>3</sup> Title 14 CCR 1.56 defines a lake as a feature that "includes lakes or man-made reservoirs."

### *Section 2050 Et Seq. – California Endangered Species Act*

The California Endangered Species Act (CESA) (Section 2050 et seq.) prohibits the “take” of species listed as candidate, threatened, or endangered by the California Fish and Game Commission. “Take” is defined by the CESA as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The CESA is administered by the CDFW and is similar to the FESA.

Under Section 2081 of the CFGC, the CDFW may authorize take of state-listed endangered, threatened, or candidate species if: (1) the take is incidental to otherwise lawful activities, (2) impacts of the take are minimized and fully mitigated, (3) a permit is consistent with regulations adopted in accordance with any recovery plan for the species in questions, and (4) the applicant ensures suitable funding to implement the measures required by the CDFW. For those state-listed species that are also federally listed under the FESA, the CESA allows for consistency determinations with federal incidental take statements under Section 2080.1 of the CFGC.

### *Section 3503 and 3503.5 – Nesting Birds and Birds of Prey*

Section 3503 of the CFGC states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the CFGC states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations of these codes include destruction of active nests resulting from removal of vegetation in which the nests are located. Violation of Section 3503.5 could also include failure of active raptor nests resulting from disturbance of nesting pairs by nearby project construction. These sections of the CFGC do not provide for the issuance of any type of incidental take permit. It is important to note that the CDFW proposed regulations in August 2015 to clarify key terms in Section 3503 and 3503.5. Finalization of these proposed regulations are pending.

### *Section 3511, 4700, 5050, and 5515 – Fully Protected Species*

Sections 3511, 4700, 5050, and 5515 of the CFGC describe protection of fully protected species. Thirty-seven species are covered by these sections of the CFGC. These species include certain fish, amphibian and reptile, bird, and mammal species. These sections of the CFGC prohibit take or possession of fully protected species, with few exceptions. The CDFW is unable to authorize incidental take of fully protected species.

### *Section 3513 – Migratory Birds*

Section 3513 of the CFGC protects California’s migratory birds by making it unlawful to take or possess birds that are designated by the MBTA as migratory



nongame birds, except as allowed by federal rules and regulations promulgated pursuant to the MBTA.

### *California Wetlands Conservation Policy*

California Wetlands Conservation Policy Executive Order W-59-93 establishes a wetland conservation policy for the state and provides comprehensive direction for the coordination of statewide activities for the preservation and protection of wetland habitats. The Resources Agency of California and California Environmental Protection Agency are designated as co-leads to implement the goals of the California Wetlands Conservation Policy, which include endorsing “no overall net loss” and achieving a “long-term net gain in the quantity, quality, and permanence of wetlands acreage and values in California.” Other stated goals are to achieve a reduction in the procedural complexity in the administration of wetland conservation programs and to encourage partnerships to make landowner incentive programs and cooperative planning efforts the primary focus of wetlands conservation and restoration.

### Local

#### *Resource Protection Ordinance (RPO)*

The County's RPO was adopted in 1989 and later amended in 2007. The RPO restricts, to varying degrees, impacts to various natural resources including wetlands, wetland buffers, floodplains, steep slopes, sensitive habitat lands, and historical sites. Certain permit types are subject to the requirements to prepare Resource Protection Studies under the RPO.

The RPO states that no impacts may occur to lands determined to be wetlands as defined by the ordinance, except those impacts related to aquaculture, scientific research, and/or wetland restoration projects. In addition, the ordinance requires that a wetland buffer be provided to further protect the wetland resources. The RPO defines wetland buffer as the lands that provide a buffer area of an appropriate size to protect the environmental and functional habitat values of the wetland, or which are integrally important in supporting the full range of the wetland and adjacent upland biological community. Access paths, improvements necessary to protect the adjacent wetlands, and those uses allowed within the actual wetland are the only allowed uses within the buffer.

The RPO specifies that uses permitted in a floodway be limited to agricultural, recreational, and other low-intensity uses. However, uses that will substantially harm the environmental values of a particular floodway area will not be permitted. The RPO also states that mineral resource extraction can be permitted subject to an approved MUP and Reclamation Plan, provided that mitigation measures are established that produce a net gain in the functional wetlands and riparian habitat within the floodway.

The RPO specifies that “Mature Riparian Woodlands may not be destroyed or reduced in size due to sand, gravel, or mineral extraction projects.” The RPO defines Mature Riparian Woodlands 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.”

It should be noted that exemptions to the RPO are allowed for “any sand, gravel or mineral extraction project, provided that the following mitigation measures are required as a condition of a Major Use Permit approved for such a project:

- 1) Any wetland buffer area shall be restored to protect environmental values of adjacent wetlands;
- 2) In a floodplain, any net gain in functional wetlands and riparian habitat shall result in or adjacent to the area of extraction;
- 3) Native vegetation shall be used on steep slope 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 which is consistent with the surrounding area; and
- 4) Mature riparian woodland may not be destroyed or reduced in size due to sand, gravel or mineral extraction.

Use of the extraction area after reclamation shall be subject to all conditions of the RPO.”

Generally, the project meets the requirements of the exemption. Regarding the first requirement, wetland buffers are planned as a design feature to avoid/minimize impacts to wetlands to the extent feasible. Within areas mapped as Mature Riparian Woodland, a buffer of 50 feet from the edge of the tree canopy would be provided. This buffer width is consistent with County guidelines, which state “A 50-foot wetland buffer would be appropriate for lower quality RPO wetlands where the wetland has been assessed to have low physical and chemical functions, vegetation is not dominated by hydrophytes, soils are not highly erosive and slopes do not exceed 25%.

Regarding the second requirement, the entire project area is within a floodplain, and the revegetation plan for the project area includes an increase in the total acreage of functional riparian habitat. Riparian/wetland habitat, specifically tamarisk scrub, would be mitigated at a 3:1 ratio through 1.5:1 restoration of high quality riparian scrub habitat dominated by mule fat along with scattered willows within the excavated mining pit (basin). Existing riparian habitat (predominantly non-native tamarisk scrub) would be mitigated through restoration and revegetation of native riparian forest and scrub at a 3:1 ratio. The higher quality

and quantity of mitigation habitats would result in a net increase in functional wetland/riparian habitat.

Also, native vegetation is planned on the slopes of the mining area post-mining and would increase the original habitat value; a majority of the impact area consists of disturbed habitat and nonnative habitat, to be revegetated post mining with native upland and riparian habitats. The slopes would be graded to 3:1, and would produce a landform consistent with surrounding soils and topography.

Regarding the fourth requirement, another project design feature is to maintain a 50-foot non-disturbance area around the mature riparian woodlands within the project area, thus mature riparian woodlands would not be impacted, meeting this requirement. Finally, post-reclamation the entirety of the revegetation and enhancement areas would be transferred to the County and be maintained and managed in perpetuity for biological values under a Biological Open Space Easement that is granted from the County. As a Biological Open Space Easement, the land would be in compliance with the RPO.

#### *Multiple Species Conservation Program (MSCP)*

The project site was previously owned by Helix Water District and is currently located outside of the County's MSCP Subarea Plan which creates a "doughnut hole" within the Metro-Lakeside-Jamul Segment of the County's MSCP Subarea Plan. The project site is now owned by El Monte Nature Preserve, LLC. Pre-Approved Mitigation Area (PAMA) lands within the Metro-Lakeside-Jamul Segment immediately surround the project area, and the project proposes a Boundary Line Adjustment (BLA) to the PAMA of the County's MSCP Subarea Plan (County of San Diego 1997), or other process agreed upon by the state and federal wildlife agencies. Section 10.11 of the County's MSCP Subarea Plan Implementing Agreement (County of San Diego 1998) allows for BLAs, and Section 5.4.2 of the MSCP (Ogden Environmental and Energy Services 1998) and Section 1.4 of the County's MSCP Subarea Plan outline the preserve boundary adjustment process. In accordance with the MSCP, adjustments to the preserve boundaries can be made without amending a subarea plan if the adjustment will result in the same or higher biological value of the preserve and with concurrence from the wildlife agencies (i.e., CDFW and USFWS). The proposed BLA would contribute the total 479.5-acre project site to the PAMA of the County's MSCP Subarea Plan thereby increasing the total size of the PAMA. A written request for the BLA has been submitted to the wildlife agencies for concurrence, and is included as **Appendix V** to this Draft EIR.

It should be noted that at this time, mitigation for impacts to vegetation are currently presented in accordance with the project area's current status outside of the MSCP. However, if this BLA is approved for incorporation into the PAMA, habitat ratios may be reduced to be consistent with the BMO (i.e., mitigation for

riparian habitats at a 2:1 ratio instead of a 3:1 ratio) (see Appendix K of the BRR). Additionally, through the project permitting process for potential impacts to jurisdictional resources, project mitigation may be adjusted based on agency requirements. Thus, mitigation as presented in this document and the Revegetation Plan (ESA 2018c) is based on higher ratios that may be adjusted throughout the permitting process and upon determination of the BLA request outcome. If the BLA is not approved, another process to amend the project area into the MSCP may be determined by the state and federal wildlife agencies. Final mitigation requirements will be documented prior to project construction in detailed landscape revegetation plans.

### *Habitat Loss Permit Ordinance*

The Habitat Loss Permit Ordinance was adopted by the County of San Diego in March of 1994 in response to both the listing of the California gnatcatcher as a federally threatened species, and the adoption of the Natural Communities Conservation Plan (NCCP) Act by the State of California. Pursuant to the Special 4(d) Rule under the FESA, the County is authorized to issue “take permits” for the California gnatcatcher (in the form of Habitat Loss Permits) in lieu of Section 7 or 10(a) Permits typically required from the USFWS. Although issued by the County, the wildlife agencies must concur with the issuance of a Habitat Loss Permit for it to become valid as take authorization under the FESA.

The Habitat Loss Permit Ordinance states that projects must obtain a Habitat Loss Permit prior to the issuance of a grading permit, clearing permit or improvement plan if the project would directly or indirectly impact any of several coastal sage scrub habitat types. The Ordinance requires Habitat Loss Permit if coastal sage scrub or related habitat would be impacted, regardless of whether the site is currently occupied by gnatcatchers. Habitat Loss Permits are not required for projects within the boundaries of the MSCP since take authorization is conveyed to those projects through compliance with the MSCP. Habitat Loss Permits are also not required for projects that have separately obtained Section 7 or 10(a) permits for take of the gnatcatcher.

As discussed, a BLA request is currently in progress to amend the project area into the boundaries of the MSCP, and it anticipated that the request will be approved. At this time, it is anticipated that this project would thus not require a Habitat Loss Permit. If the BLA is not approved, another process to amend the project area into the MSCP may be determined by the state and federal wildlife agencies.

### **2.3.2 Analysis of Project Effects and Determination as to Significance**

For the purpose of this EIR, the identified significance thresholds are based on criteria provided in the San Diego County Guidelines for Determining

Significance for Biological Resources (County Guidelines for Biological Resources), approved September 15, 2010.

### **2.3.2.1 Issue 1: Sensitive Plant and Wildlife Species**

#### Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines and the County Guidelines for Biological Resources, a significant impact would occur if the project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS, or if the project would:

- a. Impact one or more individuals of a species listed as federally or state endangered or threatened.
- b. Impact an onsite population of a County List A or B plant species, or a County Group I animal species, or a species listed as a state Species of Special Concern. Impacts to these species are considered significant; however, impacts of less than 5 percent of the individual plants or of the sensitive species' habitat on a project site may be considered less than significant if a biologically-based determination can be made that the project would not have a substantial adverse effect on the local long-term survival of that plant or animal taxon.
- c. Impact the local long-term survival of a County List C or D plant species or a County Group II animal species.
- d. Impact arroyo toad aestivation, foraging or breeding habitat. Any alteration of suitable habitat within 1 kilometer (3,280 feet) in any direction of occupied breeding habitat or suitable stream segments (unless very steep slopes or other barriers constrain movement) could only be considered less than significant if a biologically-based determination can be made that the project would not impact the aestivation or breeding behavior of arroyo toads.
- e. Impact golden eagle habitat. Any alteration of habitat within 4,000 feet of an active golden eagle nest could only be considered less than significant if a biologically-based determination can be made that the project would not have a substantially adverse effect on the long-term survival of the identified pair of golden eagles.
- f. Result in the loss of functional foraging habitat for raptors. Impacts to raptor foraging habitat is considered significant; however, impacts of less than 5 percent of the raptor foraging habitat on a project site may be considered less than significant if a biologically-based determination can

be made that the project would not have a substantial adverse effect on the local long-term survival of any raptor species.

- g. 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. Alteration of any portion of a core habitat could only be considered less than significant if a biologically-based determination can be made that the project would not have a substantially adverse effect on the core area and the species it supports.
- h. 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. The following issues should be addressed in determining the significance of indirect impacts: increasing human access; increasing predation or competition from domestic animals, pests or exotic species; altering natural drainage; and increasing noise and/or nighttime lighting to a level above ambient that has been shown to adversely affect sensitive species.
- i. Impact occupied burrowing owl habitat.
- j. Impact occupied cactus wren habitat, or formerly occupied coastal cactus wren habitat that has been burned by wildfire.
- k. Impact occupied Hermes copper habitat.
- l. Impact nesting success of the following sensitive bird species through grading, clearing, fire fuel modification, and/or other noise generating activities such as construction.

Species	Breeding Season
Coastal cactus wren	February 15 to August 15
Coastal California gnatcatcher	February 15 to August 31
Least Bell's vireo	March 15 to September 15
Southwestern willow flycatcher	May 1 to September 1
Tree-nesting raptors	January 15 to July 15
Ground-nesting raptors	February 1 to July 15
Golden eagle	January 1 to July 31
Light-footed clapper rail	February 15 to September 30

## Analysis

### *Issue 1A: Impact One or More Individuals of a Federally or State Endangered or Threatened Species*

No federally or state listed plant species were detected within the BSA. The proposed project would result in **no impact** to listed plant species.

The state and federally endangered least Bell's vireo and coastal California gnatcatcher have been observed within the BSA (Figure 2.3-3) and direct and indirect impacts may occur. Additionally, Designated Critical Habitat for arroyo toad and coastal California gnatcatcher occurs within the BSA. Direct impacts could include mortality of individuals and temporal loss of nesting and foraging habitat; indirect impacts could occur as a result of construction-generated noise and activity during the breeding season. Impacts to state and federally endangered and threatened wildlife would result in **significant impacts (Impact BIO-1, Impact BIO-2, and Impact BIO-3)**.

### *Issue 1B: Impact the Survival of a Local Population of County List A or B Plant Species or a County Group I Animal Species, or a State Species of Special Concern.*

Several County List A or B plant species, County Group 1 animal species, and State Species of Special Concern occur within the BSA. One County List B plant species (Palmer's goldenbush) was observed onsite (Figure 2.3-3), in addition to eleven County Group I animal species (San Diego banded gecko, Cooper's hawk, sharp-shinned hawk, red-shouldered hawk, osprey, turkey vulture, white-tailed kite, yellow breasted chat, loggerhead shrike, coastal California gnatcatcher, and least Bell's vireo) that occur onsite. All but three of these species, the osprey, red-shouldered hawk and turkey vulture, are also Species of Special Concern, along with the orange-throated whiptail, glossy snake, coast horned lizard, western spadefoot toad, southern California legless lizard, coast patch-nosed snake, glossy snake, red-diamond rattlesnake, yellow warbler, and San Diego black-tailed jackrabbit.

Palmer's goldenbush, a County List B plant species and Narrow Endemic, is the only special-status plant that occurs within the survey area. There will be no direct impacts to this species due to its location within Mature Riparian Woodland, an impact neutral area that will not be subject to any construction or mining activities. Potential indirect impacts to this species from fugitive dust during mining activity may occur but would be avoided through a project design feature of use of a polymer binding agent combined with frequent watering by a water truck along the haul road.

Direct impacts to wildlife species designated as County Group I or state Species of Special Concern could result from direct mortality of individuals and vegetation

removal and grading associated with the proposed project, which would remove all or most of the existing habitat that is suitable for nesting and foraging over an approximately 12-year period. County-wide surveys conducted by USGS over the last 20 years have recorded only one occurrence of a single glossy snake. The survey in El Monte Valley recorded 23 occurrences; this population of glossy snake in El Monte Valley “represents the largest concentration of the species in coastal San Diego County” (Richmond et al. 2016). Indirect impacts could result from construction-generated noise and activity during the bird breeding season. Impacts to County List A and B Plant Species, County Group I Animal Species, and State Species of Special Concern would result in **significant impacts (Impact BIO-1 and Impact BIO-4)**.

*Issue 1C: Impact the Regional Long-Term Survival of a County List C or D Plant Species or a County Group II Animal Species*

No County List C or D plant species were observed within the BSA. Therefore, there are **no direct or indirect impacts** to County List C or D plant species.

The following four County Group II wildlife species were observed onsite: orange-throated whiptail, coast horned lizard, yellow warbler, and San Diego black-tailed jackrabbit. Direct impacts could occur as a result of mortality of individuals and nests and removal of breeding and foraging habitat; indirect impacts could occur as a result of construction-generated noise and activity during the breeding season. Impacts to County List C and D Plant Species and County Group II Animal Species would result in **significant impacts (Impact BIO-1 and Impact BIO-4)**.

*Issue 1D: Impact Arroyo Toad Aestivation, Foraging or Breeding Habitat*

Although the BSA is within Designated Critical Habitat for the arroyo toad (Figure 2.3-4), it does not contain habitat suitable for arroyo toad primarily due to the lack of surface water and associated pools that this species requires for breeding, and substrates required for aestivation. The BSA contains riparian habitat along and within the floodplain of the San Diego River and has friable soils; however, the BSA is too dry and does not contain the necessary habitat features that arroyo toads use for foraging and breeding. The nearest and most recent arroyo toad sighting listed by the CNDDDB occurred approximately 5 miles north of the site in known suitable habitat. Therefore, the proposed project would result in **no direct or indirect impacts** to suitable arroyo toad habitat.

*Issue 1E: Impact Golden Eagle Habitat*

No golden eagle nests were detected onsite or within 4,000 feet of the site. The nearest known golden eagle nest listed by the CNDDDB was recorded approximately 2 miles east of the BSA at El Capitan Reservoir, well outside of the zone of influence of this project. Recent golden eagle surveys conducted by



USGS in San Diego County suggest that two adjacent golden eagle territories may overlap with the BSA (USGS 2016) and foraging habitat exists within the BSA.

The non-native grassland within the BSA is a large expanse of foraging habitat in the area available to the nearest golden eagle nesting territories; therefore, a high potential exists for the species to occur within the BSA for foraging, although suitable nesting habitat is not present within the project area or adjacent to the project area.

Direct impacts to golden eagle foraging habitat could result from removal of vegetation and grading. Indirect impacts to foraging eagles could occur through increased human presence, as golden eagles are known to be moderately sensitive to human presence (Kochert et al., 2002); the increased construction-related activity could discourage eagles from foraging in the immediate vicinity of mining and other activities. These direct and indirect impacts would result in a **significant impact (Impact BIO-1)**. Other potential indirect impacts to foraging habitat could include invasion from non-native weeds. This effect would be **less than significant** because the open non-native grassland areas already support mostly non-native grasses and forbs such as Russian thistle and mustards.

*Issue 1F: Result in Loss of Functional Foraging Habitat for Raptors*

The non-native grassland and coastal sage scrub within the project area provides functional foraging habitat for a variety of raptor species by supporting small mammals, such as ground squirrels and gophers (*Thomomys bottae*). Native riparian scrub and forest habitat also provide foraging habitat by supporting a robust population of native birds and other prey. Tamarisk scrub could provide low quality foraging habitat – this non-native vegetation generally does not support a high diversity or density of prey species. High quality native riparian forest habitat will be avoided. Direct impacts to raptor foraging habitat could result from vegetation removal and grading. Greater than five percent of the functional foraging habitat within the BSA would be impacted. These impacts to loss of non-native grassland and coastal sage scrub foraging habitat would result in a **significant impact (Impact BIO-1)**. Indirect impacts to foraging habitat could include invasion from non-native weeds. This effect would be **less than significant** because the open non-native upland areas currently support mostly non-native grasses and forbs such as Russian thistle and mustards.

*Issue 1G: Impact the Viability of a Core Wildlife Area That Supports a Viable Population of Sensitive Wildlife Species*

The 479.5-acre project area is set in the midst of a larger rural setting with large blocks of open space, making the El Monte Valley a core wildlife area. Of the 479.5 project acres, approximately 22.27 acres of the project area are considered functional native wildlife habitat for local and migratory wildlife (e.g.,

southern willow scrub, southern cottonwood-willow riparian forest, Diegan coastal sage scrub); the remaining areas consist of highly disturbed, weed-dominated uplands and tamarisk scrub, which have limited potential to support wildlife. Direct impacts to core area habitat could result from vegetation removal and mining activities. Indirect impacts to a core wildlife area could result from weed invasion or erosion after mining activity is complete.

Although cleared areas would lose habitat functionality for wildlife species during mining, these effects would be reduced to a limited portion of the project area at any given time, as the project would proceed in four phases during the 12-year life of the mining activity. As each phase is completed, it would be reclaimed (e.g., the landscape would be stabilized and revegetated), before the next phase would be initiated. As the vegetation begins to grow back within reclaimed areas, it would become suitable to provide cover, forage, and breeding opportunities for wildlife. As such, most of the BSA would be available for wildlife use for the duration of the proposed project. Thus, impacts to viability of use of the project as a core wildlife area would be **less than significant**. Upon the completion of revegetation, the area would be enhanced by the establishment of higher-quality and functional habitat types along the San Diego River corridor

*Issue 1H: Cause Indirect Impacts at the Edge of Proposed Development Adjacent to Proposed or Existing Open Space or Other Natural Habitat Areas*

The proposed project would not result in indirect impacts as a result of increased predation or competition from domestic animals or pests because there would be no associated land use change to the property upon project completion such as residential, commercial or agricultural uses.

Indirect impacts from human use after the project is completed are not expected to significantly increase as a result of the project. Currently, portions of the BSA contain unpaved roads and trails that are used by equestrian and recreational users for riding, walking, and hiking. In addition, existing residents access their homes using Willow Road and Dairy Road (both unpaved), and Helix Water District and San Diego Gas & Electric staff access the project area using these same unpaved roads. The proposed project would allow for continued access to the site during mining and reclamation/restoration activities. A trail system will be established along much of the periphery of both the area of disturbance and MUP boundary.

The project would not result in significant indirect impacts to downstream habitat due to altered hydrology. Because El Capitan Dam has effectively cut off the upstream flow since its establishment in 1935, downstream areas are not currently receiving surface flow. The main source of water in the riverbed is runoff from surrounding hillsides. Although the post mining grades could result in temporary ponding, a negative reduction of surface flows is not expected because of the lack of surface flow that presently occurs onsite. Therefore, the

changes to the topography as a result of post mining activities are not expected to substantially affect the hydrology downstream. In addition, erosion control and stormwater measures would be installed to ensure that sediment and runoff do not drain offsite during mining. Post-project reclamation and revegetation would also improve onsite drainage conditions.

Although extremely unlikely, indirect impacts from altered natural drainage features onsite could result from ponding during extreme rain events. The project would effectively lower the substrate elevation on the surface of the San Diego River 30 – 35 feet below the current channel surface, which would be approximately 10 feet above the water table. During extreme storms events, water could overtop the El Capitan dam. In the event of the dam overtopping, the water table may rise above the pit bottom and a pond could form. If ponding does occur, vegetation could form around the fringe of the pond, although vegetation growth would be temporary as it would likely recede as the water recedes. Water has overtopped the dam only four times since 1940 (D. Roff pers. comm), making this a very unlikely event.

Indirect project impacts to birds, reptiles, and other wildlife could result from a temporary increase in human activity, noise, and nighttime lighting during construction and mining activities. These factors could indirectly affect breeding birds by disrupting breeding behavior, or could increase predation, spread of invasive plants in suitable habitat, or preclude movement for amphibians/reptiles and other wildlife species. Temporary nighttime lighting would be installed at the facility for safety purposes; however, the lighting would be shielded away from adjacent native habitats, and thus is not anticipated to affect breeding or foraging behavior of sensitive species. However, during construction and mining, the ambient noise levels would be increased during operating hours, which could negatively affect breeding birds by altering breeding behavior or resulting in nest abandonment. Indirect impacts to breeding birds and special status wildlife would be a **significant impact (Impact BIO-1 through Impact BIO-4)**.

#### *Issue 11: Impact Occupied Burrowing Owl Habitat*

Burrowing owl has not been observed onsite during surveys conducted in 2006, 2010, and 2015, and the nearest known occurrence is approximately 12 miles to the north. Potential habitat within the project area is of poor quality. In addition, the habitat is highly degraded, and very dense with non-native grasses, Russian thistle, and mustards; burrowing owls prefer more open habitat. As such, they are not likely to occur onsite. However, if burrowing owls move into the project area, direct impacts to the burrowing owl or its habitat could occur within disturbed habitat and non-native grassland through vegetation removal and mining activity. Indirect impacts from adjacent construction noise and activity could also affect the owls, and these impacts would be **less than significant**.

*Issue 1J: Impact Occupied Cactus Wren Habitat*

There is no cactus wren habitat in the BSA (habitat was not present in the BSA prior to 2003 Cedar fire), and cactus wren were not observed during the 2006, 2010, and 2015 surveys. Therefore, there would be **no impact** to cactus wren or cactus wren habitat.

*Issue 1K: Impact Occupied Hermes Copper Habitat*

Native upland habitat within the BSA is not extensive enough or of high enough quality to support Hermes copper and the host plants required by this species are not present onsite. Additionally, Hermes coppers were not observed during the 2006, 2010, and 2015 surveys. There would be **no impact** to Hermes copper or Hermes copper habitat

*Issue 1L: Impact Nesting Success of Sensitive Bird Species (Coastal Cactus Wren, Coastal California Gnatcatcher, Least Bell's Vireo, Southwestern Willow Flycatcher, Tree or Ground-nesting Raptors, and Golden Eagle)*

Clearing and grading associated with project area preparation could directly affect breeding birds by the removal of potential nesting habitat within the river channel and surrounding upland habitats. Proposed mining activities could also indirectly affect breeding birds adjacent to cleared areas during the breeding season due to noise, dust, increased truck traffic, and other human activities, which could impair the breeding behavior of birds, resulting in reduced mating or nest abandonment. Additionally, fuel modification could directly impact nesting bird species through removal of nesting habitat, and indirectly impact nesting birds during breeding season through noise. Direct impacts as a result of mortality of individuals and removal of nests and habitat during the breeding season, and construction-generated noise would be considered **significant impacts (Impact BIO-1)**.

**2.3.2.2 Issue 2: Riparian Habitat and Other Sensitive Natural Communities**

Guidelines for the Determination of Significance

Based on the County's Guidelines for Determining Significance – Biological Resources (San Diego County, 2010), a significant impact would occur if the project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or if the project would:

- A. Project-related grading, clearing, construction, or other activities would temporarily or permanently remove sensitive native or naturalized habitat on or off the project area. This guideline would not apply to small remnant pockets of habitat that have a demonstrated limited biological value. No *de*

*minimus* standard is specified under which an impact would not be significant; however, minor impacts to native or naturalized habitat that is providing essentially no biological habitat or wildlife value can be evaluated on a case-by-case basis to determine whether the projected impact may be less than significant. For example, an impact to native or naturalized upland habitat under 0.1 acre in an existing urban setting may be considered less than significant (depending on a number of factors). An evaluation of this type should consider factors including, but not limited to, type of habitat, relative presence of the habitat type in the project vicinity, its condition and size, presence or potential for sensitive species, relative connectivity with other native habitat, wildlife species and activity in the project vicinity, and current degree of urbanization and edge effects in the project vicinity. For example, the isolation of a particular habitat area does not necessarily mean impacts to the area would not be significant (e.g., vernal pools). An area that is disturbed or partially developed may provide a habitat “island” that would serve as a functional refuge area “stepping stone” or “archipelago” for migratory species.

- B. Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by U.S. Army Corps of Engineering (ACOE), CDFWG and the 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.
- C. The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of three feet or more from historical low groundwater levels.
- D. 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. The following issues should be addressed in determining the significance of indirect impacts: increasing human access; increasing predation or competition from domestic animals, pests or exotic species; altering natural drainage; and increasing noise and/or nighttime lighting to a level above ambient that has been shown by the best available science to adversely affect the functioning of sensitive habitats.
- E. The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands. If the proposed project is subject to RPO, buffers of a minimum of 50 feet and a maximum of 200 feet to protect wetlands are required based on the best available science available to the County at the time of adoption of the ordinance. The

following examples provide guidance on determining appropriate buffer widths:

- A 50-foot wetland buffer would be appropriate for lower quality RPO wetlands where the wetland has been assessed to have low physical and chemical functions, vegetation is not dominated by hydrophytes, soils are not highly erosive and slopes do not exceed 25 percent.
- A wetland buffer of 50 to 100 feet is appropriate for moderate to high-quality RPO wetlands which support a predominance of hydrophytic vegetation or wetlands within steep slope areas (greater than 25 percent) with highly erosive soils. Within the 50- to 100-foot range, wider buffers are appropriate where wetlands connect upstream and downstream, where the wetlands serve as a local wildlife corridor, or where the adjacent land use(s) would result in substantial edge effects that could not be mitigated.
- Wetland buffers of 100 to 200 feet are appropriate for RPO wetlands within regional wildlife corridors or wetlands that support significant populations of wetland-associated sensitive species or where stream meander, erosion, or other physical factors indicate a wider buffer is necessary to preserve wildlife habitat.
- Buffering of greater than 200 feet may be necessary when a RPO wetland is within a regional corridor or supports significant populations of wetland-associated sensitive species and lies adjacent to land use(s) that could result in a high degree of edge effects within the buffer. Although the RPO stipulates a maximum of 200 feet for RPO wetland buffers, actions may be subject to other laws and regulations (such as the Endangered Species Act) that require greater wetland buffer widths.

### Analysis

#### *Issue 2A: Temporarily or Permanently Remove Sensitive Native or Naturalized Habitats*

Table 2.3-2 summarizes the project impacts to onsite vegetation communities. Sensitive vegetation communities that would be impacted by the proposed project include southern willow scrub, tamarisk scrub, non-vegetated channel, Diegan coastal sage scrub, and non-native grassland.

A total of 115.65 acres of sensitive vegetation communities would be temporarily impacted as a result of temporary habitat loss during mining activities and 11.51 acres of sensitive vegetation communities would be permanently impacted as a result of installation of a permanent drop structure on the eastern edge of the

excavation area and the establishment of permanent fuel modification zones, and a trail system. Impacts to sensitive vegetation communities would be considered **significant impacts (Impact BIO-5)**.

In addition, the golf course grading in 2005 resulted in temporary impacts to 0.18 acre of riparian scrub (tamarisk scrub) for a planned golf cart crossing of the river in the eastern portion of the property. The golf course project was halted and the cart path crossing was not constructed. This was the only impact to a sensitive vegetation community outside the limits of the proposed mine project.

*Issue 2B: Adversely Affect Jurisdictional Wetlands and/or Riparian Habitats as Defined by the USACE, CDFW, and County of San Diego*

The proposed project would temporarily and permanently affect jurisdictional (non-vegetated streambed) non-wetland waters and riparian habitats as defined by USACE, RWQCB, CDFW, and the County of San Diego through removal of vegetation, grading, placement of temporary structures (including a drop structure for erosion control, portable processing plant, temporary power lines, weigh scales, and modular scale house), and excavation to a maximum of 35 feet below the current surface, and placement of fill to create a bench around the mined pit. Approximately 0.36 acre of USACE/RWQCB jurisdictional non-wetland waters, and approximately 41.46 acres of CDFW riparian and San Diego County jurisdictional wetlands would be affected (Figure 2.3-2 and Table 2.3-3). Additionally, without mitigation, the project would not be allowable under the RPO exemption for sand, gravel or mineral extraction projects which requires restoration of wetland buffers, a functional gain in wetland/riparian habitat in floodplains, native vegetation and natural soils and contours on steep slopes, and protection of mature riparian woodland. Impacts to jurisdictional non-wetland waters and riparian habitats would be considered **significant (Impact BIO-5)**.

*Issue 2C: Draw Down the Groundwater Table to the Detriment of Groundwater-dependent Habitat*

During post-mining if water conditions were the same as existing conditions where groundwater is approximately 5 to 15 feet below the bottom of the pit, approximately 366 afy is predicted to be lost to evapotranspiration onsite (AECOM 2018). The proposed project is also expected to impact groundwater-dependent habitat (AECOM 2018). These impacts to the groundwater draw-down would be considered **significant (Impact BIO-7)**.

*Issue 2D: Cause Indirect Impacts to Adjacent Proposed or Existing Open Space or Other Natural Habitat Areas that Cause Long-term Harm to Sensitive Habitats*

Upon completion (i.e., after the Reclamation Plan and Revegetation Plan have been implemented), the project would not increase human access, predation, competition from domestic animals, pests, or exotic species, noise, or nighttime

lighting. Therefore, **no indirect impacts** would occur to riparian habitats or other sensitive vegetation community due to changes in these conditions.

Although the BSA does not have a formally established trail system, trails have been formed by heavy human use throughout the years. Human-made trails are currently utilized daily by hikers, bikers, people with dogs, and equestrians on horseback. A formal trails system would have rules and regulations for trail users such as keeping pets leashed and staying on public trails, as well as timing of trail access limited to daytime hours. Wildlife-friendly split rail fencing would be permanently installed along portions of the trails adjacent to sensitive resources. Although a formal trail system would be established and it is possible human and domestic pet usage may increase, these types of trail regulations would limit these potential impacts. Impacts to surrounding vegetation are expected to decrease as established trails discourage people and domestic pets from going off-trail. Thus, the establishment of a trail system would not increase pests, exotic species, noise, or nighttime lighting; impacts would be **less than significant**. The project would not result in significant indirect impacts to downstream habitat due to altered hydrology. Because El Capitan Dam has effectively cut off the flow from upstream since its establishment in 1935, the main source of water in the riverbed is runoff from surrounding hillsides. Therefore, the changes to the topography as a result of mining activities are not expected to substantially affect the hydrology downstream, and impacts would be **less than significant**. In addition, erosion control and stormwater measures would be installed as a project design feature to ensure that sediment and runoff do not drain offsite during mining.

#### *Issue 2E: Harm Wetland Functions and Values Due to Lack of Buffers*

As discussed in Section 2.3.1.2, the RPO conditionally allows impacts to wetland habitats (per Section 86.605, which describes exemptions for sand, gravel or mineral extraction projects), if certain mitigation measures are met. One of measures states that “Mature Riparian Woodland may not be destroyed or reduced in size due to sand, gravel, or mineral extraction.” A total of 8.45 acres of habitat that meets the RPO’s definition of “Mature Riparian Woodland” was mapped within the BSA. The current project was designed to avoid this area; thus, **no direct impacts** would occur.

Mining operations would result in an elevational disconnection of the existing low flow channel between upstream mining areas (Phases 1 and 2) and the Mature Riparian Woodland. Low flow runoff channels within the Mature Riparian Woodland would remain and connect with downstream areas (Phases 3 and 4). Due to infrequent overtopping of the upstream El Capitan Reservoir, highly permeable alluvial soils and hydrology conditions on-site (the main source of water is runoff from surrounding hillsides), above-ground surface flow rarely occurs. Precipitation infiltration (including subsurface runoff from adjacent



uplands) and groundwater are the primary hydrology inputs supporting the Mature Riparian Woodland; which generally includes phreatophytic plant species (plants that depend for their water supply upon ground water that lies within reach of their roots) in the midstory and overstory (e.g. willow and cottonwood), and riparian transitional and upland species in the understory. There is currently limited natural recruitment of younger willow and cottonwood age classes, likely because the water table is too deep (40-50 feet) for these species to become established. Since precipitation infiltration and groundwater conditions will not be changed in this preserved area, indirect hydrology impacts to Mature Riparian Woodland habitat would be **less than significant**.

The proposed mining haul road would primarily traverse north of the Mature Riparian Woodland, outside the 50-foot buffer around the habitat. The proximity of the daily ingress/egress of approximately 231 trucks may result in exposure of the trees, vegetation and wildlife to nitrous oxides, dust and noise. This would be a **significant impact (Impact BIO-8)**.

### **2.3.2.3 Issue 3: Federally Protected Wetlands**

#### Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines and the County's Guidelines for Determining Significance – Biological Resources (2010), a significant impact would occur if the project would have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means or if the project would 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. This Guideline refers only to federally protected wetlands. The significance of impacts shall be determined under County Guidelines B, C and E stated in Section 2.3.3.2 above, specific to federal wetlands.

- B. Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by USACE: 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.
- C. The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of three feet or more from historical low groundwater levels.

- E. The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands. If the proposed project is subject to RPO, buffers of a minimum of 50 feet and a maximum of 200 feet to protect wetlands are required based on the best available science available to the County at the time of adoption of the ordinance. The following examples provide guidance on determining appropriate buffer widths:
- A 50-foot wetland buffer would be appropriate for lower quality RPO wetlands where the wetland has been assessed to have low physical and chemical functions, vegetation is not dominated by hydrophytes, soils are not highly erosive and slopes do not exceed 25 percent.
  - A wetland buffer of 50 to 100 feet is appropriate for moderate to high-quality RPO wetlands which support a predominance of hydrophytic vegetation or wetlands within steep slope areas (greater than 25 percent) with highly erosive soils. Within the 50- to 100-foot range, wider buffers are appropriate where wetlands connect upstream and downstream, where the wetlands serve as a local wildlife corridor, or where the adjacent land use(s) would result in substantial edge effects that could not be mitigated.
  - Wetland buffers of 100 to 200 feet are appropriate for RPO wetlands within regional wildlife corridors or wetlands that support significant populations of wetland-associated sensitive species or where stream meander, erosion, or other physical factors indicate a wider buffer is necessary to preserve wildlife habitat.
  - Buffering of greater than 200 feet may be necessary when a RPO wetland is within a regional corridor or supports significant populations of wetland-associated sensitive species and lies adjacent to land use(s) that could result in a high degree of edge effects within the buffer. Although the RPO stipulates a maximum of 200 feet for RPO wetland buffers, actions may be subject to other laws and regulations (such as the Endangered Species Act) that require greater wetland buffer widths.

### Analysis

#### *Issue 3B: Adversely Affect Jurisdictional Wetlands and/or Riparian Habitats as Defined by the USACE*

The project would result in direct impacts to approximately 0.36 acre of non-wetland waters of the United States, including approximately 0.35 acre of temporary impact and approximately 0.01 acre of permanent impact, through removal of vegetation, grading, placement of temporary structures (including a

drop structure for erosion control, portable processing plant, temporary power lines, weigh scales, and modular scale house), excavation to a maximum of 35 feet below the current surface, and placement of fill to create a bench around the mined pit. These impacts would be considered **significant (Impact BIO-6)**.

*Issue 3C: Draw Down the Groundwater Table to the Detriment of Groundwater-dependent Habitat*

During post-mining if water conditions were the same as existing conditions where groundwater is approximately 5 to 15 feet below the bottom of the pit, approximately 366 afy is predicted to be lost to evapotranspiration onsite (AECOM 2018). The proposed project is also expected to impact groundwater-dependent habitat (AECOM 2018). These impacts would be considered **significant (Impact BIO-7)**.

*Issue 3E: Harm Wetland Functions and Values Due to Lack of Buffers*

As discussed in Section 2.3.1.2, the RPO conditionally allows impacts to wetland habitats (per Section 86.605, which describes exemptions for sand, gravel or mineral extraction projects), if certain mitigation measures are met. One of measures states that “Mature Riparian Woodland may not be destroyed or reduced in size due to sand, gravel, or mineral extraction.” A total of 8.45 acres of habitat that meets the RPO’s definition of Mature Riparian Woodland was mapped within the project area. The current project was designed to avoid this area; thus, **no direct impacts** would occur.

Mining operations will result in an elevational disconnection of the existing low flow channel between upstream mining areas (Phases 1 and 2) and the Mature Riparian Woodland. Low flow runoff channels within the Mature Riparian Woodland will remain and connect with downstream areas (Phases 3 and 4). Due to infrequent overtopping of the El Capitan Reservoir, alluvial soils (highly permeable) and hydrology conditions on-site, above-ground channel flow rarely occurs. Precipitation infiltration (including subsurface runoff from adjacent uplands) and groundwater are the primary hydrology inputs supporting the Mature Riparian Woodland; which generally includes phreatophytic plant species (plants that depend for their water supply upon ground water that lies within reach of their roots) in the midstory and overstory (e.g., willow and cottonwood), and riparian transitional and upland species in the understory. There is currently limited natural recruitment of younger willow and cottonwood age classes, likely because the water table is too deep (40-45 feet) for these species to become established. Since precipitation infiltration and groundwater conditions will not be changed in this preserved area, indirect hydrology impacts to Mature Riparian Woodland habitat would be **less than significant**.

The proposed mining haul road would primarily traverse north of the Mature Riparian Woodland, outside the 50-foot buffer around the habitat. The proximity

of the daily ingress/egress of approximately 231 trucks may result in exposure of the trees, vegetation and wildlife to nitrous oxides, dust and noise. This would be a **significant impact (Impact BIO-8)**.

#### **2.3.2.4 Issue 4: Wildlife Movement and Nursery Sites**

##### Guidelines for the Determination of Significance

Based on the County's Guidelines for Determining Significance – Biological Resources (San Diego County, 2010), a significant impact would occur if the project would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites or if the project would:

- A. The project would impede wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.
- B. The project would substantially interfere with connectivity between blocks of habitat, or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage. For example, if the project proposes roads that cross corridors, fencing that channels wildlife to underpasses located away from the interchanges would be required to provide connectivity. Wildlife underpasses shall have dimensions (length, width, height) suitable for passages by the affected species based on a site-specific analysis movement. Another example is increased traffic on an existing road that would result in significant road-kill or interference with an existing wildlife corridor/linkage.
- C. The project would create artificial wildlife corridors that do not follow natural movement patterns. For example, constraining a corridor for mule deer or mountain lion to an area that is not well-vegetated or that runs along the face of a steep slope instead of through the valley or along the ridgeline.
- D. The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels likely to affect the behavior of the animals identified in a site specific analysis of wildlife movement.
- E. The project does 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. The adequacy of the width shall be based on the biological information for the target species, the quality of habitat within and adjacent to the corridor, topography and adjacent land uses. Where there is limited topographic

relief, the corridor should be well-vegetated and adequately buffered from adjacent development. Where there is limited topographic relief, the corridor should be well-vegetated and adequately buffered from adjacent development. Corridors for bobcats, deer, and other large animals should reach rim-to-rim along drainages.

- F. The project does not maintain adequate visual continuity (i.e., long lines-of-site) within wildlife corridors or linkage. For example, development (such as homes or structures) sited along the rim of a corridor could present a visual barrier to wildlife movement. For stepping-stone/archipelago corridors, a project does not maintain visual continuity between habitat patches.

## Analysis

### *Issue 4A: Impede Access to Necessary Habitat Areas for Wildlife*

The project would temporarily limit wildlife access to actively mined portions the site, which could affect wildlife movement and breeding. To reduce the magnitude of the temporary habitat loss, these effects would be limited to a small portion of the project area at any given time, as the project would proceed in four phases during the 12-year mining activity. As each phase is completed, it would be reclaimed (e.g., the landscape would be stabilized and revegetated). As the vegetation begins to grow back within reclaimed areas, it would become suitable to provide cover, forage, and breeding opportunities for wildlife. As such, most of the project area would be available for wildlife use at any given time for the duration of the proposed project. In addition, because much of the surrounding land area is rural or undeveloped, wildlife could still move east to west by moving around the active area. Nevertheless, temporary access limits to areas previously available for wildlife movement would be considered **significant (Impact BIO-9)**.

### *Issue 4B: Interfere with Connectivity Between Blocks of Habitat or Block or Interfere With a Local or Regional Wildlife Corridor or Linkage*

Portions of the project site where active mining operations would occur may temporarily interfere with connectivity between blocks of habitat, or block local linkages, including the Lake Jennings/Wildcat Canyon Biological Resource Core Area. As discussed previously, to reduce the magnitude of this loss of available movement corridors, impacts would be limited to a small portion of the project area at any given time as the project would proceed in four phases from east to west, and most of the project area would be available while each phase is being mined. The only area where a block in the linkage may take place during the duration of the project is at the primary staging/access area. Use of the primary staging/access area for mining operations, including the daily ingress/egress of approximately 231 trucks, would create a barrier to wildlife crossing this portion

of the BSA and may increase incidences of road kill as well as indirect effects on wildlife movement and behavior. However, mining operations would generally occur only during daylight hours, when most wildlife would not be expected to be active (e.g., peak wildlife movement occurs one hour after dawn and one hour prior to dusk). Therefore, an increase in wildlife mortality due to increased truck traffic during daylight hours would not be expected. Additionally, reclamation and revegetation of the mined areas, which would be conducted one phase at a time, would eventually result in higher quality habitat that can serve as a local or regional wildlife corridor linkage post mining. The project would not substantially interfere with local or regional wildlife corridor linkages; therefore, impacts to wildlife movement would be **less than significant**.

*Issue 4C: Create Artificial Movement Corridors*

The project would not create artificial wildlife corridors that do not follow natural movement patterns; therefore, impacts would be **less than significant**.

*Issue 4D: Increase Noise or Nighttime Lighting Affect the Behavior of Animals Identified in Site-Specific Analysis of Wildlife Movement*

Noise and vibrations from construction and mining machinery would occur during, mining operations, soil excavation, vehicle ingress and egress, and brush-removal, which have the potential to indirectly affect wildlife movement in the vicinity of the BSA during the day. Noise and nighttime lighting impacts to wildlife would be a **significant impact (Impact BIO-1 through Impact BIO-4)**.

*Issue 4D: Constrain an Already Narrow Corridor*

The project may temporarily affect east-west wildlife movement along the existing river channel during excavation. However, during construction, wildlife would be able to move along the undeveloped upland setback of 150 – 300 feet that would be established along the northern and southern project boundaries. In addition, since excavation would occur in phases, north-west movement would not be impeded. Further, once the excavation has been completed, 99 percent of the mining area would be reclaimed and revegetated, providing higher quality habitat with better vegetative cover for the movement of wildlife. Thus, impacts would be **less than significant**.

*Issue 4F: Adversely Affect Adequate Visual Continuity Within Wildlife Corridors or Linkage*

Once the project area has been completed and revegetated, there would be no obstructions to line-of-sight as there are no permanent structures that would prevent visual continuity within wildlife corridors or linkages. Thus, impacts would be **less than significant**.

### **2.3.2.5 Issues 5 and 6: Local Policies and Ordinances and Adopted Conservation Plans**

#### Guidelines for the Determination of Significance

Based on the County's Guidelines for Determining Significance – Biological Resources (San Diego County, 2010), a significant impact would occur if the project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP, or if the project would:

- A. For lands outside of the Multiple Species Conservation Program (MSCP), the project would impact coastal sage scrub vegetation in excess of the County's 5 percent habitat loss threshold as defined by the *Southern California Coastal Sage Scrub NCCP Process Guidelines*.
- B. The project would preclude or prevent the preparation of the subregional NCCP. For example, the project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.
- C. The project will impact any amount of wetlands or sensitive habitat lands as outlined in the RPO.
- D. The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the *NCCP Guidelines*.
- E. The project does not conform to the goals and requirements as outlined in any applicable HCP, Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar planning effort.
- F. For lands within the MSCP, the project would not minimize impacts to Biological Resource Core Areas, as defined in the Biological Mitigation Ordinance (BMO).
- G. The project would preclude connectivity between areas of high habitat values, as defined by the *Southern California Coastal Sage Scrub NCCP Guidelines*.
- H. The project does not maintain existing movement corridors and/or habitat linkages as defined by the BMO.
- I. The project does not define impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
- J. The project would reduce the likelihood of survival and recovery of listed species in the wild.

- K. The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (MBTA).
- L. The project would result in the take of eagles, eagle eggs or any part of an eagle (Bald and Golden Eagle Protection Act).

### Analysis

#### *Issue 5A: For non-MSCP Lands, Impact Greater than 5% of Coastal Sage Scrub Vegetation*

The project area contains 10.38 acres of poor quality coastal sage scrub, of which 3.61 acres, or 35 percent, would be impacted (see Table 2.3-2). It should be noted that this significance is addressed for the current project status as not being within the MSCP. However as addressed in Section 2.3.1.2, a BLA (or other process determined by the state and federal wildlife agencies) is being proposed for this project and under the MSCP, these impacts would be considered **significant (Impact BIO-5)**.

#### *Issue 5B: Preclude or Prevent the NCCP Process*

The project is not currently covered by the NCCP. However, the project is currently being proposed in a BLA request (or other process determined by the state and federal wildlife agencies) to be added to the MSCP PAMA. While the project area is dominated by habitats generally supporting non-native vegetation, the proposed BLA provides an opportunity to contribute to habitat and covered species goals of the County Subarea Plan and would not preclude or prevent the NCCP process. In addition, the San Diego River and associated alluvial sand habitat within the BLA area represent areas of high biological value, providing habitat for several sensitive species and, in the case of the San Diego River corridor, representing a vital habitat linkage in the County. Also, the proposed BLA would improve upon the existing configuration of the County Subarea Plan's PAMA by filling a large portion of an existing "doughnut hole" within the PAMA and increasing connectivity among existing preserve areas. Overall, based on the analysis herein, the proposed BLA would have a net benefit to the MSCP Subregional Plan and County Subarea Plan. Therefore, **no impact** associated with precluding or preventing the NCCP process would occur.

#### *Issue 5C: Impact Sensitive Habitat Lands Outlined in the RPO*

As discussed in Section 2.3.1.2, the project includes design features, such as providing wetland buffers and maintaining a 50-foot non-disturbance area around the mature riparian woodlands within the project area to avoid/minimize impacts to biological resources. However, prior to implementation of mitigation, the project would impact wetlands and sensitive habitat lands outlined in the RPO. As discussed under Issue 2b, without mitigation the project would be not be



allowable under the RPO exemption for sand, gravel or mineral extraction projects which requires a functional gain in wetland/riparian habitat in floodplains, native vegetation and natural soils and contours on steep slopes, and protection of mature riparian woodland. Therefore, impacts to Sensitive Habitat Lands outlined in the RPO would be **significant (Impact BIO 4 and Impact BIO 5)**. In addition, a total of nine oak trees occur within the proposed mining area. Three of these oak trees would be preserved in place, while six would be removed. However, oak trees on site are not dense or numerous enough to be classified as oak woodland, a sensitive habitat under the RPO, therefore, no impact would occur to oak woodland.

*Issue 5D: Inadequately Mitigate for CSS Habitat Losses*

As noted in Section 2.3.1, coastal sage scrub habitat quality on the site is marginal as many of the patches are highly disturbed and support a high abundance of non-native grasses and forbs. With implementation of the Revegetation Plan, mitigation and enhancement for impacted habitat in addition to reclamation will increase overall habitat value for the project area and contribute to connectivity of habitats with a higher value. The project proposes to restore 50.49 acres of coastal sage scrub – a significant increase beyond the minimum 2:1 mitigation ratio, which requires a minimum of 7.22 acres of mitigation for 3.61 acres of impact. *Therefore, the project would mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the Southern California Coastal Sage Scrub NCCP Process Guidelines.*

*Issue 5E: Does Not Conform to the Goals and Requirements Outlined in an HCP, HMP, SAMP, Watershed Plan, or Similar Planning Effort*

The project is not currently covered by an HCP, Habitat Management Plan, or Special Area Management Plan. It should be noted that this issue is addressed for the current project status as not being within the MSCP. However as addressed in Section 2.3.1.2, a BLA (or other process determined by the state and federal wildlife agencies) is being proposed for this project and in order for the BLA to be approved, this project would be required to conform to the goals and requirements outlined in the MSCP.

Therefore, the project would not conflict with the goals and requirements as outlined in any applicable HCP, Habitat Management Plan, Special Area Management Plan, Watershed Plan, or similar regional planning effort and impacts would be **less than significant**.

*Issue 5F: For MSCP Lands, Fail to Minimize Impacts to Biological Resource Core Areas (BRCAs) as Defined in the County BMO*

The project area occurs within Lake Jennings/Wildcat Canyon Biological Resource Core Area (BRCA) (County of San Diego 1997). Although impacts to

movement and linkages within this BRCA would occur, reclamation and revegetation of the mined areas would eventually result in higher quality habitat that can serve as a local or regional wildlife corridor linkage post mining. Post project implementation, habitat linkages and existing movement corridors would be maintained, and vegetative cover would be increased, thus increasing the overall width of the linkage and habitat quality available to wildlife within the project area. Visual continuity would be maintained. Thus, this project would not fail to minimize impacts to BRCAs.

*Issue 5G: Remove Connectivity of Existing Movement Corridors and/or Habitat Linkages as Defined by the BMO*

While the current project is not within the MSCP, as addressed in Section 2.3.1.2, a BLA (or other process determined by the state and federal wildlife agencies) is being proposed for this project and in order for the BLA to be approved, this project would be required to conform to the goals and requirements outlined in the MSCP and would be required to maintain movement corridors and habitat linkages as defined in the County BMO. The project area occurs within Lake Jennings/Wildcat Canyon Biological Resource Core Area (County of San Diego 1997). Although impacts to movement and linkages within this Biological Resource Core Area would occur, reclamation and revegetation of the mined areas would eventually result in higher quality habitat that can serve as a local or regional wildlife corridor linkage post mining. During project construction, noise levels would only be increased during daytime hours when most wildlife would not be expected to be active (e.g., peak wildlife movement occurs one hour after dawn and one hour prior to dusk) and temporary nighttime lighting that would be installed at the facility for safety purposes would be shielded away from adjacent native habitats, and thus is not anticipated to affect breeding or foraging behavior of wildlife moving through the area. Post project implementation, habitat linkages and existing movement corridors would be maintained, and vegetative cover would be increased, thus increasing the overall width of the linkage and habitat quality available to wildlife within the project area. Visual continuity would be maintained. Additionally, at this time, there are no known habitat corridor or linkage studies demonstrating connectivity between offsite regions of high quality coastal sage scrub, but this project would not preclude connectivity between areas of high value that contain coastal sage scrub.

Thus, impacts to BRCAs would be minimized as defined in the County of San Diego Biological Mitigation Ordinance (BMO) and impacts would be **less than significant**.

*Issue 5H: Fail to Maintain Corridors Identified in the BMO*

Portions of the project site where active mining operations are occurring may temporarily interfere with connectivity between existing movement corridors and/or habitat linkages as defined by the BMO. As discussed previously, to

reduce the magnitude of this loss of available movement corridors, these impacts would be limited to a small portion of the project area at any given time as the project would proceed in four phases and most of the project area would be available while each phase is being constructed. The only area where a block in the linkage may take place during the duration of the project is at the primary staging/access area. Use of the primary staging/access area for mining operations, including daily ingress/egress approximately 231 trucks, would create a barrier to wildlife crossing this portion of the project area and may increase incidences of road kill as well as indirect effects on wildlife movement and behavior. However, mining operations would generally occur only during daylight hours, when most wildlife would not be expected to be active (e.g., peak wildlife movement occurs one hour after dawn and one hour prior to dusk). Therefore, an increase in wildlife mortality due to increased truck traffic during daylight hours would not be expected. Additionally, reclamation and revegetation of the mined areas, which would be conducted one phase at a time, would eventually result in higher quality habitat that can serve as a local or regional wildlife corridor linkage post mining. Thus, this project would not fail to maintain corridors.

*Issue 5I: Impact MSCP Narrow Endemics and Core Populations of Narrow Endemics*

The proposed project is not within the MSCP and is not anticipated to impact core populations of narrowly endemic species. Therefore, **no impact** would occur.

*Issue 5J: Reduce Likelihood of Survival and Recovery of Listed Species in the Wild*

The project could affect federally listed least Bell's vireo and California gnatcatcher through direct impacts (direct mortality of individuals, loss or removal of nesting habitat) and indirect (construction-generated noise during breeding activities). However, the current condition of the habitat is poor (high cover of invasive species, low native species diversity, etc.). The proposed project is not expected to reduce the likelihood of survival and recovery of these species in the wild as there are low numbers of these species that were detected onsite so that if direct mortality occurred, these low numbers would not affect the survivability of the overall population. Direct and indirect impacts to the low numbers of individuals of these species would not impact the survivability of these species. Thus, impacts to these species would be **less than significant** relative to the likelihood of survival and recovery of listed species.

*Issue 5K: Result in the Killing of Migratory Birds or Destruction of Active MBTA Nests or Eggs*

Killing of migratory birds or destruction of active MBTA nests or eggs may occur during construction within the mining footprint as a result of vegetation crushing or removal. These impacts would be considered **significant (Impact BIO-1)**.

### *Issue 5J: Result in the Take of Eagles, Eagle Eggs, or Any Part of an Eagle*

The project would not result in the take of eagles, eagle eggs, or any part of an eagle. As discussed previously, no golden eagle nests were detected onsite or within 4,000 feet of the project site. The nearest known golden eagle nest listed by the CNDDDB was recorded approximately 2 miles east of the BSA at El Capitan Reservoir, well outside of the zone of influence of the project. Recent golden eagle surveys conducted by USGS in San Diego County suggest that two adjacent golden eagle territories may overlap with the BSA (USGS 2016) and foraging habitat exists within the BSA, however nesting is not expected to occur, and take of eagles, eagle eggs, or any part of an eagle is not expected. Thus, **no impacts** would occur

### **2.3.3 Cumulative Impacts**

As urbanization and industrial pressures increase within the El Monte Valley and other unincorporated areas of San Diego, impacts to biological resources within the region may also increase cumulatively. Cumulative impacts are concluded to be significant if the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

A list of cumulative projects has been compiled, and the cumulative project study area defined, based on input from the County of San Diego. All of the cumulative projects are depicted in Figure 2.3-5. Table 2.3-4 lists the cumulative projects that have the potential to result in impacts to biological resources.

The geographical scope of the potential cumulative impacts related to biological resources encompasses the area south of San Vicente Reservoir, (generally) north of the Interstate 8, east of the city of San Diego and west of El Capitan Reservoir. As described in the impact analyses above, potentially significant biological resource impacts resulting from the proposed project include sensitive plant communities, habitat for sensitive species, nesting birds, foraging habitat for raptors, jurisdictional wetlands and/or riparian habitats, wildlife movement and linkages, among other impacts. Although impacts would occur, habitat would be reclaimed and revegetated following the proposed mining activities. Mitigation Measures **M-BIO-1** through **M-BIO-12** would reduce these impacts to **less than significant** levels.

### Issue 1: Sensitive Plant and Wildlife Species

As described in Sections 2.3.2.1, potentially significant biological resource impacts resulting from the proposed project include sensitive plant communities, habitat for sensitive species, nesting birds, foraging habitat for raptors, jurisdictional wetlands and/or riparian habitats, wildlife movement and linkages, among other impacts. The habitat would be reclaimed and revegetated in phases

following the proposed mining activities. The entirety of the 226.41 acres of temporary impacts within the mining phases will either be restored for habitat mitigation (113.92 acres) or be subject to reclamation revegetation (127.19 acres). An additional 64.16 acres (rounded up from the required 62.72 acres) of riparian and transitional upland habitats (with non-native exotic plant species) outside of mining limits will be enhanced for mitigation. A total of 238.04 of the 226.41 acres (greater than 98%) within the temporary impact area of disturbance in the mining phases is currently comprised of non-native habitats. All native habitats will be restored in-kind for mitigation per County guidelines, non-native grasslands will be mitigated with coastal sage scrub, tamarisk scrub will be mitigated with both riparian forest mitigation and enhancement within riparian and transitional upland habitats, and temporary impact areas that are not designated for habitat mitigation will be reclaimed via soil stabilization and reseeded.

The majority of the cumulative projects listed in Table 2.3-4 are commercial or residential projects. Three of the 24 projects have approved Negative Declarations (Cumulative Projects 7, 8, and 13). An assessment of project locations, aerial photo signature, and an overlay of existing species database information (CNDDDB, USFWS, and MSCP) was conducted in Google Earth for the remaining 21 projects identified with no existing environmental information or with approved Mitigated Negative Declarations, ten projects (Cumulative Projects 10, 14, 16 through 21, and 23 - 24) were identified as being located in urban/developed areas; these are likely to not have potential impacts to biological resources. These developed areas generally have fewer sensitive biological resources than in the El Monte Valley where the proposed project is located.

The remaining 11 projects are located within undeveloped, open space areas likely to have biological resources that have a potential to be impacted (Cumulative Projects 1 through 6, 9, 11 - 12, 15, and 22). Other biological resources associated with these habitats may be impacted if present at this site; at a minimum this may include nesting birds protected under the MBTA or rare plants. Potential impacts to nesting birds may include direct mortality to individuals or eggs, loss of nests or nesting and foraging habitat and indirect impacts such as construction-generated noise during the breeding season. However, project design measures and mitigation measures as discussed in Section 2.3.5 would be implemented to reduce these impacts to less-than-significant levels.

Therefore, the proposed project would not contribute considerably to cumulative biological impacts and cumulative impacts to sensitive plant communities would be **less than significant**.

## Issue 2: Riparian Habitat and Other Sensitive Natural Communities

At a minimum, biological impacts may occur to vegetation communities requiring mitigation on the eleven Cumulative Project sites identified to occur within undeveloped open space areas; the Google Earth aerial photograph for these sites all appear to display either coastal sage scrub, oak woodlands, and/or nonnative grassland, which are similar to habitats on the project site. Similarly, potential direct impacts to vegetation communities may occur such as direct removal or indirect impacts such as construction-generated dust, sedimentation, or runoff into adjacent vegetation communities. Although these same types of impacts have been identified for the project, project design measures and mitigation measures as discussed in Section 2.3.5 would be implemented to reduce these impacts to less-than-significant levels. Therefore, the proposed project would not contribute considerably to cumulative biological impacts and cumulative impacts to sensitive plant communities would be **less than significant**.

## Issue 3: Federally Protected Wetlands

At least eleven of the Cumulative Projects identified in Table 2.3-4 occur in undeveloped, open space areas. Project-specific information would be required to determine the presence of federally protected wetlands on these sites; if they do occur, potential direct impacts to wetlands may include removal of vegetation, grading, placement of temporary structures, and fill. While the project would impact 0.36 acre of federally protected wetlands, mitigation would reduce potentially significant impacts to below a level of significance. Therefore, the proposed project would not contribute considerably to cumulative biological impacts and cumulative impacts to jurisdictional wetlands and waterways would be **less than significant**.

## Issue 4: Wildlife Movement and Nursery Sites

At least eleven of the Cumulative Projects identified in Table 2.3-4 occur in undeveloped, open space areas that may function as wildlife movement corridors or linkages. However, it was determined that the proposed project would not significantly impact wildlife movement and nursery sites, thus the proposed project would not contribute to cumulative impacts to wildlife movement corridors and nursery sites.

## Issue 5: Local Policies and Ordinances and Adopted Conservation Plans

Projects considered within the vicinity of the proposed project would contribute to cumulative impacts to sensitive plants, wildlife, and habitats. Based on a Google Earth analysis of an overlay of MSCP layers onto the Cumulative Project sites identified in Table 2.3-4, fourteen of the total 24 projects occur within the County's MSCP Plan boundaries and have/would comply with local policies and ordinances such as the County guidelines (County of San Diego 2008) and

MSCP/Biological Mitigation Ordinance, and with the RPO. These projects have/would incorporate avoidance, minimization, and mitigation measures following guidelines provided in these local policies. Of the remaining projects (Cumulative Projects 15 through 24), eight occur within the City of Santee. Of the remaining two, one occurs within the City of San Diego and the other occurs within the City of El Cajon. These projects would have to comply with the local policies, ordinances, and adopted conservation plans of these jurisdictions.

The proposed project similarly would comply with the County local policies, and ordinances, and is being processed for an MUP permit. The project would qualify under an RPO exemption with project design features and implementation of mitigations for impacts to wetlands and environmentally sensitive lands. Additionally, at this time the project site is not within the MSCP but is currently being proposed to be incorporated into the MSCP via a BLA (or other process determined by the state and federal wildlife agencies) which requires full compliance with the MSCP. This project would not contribute to cumulative impacts of non-compliance with local policies, ordinances, and adopted conservation plans.

#### **2.3.4 Significance of Impacts Prior to Mitigation**

The following significant impacts related to biological resources would occur with project implementation:

**Impact BIO-1** The project would result in potentially significant impacts (direct mortality of individuals, vegetation removal in occupied or suitable habitat) to special-status species as identified in local or regional plans, policies, or regulations, or by the CDFW and USFWS. This includes potentially significant impacts to nesting birds protected by the MBTA, which could include removal of nesting habitat within mining areas or fuel modification areas, excessive noise, and increased human activity during the breeding season. Additionally, the project would impact greater than 5% of the non-native grassland and coastal sage scrub within the project area that provide functional foraging habitat for raptors. Potentially significant indirect impacts to special-status species include construction-generated noise, dust, sedimentation, runoff in adjacent habitat to the mining phases

**Impact BIO-2** The project would result in potentially significant impacts to least Bell's vireo as a result of direct impacts to suitable habitat resulting in vegetation removal of 0.12 acres of suitable riparian habitat.

**Impact BIO-3** The project would result in potentially significant impacts to coastal California gnatcatcher in the form of direct loss of 3.61 acres of coastal sage scrub habitat.

**Impact BIO-4** The project would result in impacts to special-status herpetological species such as the glossy snake. Impacts could include direct mortality as a

result of crushing during mining activities, and loss of aestivation, burrowing, and foraging habitat.

**Impact BIO-5** The project would result in potentially significant direct impacts as a result of vegetation removal. This would consist of impacts to 0.12 acres of southern willow scrub, 41.81 acres of tamarisk scrub, 0.36 acres of non-vegetated channel, 3.61 acres of Diego coastal sage scrub, and 86.55 acres of non-native grassland, totaling 176.64 acres.

**Impact BIO-6** The project would result in potentially significant impacts to 0.36 acres of non-vegetated channel, which are jurisdictional non-wetland waters (RWQCB and USACE jurisdiction). The project would also result in potentially significant impacts to 41.46 acres of tamarisk scrub riparian habitat (CDFW and County jurisdiction) as a result of vegetation removal, totaling 41.82 acres of impacts to jurisdictional resources.

**Impact BIO-7** The project would result in groundwater draw-down, and is expected to have impacts to groundwater-dependent habitat (AECOM 2018).

**Impact BIO-8** The project would result in potentially significant indirect impacts to mature riparian woodland that occurs adjacent to the haul road, such as construction-generated fugitive dust.

**Impact BIO-9** The project would result in potentially significant impacts to wildlife movement corridors by limiting access in each phase of mining during mining activities.

### **2.3.5 Mitigation**

Implementation of the Reclamation Plan and Revegetation Plan, as well as the Mitigation Measures listed below, would reduce impacts to a less than significant level. Ultimately, implementation of the project would result in beneficial impacts to biological resources. Each numbered measure below is followed by the corresponding significant impact that it addresses.

#### **M-BIO-1: Raptors and Nesting Birds Covered by MBTA (Impact BIO-1)**

- 1) To avoid and minimize impacts to nesting coastal California gnatcatchers, least Bell's vireo, raptors and other birds protected by the Migratory Bird Treaty Act, vegetation removal and grading shall occur outside of the nesting bird season (February 1 through August 31). Note that no gravel crushing is required to process the materials extracted from the site; therefore, noise levels would be lower than those typically associated with mining activities. If the breeding season cannot be avoided, the following measures shall be implemented:



- a. During the avian breeding season, a qualified Project Biologist shall conduct a preconstruction avian nesting survey no more than 72 hours prior to vegetation disturbance or site clearing. Surveys need not be conducted for the entire project area at one time; they shall be phased so that surveys occur shortly before a portion of the site is disturbed. If construction begins in the non-breeding season and proceed continuously into the breeding season, no surveys shall be required. However, if there is a break of 3-5 days or more in construction and mining activities during the breeding season, a new nesting bird survey shall be conducted before these activities begin again.
  - b. The preconstruction survey shall cover all suitable bird nesting habitat on and within 300 feet, and all suitable raptor nesting habitat on and within 500 feet, of areas anticipated to be impacted in the near term. If an active nest is found during the preconstruction avian nesting survey, a qualified Project Biologist shall implement a 300-foot minimum avoidance buffer for coastal California gnatcatcher, least Bell's vireo, and other passerine birds, and a 500-foot minimum avoidance buffer for all raptor species. The nest site area shall not be disturbed until the nest becomes inactive or the young have fledged.
- 2) A preconstruction survey for burrowing owl will be conducted in accordance with Section 3.4.1 "Pre-grading Survey" of the *Strategy for Mitigating Impacts to Burrowing Owls in the Unincorporated County* (Burrowing Owl Strategy; County of San Diego 2010b). If burrowing owls are detected during the preconstruction survey within 300-feet of proposed grading, a translocation plan will be developed and finalized in coordination with the County and the wildlife agencies (USFWS and CDFW). Grading will not occur within 300-feet of an active owl burrow until the young have fledged and are no longer dependent on the burrow. Grading closer than 300 feet may occur within written concurrence from the wildlife agencies and the County Mitigation Monitoring Coordinator; the distance will depend on the burrow's location in relation to the site's topography and other physical and biological characteristics. In addition, mitigation for impacts to habitat would be required as outlined in the Burrowing Owl Strategy.

### **M-BIO-2: Least Bell's Vireo (Impact BIO-2)**

In accordance with the project's Revegetation Plan, direct impacts to suitable habitat for the state and federally endangered least Bell's vireo shall be mitigated at a minimum of 3:1 ratio through the restoration of southern willow scrub habitat. Approximately 126 acres of riparian habitat suitable to support least Bell's vireo will be revegetated.

**M-BIO-3: Coastal California gnatcatcher (Impact BIO-3)**

In accordance with the project's Revegetation Plan, direct impacts to California gnatcatcher-occupied habitat shall be mitigated at a minimum 2:1 ratio through restoration. Restoration may include a combination of in-kind restoration (i.e., coastal sage scrub habitat restored to coastal sage scrub habitat) and out-of-kind restoration (i.e., non-native grassland habitat restored to coastal sage scrub habitat). Approximately 50.5 acres of Diegan coastal sage scrub habitat will be revegetated.

**M-BIO-4: Glossy Snake and Other Special-Status Amphibian and Reptile Species (Impact BIO-4)**

A focused herpetofaunal mitigation plan shall be developed and implemented by a qualified biologist to address potential direct and indirect impacts to glossy snake and other amphibian and reptile state Species of Special Concern. The mitigation plan shall include the following measures to be implemented:

- 1) Trapping and collection of herpetofaunal species shall be conducted prior to any site preparation and mining activities (refer to Appendix J of the Biological Resources Report [included as Appendix G to this Draft EIR]). Once the herpetofaunal species are collected, they shall be relocated and set free outside of mining boundaries in the eastern portion of the project site, east of Dairy Road. They shall be marked to track the success of this action over time; the mitigation plan shall include detail on the specific methodology of the marking study.
- 2) Exclusionary fencing shall be installed along the project disturbance footprint to preclude special-status herpetofaunal species from moving back into the site. The focused mitigation plan shall include specifications for installing, monitoring, and repairing the fencing to maintain its function and integrity throughout the duration of construction and mining activities.
- 3) Preconstruction surveys for herpetofaunal species shall be conducted by a qualified biologist no more than 10 days prior to initiation of excavation activities associated with site preparation and sand mining activities in those specified areas of the project site. Surveys may not need to be conducted for the entire project site at once; they may be phased so that surveys occur in portions of the project before excavation occurs (refer to Appendix J of the Biological Resources Report [included as Appendix G to this Draft EIR]).
- 4) Overburden excavated and collected during site preparation and mining activities shall be moved (to the maximum extent feasible) to the eastern portion of the site, outside of the mining limits, to improve the habitat for herpetofaunal species at the release location for the project site, particularly as fill into some of the previously excavated areas in the

eastern portion of the site where limited species observations have been documented (refer to Appendix J of the Biological Resources Report [included as Appendix G to this Draft EIR]).

**M-BIO-5: Mining Best Management Practices and oversight (Impact BIO-1 through BIO-9)**

A qualified Project Biologist shall be responsible for monitoring the limits of construction and mining activity, mitigation measures, design considerations, and project conditions during all phases of the project. The Project Biologist shall conduct the following:

1. Attend the preconstruction meeting with the contractor and other key construction personnel prior to clearing, grubbing, or grading.
2. Conduct worker training prior to all phases of construction; this shall include meetings with the contractor and other key construction personnel to explain limits of disturbance, which shall be delineated with temporary construction fencing with clear signage stating the fenced area is a sensitive habitat area and to keep out, and the importance of restricting work to designated areas prior to clearing, grubbing, or grading. Discussions shall include procedures for minimizing harm to or harassment of wildlife encountered during construction and mining activities prior to clearing, grubbing, and/or grading.
3. Conduct pre-construction clearance surveys to detect the presence of nesting birds, burrowing owls, and other sensitive terrestrial wildlife species, such as coast horned lizard, glossy snake, orange-throated whiptail, and two-striped garter snake. The Project Biologist shall use their discretion in identifying measures to avoid impacts to any sensitive wildlife observed during pre-construction clearance surveys (e.g., avoidance buffers, relocation from harm's way, etc.).
4. Be present onsite to monitor initial vegetation clearing, grubbing, and grading to ensure that mitigation measures are being appropriately followed, including restricting activity to delineated construction areas and avoiding impacts to breeding birds.
5. Periodically monitor the limits of construction and mining operations as needed throughout the life of the project to avoid unintended direct and indirect impacts.
6. Confirm construction and mining activity boundaries are marked (e.g., delineated with temporary fencing and sensitive habitat signage) and not breached;
7. Monitor Mature Riparian Woodland areas to confirm they are protected from incursion with installation of temporary construction fencing and

- sensitive habitat signage. Also confirm that the slopes at the edge of protected Mature Riparian Woodland habitat are not eroding, and that appropriate erosion control measures, such as fiber rolls, blankets, gravel bags, etc., are installed;
8. Apply AggreBind® to temporary haul roads prior to beginning construction (remove at the end of construction) and spray water on grading areas and at points of ingress and egress of the haul road at the intersection where the haul roads meet dirt roads or paved roads to minimize dust;
  9. Water roads and grading areas regularly to minimize dust;
  10. Implement pertinent requirements that address erosion and runoff, including the federal Clean Water Act, National Pollution Discharge Elimination System (NPDES), and Stormwater Pollution Prevention Plan (SWPPP); and
  11. Prepare a post-construction monitoring report for submittal to the County of San Diego. The report shall substantiate the supervision of the clearing, grubbing, and/or grading activities, and shall provide a final assessment of biological impacts.

**M-BIO-6: Reclamation Plan implementation oversight (Impacts BIO-2, BIO-3, BIO-5, and BIO-6)**

A qualified Restoration Ecologist shall be designated to oversee implementation of the Reclamation Plan (as it pertains to site preparation, erosion control, hydro seeding, and soil stabilization). The Restoration Ecologist shall have at least 5 years of experience monitoring successful native habitat restoration projects in Southern California, including all habitat types that shall be restored onsite. In addition, the Restoration Ecologist shall:

- Attend all relevant construction meetings.
- Have the authority to redirect construction and maintenance crews in keeping with the goals, objectives, and performance standards of the final Reclamation Plan.
- Approve the seed palette used for hydro seeding.
- Regularly monitor reclamation activities to determine if and how remedial actions should be conducted, if needed, for observed issues such as sedimentation and erosion.

### **M-BIO-7: Revegetation Plan implementation and oversight (Impact BIO-1 through BIO-9)**

A Revegetation Plan shall be implemented to guide and ensure successful revegetation/creation of self-sustaining riparian and upland habitats, which shall serve as mitigation for impacts to native vegetation communities. In contrast to the Reclamation Plan, which focuses on landform and soil stabilization, the focus of the Revegetation Plan is to restore the ecological functions and values of the impacted habitats. Revegetation (mitigation) and habitat enhancement would occur within mining phases as depicted in Figure 7 and would be implemented in accordance with the Revegetation Plan (ESA 2018c) once approved by the County. The Revegetation Plan includes the following:

- Sufficient restoration or creation of habitat to fulfill the mitigation obligations described in M-BIO-8.
- The planting plan shall be designed to ensure that the appropriate restored/created habitat is suitable for the coastal California gnatcatcher and least Bell's vireo, and allows for local and regional wildlife movement (e.g., appropriate width and vegetative cover).
- The planting design shall also include adequate wetland buffers (100 to 200 feet wide, measured from the edge of wetland habitat).
- A native planting palette appropriate for each vegetation type being mitigated and appropriate to local conditions.
- Irrigation for upland and wetland habitat types for the first 2 to 3 years. Irrigation should be removed during the final 2 years of restoration to ensure that the habitat is self-sustaining.
- A 120-day plant establishment period plus five-year restoration maintenance period (or until success criteria are met).
- Qualitative and quantitative monitoring methods to ensure that success criteria are met.
- Five-year maintenance methods.
- Success criteria for establishment period and years 1–5.
- Responsibilities and qualifications of restoration and maintenance contractor(s) and restoration ecologist.
- Description of annual reporting.

### **M-BIO-8: Sensitive vegetation communities (Impact BIO-5)**

- 1) In order to be consistent with the Southern California Coastal Sage Scrub NCCP guidelines, direct impacts to more than 5 percent of the coastal sage scrub onsite (i.e., impacts to more than 0.52 acre) shall be avoided.

Avoidance shall be targeted at those patches of coastal sage scrub in which a California gnatcatcher was observed during the 2015 surveys.

- 2) Direct impacts to sensitive vegetation communities shall be mitigated through implementation of the Reclamation Plan and Revegetation Plan. The Revegetation Plan shall be designed to provide high quality habitat that is compatible with the post-project topography and hydrology. As such, some of the temporarily impacted habitat shall be mitigated out-of-kind (i.e., with a different, but higher quality habitat type), resulting in a net gain of native habitat acreage onsite and improve overall native habitat quality and functions.
- 3) Revegetation mitigation will occur in areas currently supporting non-vegetated channel (will be revegetated as vegetated channel), southern willow scrub, tamarisk scrub (will be revegetated as native cottonwood-willow riparian forest and riparian scrub), coastal sage scrub, and non-native grassland (will be revegetated as coastal sage scrub) (**Table 2.3-5**). Based on mitigation replacement ratios and projected impacts for the mine project, a total of 126.15 acres of riparian/wetland habitat is required to be revegetated (restored) or enhanced (plus 0.54 acre of riparian habitat restored for the previous golf course project for a total 126.69 acres); and 50.49 acres of upland habitat is required to be revegetated (restored) to mitigate for temporary and permanent impacts. For the 3:1 mitigation ratio, 1.5:1 of the mitigation (i.e., 50%) for the mine project will occur via revegetation and restoration of 62.71 acres divided between 46.36 acres of cottonwood-willow riparian forest and 16.28 acres of southern willow scrub. The remaining 1.5:1 of the mitigation ratio (i.e., remaining 50%) will occur via enhancement and restoration of 62.72 acres of riparian and transitional habitat (for a total mitigation requirement of 125.43 acres). Based on an assessment of riparian and transitional habitat with exotic species onsite, 64.16 acres are proposed for enhancement. Therefore, the proposed enhancement and restoration mitigation of 64.16 acres will exceed the 62.72-acre requirement based on the mitigation ratio.

Based on input from the County, the proposed mitigation for impacts to tamarisk scrub includes restoration of native riparian habitat within post-mining areas and enhancement and restoration of riparian and transitional habitat outside of mining limits. This approach would improve habitat more comprehensively within the project site and improve the functions and sustainability of habitat restoration mitigation areas onsite.

Riparian/wetland habitat restoration will consist of high quality vegetated channel (0.36 acre) planted within the channel, cottonwood-willow and transitional species dominated riparian forest (46.43 acres) planted along the edges of the channel for a width of up to 300 feet, and riparian scrub habitat dominated by mule fat along with scattered willows and transitional

species (17.18 acres [16.64 acres for the mine project + 0.54 acre for the previous golf course project]) within the excavated mining pit (basin) and lower slopes. The planted riparian forest mitigation (i.e., 46.43 acres) and the majority of riparian scrub mitigation (i.e., 16.28 acres for the mine project + 0.54 acre for the golf course project) will provide mitigation within post-mining areas for impacts to tamarisk scrub habitat. The additional 0.54 acre of southern willow scrub mitigation will occur as mitigation for the previously approved golf course project impact in 2005 to 0.18 acre of disturbed riparian (tamarisk scrub).

As previously discussed, the required balance of mitigation for tamarisk scrub for the mine project (i.e., 62.72 acres) will be accomplished by enhancing and restoring 64.16 acres of riparian and transitional habitat that include invasive exotic species within the project site outside of mining limits. Because all remaining riparian habitats onsite are included in the planned enhancement along with some adjacent transitional habitats (i.e., to establish contiguous enhancement area), the planned enhancement area has been rounded up to 64.16 acres (relative to the 62.72-acre requirement). The enhancement of 64.16 acres of riparian and transitional habitat will include initial removal of target exotics, follow-up monitoring and maintenance treatments annually for five years as needed, and measures to promote native plant revegetation including limited seeding and scattered planting. Removal of exotic species will be conducted with hand-tools (shovels, chain-saws, etc.) along with follow-up application of herbicide to kill exotic plant specimens. No vehicular equipment will be driven into the river bed. Maintenance personnel will walk into the enhancement areas, cut exotic vegetation, and carry it in pieces to nearby vehicles (e.g., pickup trucks) or dumpsters located along project access routes and/or disturbed upland staging areas. Exotic plant biomass will then be hauled to an approved green waste facility. Exotic vegetation will be either dug out with shovels (if specimens are small enough and the root system can be effectively removed), or cut within one foot of the ground surface. Cut stems/stumps will then be treated with herbicide. Based on input from County staff during an August 16, 2017 site visit, the removal of large exotics such as eucalyptus trees which provide screening for adjacent residences on the south side of the river should be removed in a phased approach so that sufficient screening with vegetation is provided (e.g., with existing vegetation and new native plant growth) during the enhancement and restoration program.

The existing riparian and transitional habitat areas that will be enhanced lack typical riparian habitat hydrology and are similar to alluvial fan scrub habitat (except for the extensive presence of tamarisk and other exotic species) which includes a mixture of riparian and transitional and upland species. Within this setting, management of natural recruitment is

considered the most appropriate method to establish native habitat over time. However, measures will be conducted as part of the enhancement effort to promote native plant establishment including (1) limited seeding (utilizing some species in the project seed mixes and collection and spread of seed collected onsite during maintenance activities), (2) scattered low-density planting (container plants and cuttings) during wet conditions to help establish small patches/"islands" of native plants (which can help promote more natural recruitment), (3) distribution of mulch (not including non-native seed or propagules) to provide improved microhabitat conditions for native plant germination and establishment, and (4) regular periodic follow-up exotic plant control to reduce competition with native plants. Because of the existing grades, depth to groundwater, and sandy alluvial soils, implementation of a planting program and temporary irrigation system are not considered appropriate or a worthwhile use of resources in the proposed enhancement areas. Relying on natural recruitment and treating exotic species is considered the best approach to establish native vegetation adapted to the site that will be self-sustaining over time. Enhancement mitigation activities are scheduled to start at the beginning of the project concurrent with the initiation of Phase 1 activities. The enhancement areas after the initial five-year maintenance and monitoring period will be managed in perpetuity, consistent with the other project mitigation areas.

- 4) As previously discussed, the remainder of the temporary impact area within the mining phases not designated for habitat mitigation will be subject to reclamation. Based on planned habitat mitigation acreage for the mine project, a total of 112.48 acres of reclamation would be conducted. However, because 0.54 acre of southern willow scrub restoration mitigation required for previous golf course impacts is planned within post-mining Phase 1 area, total reclamation within the mining temporary impact area has been lessened from 112.48 acres to 111.94 acres.
- 5) Upland habitat revegetation shall consist of high quality coastal sage scrub habitat. The upland habitat mitigation need is mostly due to projected impacts to non-native grassland habitat, which is dominated by non-native grasses and forbs, providing only low quality habitat. The restored coastal sage scrub will provide an important foraging and breeding resource for the coastal California gnatcatcher, which is known to be onsite. Providing high quality coastal sage scrub in this area is highly beneficial, as all of the habitat surrounding the project area is degraded due to past wildfires. The excess revegetation of riparian habitat, which is of higher value than non-native grassland, will address the remaining upland mitigation need. A summary of anticipated impacts, mitigation ratios, required mitigation, and actual restoration are provided in Table 16. Because it is anticipated the project would be amended into the MSCP



through the BLA (or other process determined by the state and federal wildlife agencies), all habitat mitigation ratios shall be consistent with the BMO.

- 6) Mitigation (i.e., revegetation and reclamation) shall be implemented on a phase-by-phase basis. Project site revegetation/restoration activities will be implemented in a phased approach moving from east to west across the project site as mining is completed. The mined area shall be progressively restored and reclaimed on disturbed areas previously mined prior to initiation of mining on the next phase. Restoration and reclamation is an ongoing process that commences when mining operations have ceased within a given area (phase) and continues until all mining related disturbance is reclaimed and all equipment involved in these operations have been removed before moving onto the next phase. Tables 2.3-6 through 2.3-10 show the anticipated breakdown of habitat mitigation and reclamation acres by phase.

An overall restoration plan shall be approved by the County prior to the initiation of Phase 1 mining operations, including invasive species removal outside of the mining limits. Individual 40-scale restoration plans will be prepared for each phase and approved prior to the initiation of mining for the phase. Once Phase 1 mining has been completed and prior to the second half of Phase 2 mining operations being initiated, Phase 1 revegetation/restoration shall be implemented including, but not limited to, final restoration grading/slope stabilization, salvaged top soil placement and amendment, container planting, hydro-seed application/imprinting, temporary irrigation, erosion control, fencing and signage. Partial grading/mining of the subsequent mining phase is required to create a safe means of access for equipment and personnel to the previously mined phase to facilitate initiation the above outlined restoration activities. Once the revegetation/restoration installation has been completed for a particular phase, it will be reviewed by the County for conformance with the approved Revegetation Plan and will trigger the beginning of the monitoring and reporting period. Restoration/revegetation activities may be further broken down into sub-phases at the discretion of the mine operator. Ongoing maintenance is required to manage invasive species and trespass and is not part of the revegetation/ restoration activities that must be completed prior to moving on to the next phase of mining, as it is an ongoing activity. Revegetation/restoration bonding is required by phase prior to phase mining and will be released upon the successful completion of the phase restoration/revegetation installation, as determined by the County.

To minimize temporal loss of habitat values, mitigation for the proposed mine project for impacts outside of the mining footprint (i.e., fuel modification zones and some trail segments) and mitigation for the previous golf course project impact will be mitigated within the post-mine

Phase 1 area. In addition, proposed enhancement to 64.14 acres of riparian and transitional habitats (as part of mitigation for impacts to tamarisk scrub) will be initiated at the start the project and Phase 1 mining activities in areas outside the mining footprint.

- 7) Temporary fencing shall be installed as necessary during all mining, reclamation, and restoration activities to protect sensitive habitat, including Mature Riparian Woodland and their buffers, from unauthorized incursion into areas outside the limits of disturbance. In addition, clear signage shall be installed, stating the fenced area is a sensitive habitat area and to keep out.
- 8) To protect the habitat mitigation area in the long term, the entirety of the revegetation and enhancement areas shall be protected in perpetuity by placing a Biological Open Space Easement granted to the County of San Diego, over the revegetation and enhancement areas. At this time, it is anticipated that once the four proposed mining phases are complete, the entirety of the areas proposed for mitigation, including the revegetation and enhancement areas that totals 178 acres, (1) will be transferred in fee title to a qualified land steward (non-profit) conservancy so that it may be maintained and managed in perpetuity for biological values, and (2) a Biological Open Space Easement will be recorded. It is understood, as standard measure, that a Biological Open Space Easement will be recorded and a long-term manager will be identified/established (and habitat management funds provided) for designated project habitat mitigation areas. It is the intent of the property owner to transfer the property to a non-profit/conservancy group prior to the completion of the habitat mitigation restoration.
- 9) A Resource Management Plan (RMP) will be prepared for the 178 acres of mitigation/enhancement areas designated as Biological Open Space (Figure 17 of the Biological Resources Report (Appendix G of the DEIR)). The RMP will be prepared in accordance with the County's Report Format and Content Requirements for Biological Resources and approved by the County of San Diego and Wildlife Agencies (CDFW and USFWS).
- 10) Permanent fencing and signage shall be installed around the perimeter of the Biological Open Space Easement as proposed in Figure 17 of the BRR. Fencing details (e.g., the type and final location of fencing) would be determined upon finalization of the Revegetation Plan.

**M-BIO-9: Mature riparian woodland, as defined by the County RPO (Impact BIO-8)**

Mature Riparian Woodland and a 50-foot buffer beyond the canopy of trees shall be avoided during preconstruction clearing, grubbing, and/or grading, and during mining activities. This shall be accomplished by having a qualified Project

Biologist onsite prior to the start of the project to delineate and protect the Mature Riparian Woodland with temporary construction fencing to avoid incursion during preconstruction clearing, grubbing, and/or grading, and during mining activities. In addition, potential indirect impacts from dust coming from the nearby temporary haul road would be mitigated to a level below significant through the application of an environmentally-friendly water-based polymer binding agent, AggreBind® and use of a water truck, as discussed in M-BIO-5.

#### **M-BIO-10: Jurisdictional resources (Impact BIO-6)**

Direct impacts to jurisdictional wetlands and waters shall be mitigated through implementation of the Reclamation Plan and Revegetation Plan, resulting in habitat creation and restoration of higher quality than the habitat that is being impacted. Impacts to riparian resources shall be mitigated at a 3:1 ratio. A summary of anticipated impacts, mitigation ratios, and required mitigation are provided in Table 2.3-11. Impacts to non-vegetated streambed/non-wetland waters shall be mitigated at a 1:1 ratio. Mitigation ratios shall be based on the requirements in the County's *Guidelines for Determining Significance* (County 2010a) for areas outside of the MSCP, and may be modified by finalization of the BLA process (or other process determined by the state and federal wildlife agencies) as discussed in Appendix K of the BRR. Additionally, federal (Section 401 and 404 of the Clean Water Act) and state permits (Section 1600 of the CFGC) require permits for impacts to jurisdictional resources. The project will comply with these regulations and pursue permitting for potential impacts to 41.46 acres of riparian habitat regulated by CDFW, and 0.36 impacts of non-vegetated streambed and non-wetland waters regulated by USACE and CDFW). Final mitigation requirements for impacts to jurisdictional resources will be determined through the permitting process.

#### **M-BIO-11: Groundwater resources (Impact BIO-7)**

Impacts to groundwater shall be mitigated by removing the Helix Water District Well HWD-101 from production, thereby reducing total demand by approximately 250 afy and balancing future project demand with annual recharge.

#### **M-BIO-12: Wildlife movement (Impact BIO 9)**

To ensure the area remains accessible to wildlife upon completion of the project, any fencing that is installed around the project area during the reclamation process shall be three strand, post-and-rail, or other type that allows for movement of terrestrial wildlife.

### **2.3.6 Conclusion**

#### *Special Status Species*

Potentially significant impacts include direct and indirect impacts to the federally listed and/or Group I animal species including the San Diego banded gecko,

coastal California gnatcatcher, least Bell's vireo, Cooper's hawk, sharp-shinned hawk, red-shouldered hawk, osprey turkey vulture, white-tailed kite, yellow breasted chat, and loggerhead shrike that are known to occur within the BSA. Direct impacts include direct mortality of individuals and loss of habitat (including burrowing, breeding, nesting, and foraging from vegetation removal and mining activities). Indirect impacts include construction-generated noise, dust, sedimentation into adjacent habitats, and nighttime lighting. However, mitigation measures will be implemented to avoid/minimize impacts to a less-than-significant level. Avoidance of the bird breeding season, preconstruction surveys to confirm absence, and biological monitoring during mining and construction activities will reduce potential impacts to breeding least Bell's vireo and coastal California gnatcatcher, as well as other nesting birds covered under the MBTA. Mining activities will be phased and each phase will be revegetated once mining is complete before reinitiating the subsequent phase, thus habitats that will be temporarily lost during mining will be replaced and mitigated at required ratios to increase available suitable habitats. The implementation of mitigation for special-status species according to County guidelines would compensate for impacts.

#### *Riparian Habitat or Sensitive Natural Community*

Potentially significant impacts include direct permanent and temporary impacts to sensitive vegetation communities as a result of implementation of the project. Temporary impacts to southern willow scrub, southern cottonwood willow riparian forest, tamarisk scrub, non-vegetated channel, Diegan coastal sage scrub, nonnative grasslands, and Mature Riparian Woodland would occur as a result project construction, through the direct loss of habitat during mining, and creation of trails and fuel management zones. Mining activities will be phased and revegetated once mining is complete, thus habitats that will be temporarily lost during mining will be replaced and mitigated at required ratios, resulting in an increase in the amount of habitat and the quality of habitats. The implementation of mitigation for riparian habitat and sensitive natural communities according to County guidelines would compensate for impacts.

#### *Jurisdictional Wetlands and Waterways*

Potentially significant impacts to non-wetland waters of the United States and federal wetlands would occur as a result of project implementation through direct vegetation removal, as discussed above. However, the area would be reclaimed and revegetated with higher quality self-sustaining wetlands and riparian habitats with implementation of mitigation measures (**M-BIO-4** through **M-BIO-7**, and **M-BIO-9**), and permitting requirements. The implementation of mitigation for jurisdictional wetlands and waterways according to County guidelines would compensate for impacts.

### *Wildlife Movement and Nursery Sites*

Potentially significant, temporary project impacts limiting wildlife movement during mining would occur. However, reclamation and revegetation would be implemented after mining activities are completed. As discussed above, mitigation measures including habitat mitigation to increase the amount of habitat to support movement and wildlife nursery sites would compensate for impacts. The implementation of mitigation for special-status species and riparian habitat and sensitive natural communities according to County guidelines would compensate for impacts.

### *Local Policies, Ordinances, and Adopted Plans*

The project complies with local policies, ordinances, and plans and will implement mitigation in accordance with these policies/ordinances/plans. Potential project impacts to coastal sage scrub and other sensitive habitats, as discussed above, would be considered significant. Mitigation measures would compensate for impacts according to the goals and requirements of County guidelines by mitigating impacts to sensitive species and habitats below a level of significance.

**Table 2.3-1: Existing Vegetation Communities**

<b>Vegetation Communities</b>	<b>Project Area (acres)</b>	<b>100-ft buffer (acres)</b>	<b>Total BSA (acres)</b>
<b>Riparian and Wetlands</b>			
Southern Cottonwood-Willow Riparian Forest (Holland Code 61330)	11.18	0.73	11.91
Southern Willow Scrub (Holland Code 63320)	0.71	0.00	0.71
Tamarisk Scrub (Holland Code 63810)	85.69	6.53	92.22
Non-Vegetated Channel (Holland Code 64200)	1.66	0.07	1.73
<b>Uplands</b>			
Diegan Coastal Sage Scrub (Holland Code 32500)	10.38	10.08	20.46
Southern Mixed Chaparral (Holland Code 37120)	0.00	3.83	3.83
Non-Native Grassland (Holland Code 42200)	135.75	16.00	151.75
Eucalyptus Woodland (Holland Code 79100)	2.62	0.70	3.32
<b>Other Cover Types</b>			
Disturbed Habitat (Holland Code 11300) <sup>1</sup>	228.52	30.79	259.31
Agriculture (Holland Code 18000)	0.00	1.59	1.59
Developed (Holland Code 12000)	3.03	14.79	17.82
Mature Riparian Woodland <sup>2</sup>	8.45	0.00	8.45
<b>TOTAL</b>	<b>479.54<sup>2</sup></b>	<b>85.11</b>	<b>564.65<sup>2</sup></b>

<sup>1</sup> Disturbed Habitat includes highly degraded areas with ruderal, weedy species, or unvegetated areas such as roads, trails, and vacant lots.

<sup>2</sup> A total of 8.45 acres was mapped as "Mature Riparian Woodland" pursuant to the County Resource Protection Ordinance definition. Note that Mature Riparian Woodland is not a Holland (1986)/Oberbauer et. al. (2008) category. The vegetation was mapped as a GIS overlay on top of the Holland/Oberbauer-based vegetation mapping; therefore, this acreage is not added to the acreage totals.

**Table 2.3-2 Temporary and Permanent Project Impacts to Vegetation Communities (acres)**

Habitat Type / Vegetation Community	Temporary Impacts <sup>1</sup>	Permanent Impacts <sup>2</sup>	Impact Neutral <sup>3</sup>	Total Impacts
<b>Riparian and Wetlands</b>				
Southern Cottonwood-Willow Riparian Forest	0.00	0.00	6.97	0.00
Southern Willow Scrub	0.00	0.12	0.00	0.12
Tamarisk Scrub	38.80	3.01	0.00	41.81
Non-Vegetated Channel	0.35	0.01	0.07	0.36
<b>Uplands</b>				
Diegan Coastal Sage Scrub	2.06	1.56	0.00	3.61
Non-Native Grassland	74.44	12.12	1.36	86.55
Eucalyptus Woodland	0.08	1.22	0.00	1.30
<b>Other Cover Types</b>				
Disturbed Habitat	110.68	15.35	0.04	126.04
Developed	0.00	2.55	0.00	2.55
Mature Riparian Woodland <sup>4</sup>	0.00	0.00	0.00	0.00
<b>Totals<sup>5</sup></b>	<b>226.40</b>	<b>35.94</b>	<b>8.45</b>	<b>262.34</b>

<sup>1</sup> Temporary impacts include all of the mining extraction areas, processing areas, and temporary access roads, as well as the filled-in, dry depression previously excavated as a golf course pond, which will be filled in during Phase 1. These areas will be revegetated upon completion of each mining phase.

<sup>2</sup> Permanent impacts consist of the permanent drop structure, which will be built on the eastern end of the mining area, fuel modifications zones, which will be permanently maintained to ensure that vegetation remains at or below three inches in height, and a trail system, which will result in permanent trails along the perimeter of the area of disturbance and MUP boundary.

<sup>3</sup> Impact neutral areas are areas that are not considered impacted, but cannot be credited toward mitigation requirements, such as wetland buffers.

<sup>4</sup> A total of 8.45 acres was mapped as "Mature Riparian Woodland," pursuant to the County Resource Protection Ordinance definition. Note that Mature Riparian Woodland is not a Holland (1986)/Oberbauer et al. (2008) category. The vegetation was mapped as a GIS overlay on top of the Holland/Oberbauer-based vegetation mapping; therefore, this acreage is not added to the acreage totals. The total impact neutral acreage for Holland/Oberbauer vegetation types

<sup>5</sup> Due to rounding, totals may differ slightly from numbers in column.

**Table 2.3-3: Impacts to Jurisdictional Resources**

Jurisdiction	Temporary Impacts	Permanent Impacts	Total Impacts
Federal (USACE)/ State (RWQCB)	0.35	0.01	<b>0.36</b>
State (CDFW)/ County (San Diego)	39.18	2.28	<b>41.46</b>
<b>Total</b>	<b>39.53</b>	<b>2.29</b>	<b>41.82</b>

Source: ESA 2017

**Table 2.3-4. Past, Present, and Reasonably Anticipated Future Projects in the Project Area that could Affect Biological Resources**

Cumulative Project Map Key	Project Name	Project Type	Location(s)	County of San Diego Reference #	APN #	Potential Resources Affected/Notes
<b>County of San Diego</b>						
1	Lake Jennings Marketplace	Shopping Center Gasoline with Food Mart and Car Wash	South side of Olde Highway 80 between Ridge Hill Road and Rios Canyon Road Lakeside, CA	TM5490 PDS2014-TM-5590	395-250-08	Potential biological resources, air quality, and traffic impacts.
2	Ashwood II Condo Conversion	Residential subdivision into nine lots on a 4.54-acre site	9288 Adlai Road Lakeside, CA	TM5356 PDS2004-3100-5356	398-390-19	Potential impacts to biological resources impacts, noise, and utilities and service systems. Mitigated Negative Declaration approved in 2006.
3	Greenhills Ranch	Estate Residential	9370 Adlai Road 9385 Adlai Road Lakeside, CA	TM5140/ TM5563	398-400-08-00	Potential biological resources and cultural resources impacts.
4	Crest/Dehesa	Estate Residential	12101 Muth Valley Lakeside, CA	TM5317	329-121-02-00	Project is idle.
5	Crestlake	Single-Family Detached	15045 Old Hwy 80 Lakeside, CA	TM5082 PDS2004-3100-5082	402-210-19	Potential impacts to biological resources. EIR approved in 2007.
6	Magnolia Courts	Single-Family Detached	9317 Lake Jennings Park Road Lakeside, CA	TM5541 PDS2007-3100-5541	395-220-11	Project is idle. Site is currently vacant/undeveloped land.
7	Clegg	Single-Family Detached	13516 E Lakeview Road Lakeside, CA	TM 5286 PDS2004-3100-5286	398-390-66	Negative Declaration approved in 2007.
8	Julian Avenue Major Subdivision	Single-Family Detached	9626 Christmas Tree Lane. Lakeside, CA	TM 5539 PDS2007-3100-5539	395-091-03	Negative Declaration approved in 2009.



**Table 2.3-4. Past, Present, and Reasonably Anticipated Future Projects in the Project Area that could Affect Biological Resources**

Cumulative Project Map Key	Project Name	Project Type	Location(s)	County of San Diego Reference #	APN #	Potential Resources Affected/Notes
9	Oakmont II	Single-Family Detached	Located off of Flinn Springs Road and Oak Creek Road Lakeside, CA	TM5421 PDS2005-3100-5421	396-020-13	Potential biological resources and noise impacts. Mitigated Negative Declaration approved in 2014.
10	Sunny Ridge Estates	Single-Family Detached	11427 El Nopal Lakeside, CA	TM5436	379-024-31-00	Noise and traffic impacts.
11	Eniss Sand Mines	Minor alterations at the existing mining area.	12356 Moreno Avenue 12238 Moreno Avenue 12332 Vigilante Road 12417 Vigilante Road Lakeside, CA	87-075-01 87-006-01 PDS2005-3301-87-075-01 PDS2011-3311-87-0011	375-040-01 25-062-06	In Progress. No environmental documents available as of the date of this EIR.
12	Turner Sand Mine (East County Sand Mine)	Extraction of 1,175,000 cubic yards of material (sand and top soil). The Reclamation Plan consists of importing 1,278,000 cy of clean soil, rock, and asphalt for use as onsite fill, channel rip-rap, and to construct a portion of Slaughterhouse Creek and San Vicente Creek channels to convey 100-year storm.	South of San Vicente Avenue Bounded by SR-67 to the west and Moreno Avenue to the east Lakeside, CA	PDS2009-3300-09-016	375-100-24 375-041-12 375-041-09 375-041-28 375-041-29 375-100-09	In Progress. No environmental documents available as of the date of this EIR.

**Table 2.3-4. Past, Present, and Reasonably Anticipated Future Projects in the Project Area that could Affect Biological Resources**

Cumulative Project Map Key	Project Name	Project Type	Location(s)	County of San Diego Reference #	APN #	Potential Resources Affected/Notes
13	Settler's Point	Multi-Family Residential	13244 I-8 Business Lakeside, CA	TM5423 PDS2005-3100-5423	397-291-03	Negative Declaration approved in 2012.
14	Hanson El Monte Pond Flood Control	Restoration and Recharge	10402 El Monte Road Lakeside, CA	PDS2014-LDGRMJ-00012	Unavailable	Currently in the environmental public review period.
<b>City of Santee</b>						
15	Fanita Ranch	Residential	Northwest area of Santee, CA	TM 05-04	Unavailable	In progress. No environmental documents available as of the date of this EIR.
16	Braverman Drive Residential	Residential	10635 Braverman Drive Santee, CA	TM-2015-2	381-160-7300	Approved by City Council in February 2016.
17	Michael Grant	Residential	Prospect Avenue between Mesa Road and Our Way Santee, CA	TM2015-2	383-112-05, 28	In progress. No environmental documents available as of the date of this EIR.
18	Infill Development Company	Infill Development	8646 Caribbean Way Santee, CA	TM2015-3	383-260-40, 383-260-41	In progress. No environmental documents available as of the date of this EIR.
19	Village Run Homes LLC	Residential	Buena Vista and Mission Greens Santee, CA	TM2015-4	384-042-22-00 384-042-23-00	In progress. No environmental documents available as of the date of this EIR.

**Table 2.3-4. Past, Present, and Reasonably Anticipated Future Projects in the Project Area that could Affect Biological Resources**

Cumulative Project Map Key	Project Name	Project Type	Location(s)	County of San Diego Reference #	APN #	Potential Resources Affected/Notes
20	Mission Trails Collection (Middle Parcel)	Residential	8758 Bushy Hill Drive Santee, CA	TM2015-5	383-021-06	Potential impacts to biological and cultural resources. Mitigated Negative Declaration prepared. Approved by City Council on January 27, 2016.
21	Hattie Davison Properties	Residential	7927-7941 Mission Gorge Road Santee, CA	TM2015-6	383-260-75-00 /383-260-76-00	Potential impacts to biological and cultural resources. Mitigated Negative Declaration prepared. Approved by City Council on October 28, 2015.
22	Walker Trails	Residential	NW Corner of Magnolia and Chubb Lane			
<b>City of San Diego</b>						
23	Castlerock Project		Mast Boulevard and Medina Drive			
<b>City of El Cajon</b>						
24	Bella Terrazza	Residential	East Main Street, north of Greenfield Drive			

Source: County of San Diego 2015

**Table 2.3-5: Total Project Impacts to Vegetation Communities and Mitigation (acres)**

Habitat Type / Vegetation Community	Mining Phases 1-4		Trails Outside Mining Phases (Perm)	Fuel Mod Zones Outside Mining Phases (Perm)	Total Impacts	Mitigation Ratio <sup>2</sup>	Habitat Mitigation <sup>3</sup>	Reclamation Revegetation <sup>3</sup>
	Perm <sup>1</sup>	Temp						
<b>Riparian and Wetlands</b>								
Southern Cottonwood-willow Riparian Forest	0.00	0.00	0.00	0.00	0.00	3:1	0.00	12.43
Southern Willow Scrub	0.00	0.00	0.02	0.10	0.12	3:1	0.36	46.78
Tamarisk Scrub	0.94	38.80	0.58	1.49	41.81	3:1	125.43 <sup>4</sup>	0.00
Non-Vegetated Channel	0.01	0.35	0.00	0.00	0.36	1:1	0.36 <sup>5</sup>	8.55
<i>Subtotal</i>	<i>0.95</i>	<i>39.15</i>	<i>0.60</i>	<i>1.59</i>	<i>42.29</i>		<i>126.15</i>	<i>67.76</i>
<b>Uplands</b>								
Diegan Coastal Sage Scrub	0.97	2.06	0.27	0.32	3.61	2:1	7.22	44.72
Non-Native Grassland	4.75	74.44	2.90	4.47	86.55	0.5:1	43.27 <sup>6</sup>	0.00
Eucalyptus Woodland	0.91	0.08	0.04	0.27	1.30	N/A	0.00	0.00
<i>Subtotal</i>	<i>6.63</i>	<i>76.58</i>	<i>3.21</i>	<i>5.06</i>	<i>91.46</i>		<i>50.49</i>	<i>44.72</i>
<b>Other Cover Types</b>								
Disturbed Habitat	9.40	110.68	3.30	2.64	126.04	N/A	0.00	0.00
Developed	0.00	0.00	0.01	2.54	2.55	N/A	0.00	0.00
<i>Subtotal</i>	<i>9.40</i>	<i>110.68</i>	<i>3.31</i>	<i>5.18</i>	<i>128.59</i>		<i>0.00</i>	<i>0.00</i>
<b>Mine Project Totals<sup>7</sup></b>	<b>16.99</b>	<b>226.40</b>	<b>7.12</b>	<b>11.83</b>	<b>262.34</b>		<b>176.64</b>	<b>112.48<sup>8</sup></b>
<b>2005 Golf Course Totals</b>					<b>0.18<sup>8</sup></b>	<b>3:1<sup>8</sup></b>	<b>0.54<sup>8</sup></b>	<b>(-0.54)<sup>8</sup></b>
<b>TOTAL</b>					<b>262.52</b>		<b>177.18</b>	<b>111.94 to</b>

<sup>1</sup> Permanent impacts within the mining phases are from the drop structure and trails.

<sup>2</sup> Habitat mitigation ratios (Outside of approved MSCP Plan areas) are provided from the County's Guidelines for Determining Significance for Biological Resources (September 2010).

<sup>3</sup> A combination of habitat mitigation and reclamation revegetation will occur within the temporary impact acreage (226.40 acres). The balance of 62.72 acres of mitigation for Tamarisk Scrub (1.5:1 of the 3:1 mitigation ratio) will occur through restoration of riparian and transitional habitat outside of mining limits but within the project site via exotic plant removal and activities to promote native plant revegetation.

- <sup>4</sup> Tamarisk Scrub will be mitigated by a combination of restoration of native Riparian Forest and Riparian Scrub habitats within post-mining areas (62.71 acres), and restoration of riparian and transitional habitat outside of mining limits but within the project site (62.72 acres; rounded up to 64.16 acres to address all riparian areas onsite plus some adjacent transitional habitat) via exotic plant removal and activities to promote native plant revegetation.
- <sup>5</sup> Non-Vegetated Channel will be mitigated by restoration of Vegetated Channel since it is expected the post-mining grades and conditions will support native plants in the channel.
- <sup>6</sup> Non-Native Grassland will be mitigated by restoration of Diegan Coastal Sage Scrub.
- <sup>7</sup> Due to rounding, totals may differ slightly from numbers in column.
- <sup>8</sup> Grading in 2005 from the previously approved golf course project that was halted temporarily impacted 0.18 acre of disturbed riparian scrub (tamarisk scrub). The planned golf course cart path crossing of the river associated with this grading was not ultimately constructed. This is the only impact to a sensitive vegetation community outside of the planned mine project footprint that requires mitigation. This riparian habitat shall be mitigated at a 3:1 replacement ratio in accordance with the County's Guidelines for Determining Significance for Biological Resources (September 2010) by conducting 0.54 acre of southern willow scrub restoration in mining Phase 1. The golf course mitigation will occur where mine project riparian scrub reclamation would have occurred, therefore, overall planned reclamation will be reduced by 0.54 acre and riparian habitat reclamation will total 46.24 acres instead of 46.78 acres.

**Table 2.3-6: Project Impacts and Mitigation for Mining Phase 1**

Habitat Type / Vegetation Community	Permanent <sup>1</sup>	Temporary	Total	Mitigation Ratio <sup>2</sup>	Habitat Mitigation <sup>3</sup>	Reclamation <sup>3</sup>
<b>Riparian and Wetlands</b>						
Southern Cottonwood-willow Riparian Forest	0.00	0.00	0.00	3:1	0.00	0.00
Southern Willow Scrub	0.00	0.00	0.00	3:1	0.00	18.87
Tamarisk Scrub	0.80	11.55	12.35	3:1	37.05 <sup>4</sup>	0.00
Non-Vegetated Channel	0.01	0.08	0.09	1:1	0.09 <sup>5</sup>	1.76
<i>Subtotal</i>	<i>0.81</i>	<i>11.63</i>	<i>12.44</i>		<i>37.14</i>	<i>20.63</i>
<b>Uplands</b>						
Diegan Coastal Sage Scrub	0.97	1.77	2.74	2:1	5.4	13.13
Non-Native Grassland	4.41	16.85	21.26	0.5:1	10.63 <sup>6</sup>	0.00
Eucalyptus Woodland	0.91	0.01	0.92	N/A	0.00	0.00
<i>Subtotal</i>	<i>6.29</i>	<i>18.63</i>	<i>24.92</i>		<i>16.11</i>	<i>13.13</i>
<b>Other Cover Types</b>						
Disturbed Habitat	9.08	46.54	55.62	N/A	0.00	0.00
Developed	0.00	0.00	0.00	N/A	0.00	0.00
<i>Subtotal</i>	<i>9.08</i>	<i>46.54</i>	<i>55.62</i>		<i>0.00</i>	<i>0.00</i>
<b>Totals<sup>7</sup></b>	<b>16.18</b>	<b>76.80</b>	<b>92.98</b>		<b>53.25</b>	<b>33.76</b>

<sup>1</sup> Permanent impacts in Phase 1 are from the drop structure, trails, and two staging areas.

<sup>2</sup> Habitat mitigation ratios (Outside of approved MSCP Plan areas) are provided from the County's Guidelines for Determining Significance for Biological Resources (September 2010).

<sup>3</sup> A combination of habitat mitigation and reclamation revegetation will occur within the temporary impact acreage (76.80). The balance of 18.52 acres of mitigation for Tamarisk Scrub will occur through restoration of riparian and transitional habitat outside of mining limits but within the project site via exotic plant removal and activities to promote native plant revegetation. Mitigation for impacts outside of mining limits (trails and fuel modification zones) will be mitigated in Phase 1 and the reclamation acres (i.e., remaining temporary impact area) in this table account for this mitigation.

<sup>4</sup> Tamarisk Scrub will be mitigated by a combination of restoration of native Riparian Forest and Riparian Scrub habitats within post-mining areas, and restoration of riparian and transitional habitat outside of mining limits but within the project site via exotic plant removal and activities to promote native plant revegetation.

<sup>5</sup> Non-Vegetated Channel will be mitigated by restoration of Vegetated Channel since it is expected the post-mining grades and conditions will support native plants in the channel.

<sup>6</sup> Non-Native Grassland will be mitigated by restoration of Diegan Coastal Sage Scrub.

<sup>7</sup> Due to rounding, totals may differ slightly from numbers in column.

**Table 2.3-7: Project Impacts and Mitigation for Mining Phase 2**

<b>Habitat Type / Vegetation Community</b>	<b>Permanent<sup>2</sup></b>	<b>Temporary</b>	<b>Total</b>	<b>Mitigation Ratio<sup>2</sup></b>	<b>Habitat Mitigation<sup>3</sup></b>	<b>Reclamation<sup>3</sup></b>
<b>Riparian and Wetlands</b>						
Southern Cottonwood-willow Riparian Forest	0.00	0.00	0.00	3:1	0.00	0.00
Southern Willow Scrub	0.00	0.00	0.00	3:1	0.00	12.28
Tamarisk Scrub	0.10	12.79	12.89	3:1	38.67 <sup>4</sup>	0.00
Non-Vegetated Channel	0.00	0.11	0.11	1:1	0.11 <sup>5</sup>	2.18
<i>Subtotal</i>	<i>0.10</i>	<i>12.90</i>	<i>13.00</i>		<i>38.78</i>	<i>14.46</i>
<b>Uplands</b>						
Diegan Coastal Sage Scrub	0.00	0.00	0.00	2:1	0.00	9.23
Non-Native Grassland	0.07	17.65	17.72	0.5:1	8.86 <sup>6</sup>	0.00
Eucalyptus Woodland	0.00	0.00	0.00	N/A	0.00	0.00
<i>Subtotal</i>	<i>0.07</i>	<i>17.65</i>	<i>17.72</i>		<i>8.86</i>	<i>9.23</i>
<b>Other Cover Types</b>						
Disturbed Habitat	0.05	21.45	21.50	N/A	0.00	0.00
Developed	0.00	0.00	0.00	N/A	0.00	0.00
<i>Subtotal</i>	<i>0.05</i>	<i>21.45</i>	<i>21.50</i>		<i>0.00</i>	<i>0.00</i>
<b>Totals<sup>7</sup></b>	<b>0.22</b>	<b>52.00</b>	<b>52.22</b>		<b>47.64</b>	<b>23.69</b>

<sup>1</sup> Permanent impacts in Phase 2 are from the trails.

<sup>2</sup> Habitat mitigation ratios (Outside of approved MSCP Plan areas) are provided from the County's Guidelines for Determining Significance for Biological Resources (September 2010).

<sup>3</sup> A combination of habitat mitigation and reclamation revegetation will occur within the temporary impact acreage (52.00 acres). The balance of 19.33 acres of mitigation for Tamarisk Scrub will occur through restoration of riparian and transitional habitat outside of mining limits but within the project site via exotic plant removal and activities to promote native plant revegetation.

<sup>4</sup> Tamarisk Scrub will be mitigated by a combination of restoration of native Riparian Forest and Riparian Scrub habitats within post-mining areas, and restoration of riparian and transitional habitat outside of mining limits but within the project site via exotic plant removal and activities to promote native plant revegetation.

<sup>5</sup> Non-Vegetated Channel will be mitigated by restoration of Vegetated Channel since it is expected the post-mining grades and conditions will support native plants in the channel.

<sup>6</sup> Non-Native Grassland will be mitigated by restoration of Diegan Coastal Sage Scrub.

<sup>7</sup> Due to rounding, totals may differ slightly from numbers in column

**Table 2.3-8: Project Impacts and Mitigation for Mining Phase 3**

<b>Habitat Type / Vegetation Community</b>	<b>Permanent<sup>2</sup></b>	<b>Temporary</b>	<b>Total</b>	<b>Mitigation Ratio<sup>2</sup></b>	<b>Habitat Mitigation<sup>3</sup></b>	<b>Reclamation<sup>3</sup></b>
<b>Riparian and Wetlands</b>						
Southern Cottonwood-willow Riparian Forest	0.00	0.00	0.00	3:1	0.00	12.43
Southern Willow Scrub	0.00	0.00	0.00	3:1	0.00	5.24
Tamarisk Scrub	0.02	3.76	3.78	3:1	11.34 <sup>4</sup>	0.00
Non-Vegetated Channel	0.00	0.03	0.03	1:1	0.03 <sup>5</sup>	2.86
<i>Subtotal</i>	<i>0.02</i>	<i>3.79</i>	<i>3.81</i>		<i>11.37</i>	<i>20.53</i>
<b>Uplands</b>						
Diegan Coastal Sage Scrub	0.00	0.00	0.00	2:1	0.00	8.37
Non-Native Grassland	0.19	25.81	26.00	0.5:1	13.00 <sup>6</sup>	0.00
Eucalyptus Woodland	0.00	0.00	0.00	N/A	0.00	0.00
<i>Subtotal</i>	<i>0.19</i>	<i>25.81</i>	<i>26.00</i>		<i>13.00</i>	<i>8.37</i>
<b>Other Cover Types</b>						
Disturbed Habitat	0.14	18.00	18.14	N/A	0.00	0.00
Developed	0.00	0.00	0.00	N/A	0.00	0.00
<i>Subtotal</i>	<i>0.14</i>	<i>18.00</i>	<i>18.14</i>		<i>0.00</i>	<i>0.00</i>
<b>Totals<sup>7</sup></b>	<b>0.35</b>	<b>47.60</b>	<b>47.95</b>		<b>24.37</b>	<b>28.90</b>

<sup>1</sup> Permanent impacts in Phase 3 are from the trails.

<sup>2</sup> Habitat mitigation ratios (Outside of approved MSCP Plan areas) are provided from the County's Guidelines for Determining Significance for Biological Resources (September 2010).

<sup>3</sup> A combination of habitat mitigation and reclamation revegetation will occur within the temporary impact acreage (47.60 acres). The balance of 5.67 acres of mitigation for Tamarisk Scrub will occur through restoration of riparian and transitional habitat outside of mining limits but within the project site via exotic plant removal and activities to promote native plant revegetation.

<sup>4</sup> Tamarisk Scrub will be mitigated by a combination of restoration of native Riparian Forest habitat within post-mining areas, and restoration of riparian and transitional habitat outside of mining limits but within the project site via exotic plant removal and activities to promote native plant revegetation.

<sup>5</sup> Non-Vegetated Channel will be mitigated by restoration of Vegetated Channel since it is expected the post-mining grades and conditions will support native plants in the channel.

<sup>6</sup> Non-Native Grassland will be mitigated by restoration of Diegan Coastal Sage Scrub.

<sup>7</sup> Due to rounding, totals may differ slightly from numbers in columns.



**Table 2.3-9: Project Impacts and Mitigation for Mining Phase 4**

<b>Habitat Type / Vegetation Community</b>	<b>Permanent<sup>2</sup></b>	<b>Temporary</b>	<b>Total</b>	<b>Mitigation Ratio<sup>2</sup></b>	<b>Habitat Mitigation<sup>3</sup></b>	<b>Reclamation<sup>3</sup></b>
<b>Riparian and Wetlands</b>						
Southern Cottonwood-willow Riparian Forest	0.00	0.00	0.00	3:1	0.00	0.00
Southern Willow Scrub	0.00	0.00	0.00	3:1	0.00	10.39
Tamarisk Scrub	0.02	10.70	10.72	3:1	32.16 <sup>4</sup>	0.00
Non-Vegetated Channel	0.00	0.13	0.13	1:1	0.13 <sup>5</sup>	1.75
<i>Subtotal</i>	<i>0.02</i>	<i>10.83</i>	<i>10.85</i>		<i>32.29</i>	<i>12.14</i>
<b>Uplands</b>						
Diegan Coastal Sage Scrub	0.00	0.28	0.28	2:1	0.56	13.99
Non-Native Grassland	0.08	14.12	14.20	0.5:1	7.10 <sup>6</sup>	0.00
Eucalyptus Woodland	0.00	0.07	0.07	N/A	0.00	0.00
<i>Subtotal</i>	<i>0.08</i>	<i>14.47</i>	<i>14.55</i>		<i>7.66</i>	<i>13.99</i>
<b>Other Cover Types</b>						
Disturbed Habitat	0.14	24.70	24.84	N/A	0.00	0.00
Developed	0.00	0.00	0.00	N/A	0.00	0.00
<i>Subtotal</i>	<i>0.14</i>	<i>24.70</i>	<i>24.84</i>		<i>0.00</i>	<i>0.00</i>
<b>Totals<sup>7</sup></b>	<b>0.24</b>	<b>50.00</b>	<b>50.24</b>		<b>39.95</b>	<b>26.13</b>

<sup>1</sup> Permanent impacts in Phase 4 are from the trails.

<sup>2</sup> Habitat mitigation ratios (Outside of approved MSCP Plan areas) are provided from the County's Guidelines for Determining Significance for Biological Resources (September 2010).

<sup>3</sup> A combination of habitat mitigation and reclamation revegetation will occur within the temporary impact acreage (50.00 acres). The balance of 16.08 acres of mitigation for Tamarisk Scrub will occur through restoration of riparian and transitional habitat outside of mining limits but within the project site via exotic plant removal and activities to promote native plant revegetation.

<sup>4</sup> Tamarisk Scrub will be mitigated by a combination of restoration of native Riparian Forest and Riparian Scrub habitats within post-mining areas, and restoration of riparian and transitional habitat outside of mining limits but within the project site via exotic plant removal and activities to promote native plant revegetation.

<sup>5</sup> Non-Vegetated Channel will be mitigated by restoration of Vegetated Channel since it is expected the post-mining grades and conditions will support native plants in the channel.

<sup>6</sup> Non-Native Grassland will be mitigated by restoration of Diegan Coastal Sage Scrub.

<sup>7</sup> Due to rounding, totals may differ slightly from numbers in column.

**Table 2.3-10: Project Impacts and Mitigation for Areas Outside Mining Phases (permanent)**

<b>Habitat Type/Vegetation Community</b>	<b>Trails Outside Mining Phases</b>	<b>Fuel Mod Zones Outside Mining Phases</b>	<b>Total</b>	<b>Mitigation Ratio<sup>1</sup></b>	<b>Habitat Mitigation<sup>2</sup></b>
<b>Riparian and Wetlands</b>					
Southern Cottonwood-willow Riparian Forest	0.00	0.00	0.00	3:1	0.00
Southern Willow Scrub	0.02	0.10	0.1	3:1	0.36
Tamarisk Scrub	0.58	1.49	2.07	3:1	6.21 <sup>3</sup>
Non-Vegetated Channel	0.00	0.00	0.00	1:1	0.00
<i>Subtotal</i>	<i>0.60</i>	<i>1.59</i>	<i>2.19</i>		<i>6.57</i>
<b>Uplands</b>					
Diegan Coastal Sage Scrub	0.27	0.32	0.59	2:1	1.18
Non-Native Grassland	2.90	4.47	7.37	0.5:1	3.68 <sup>4</sup>
Eucalyptus Woodland	0.04	0.27	0.31	N/A	0.00
<i>Subtotal</i>	<i>3.21</i>	<i>5.06</i>	<i>8.27</i>		<i>4.86</i>
<b>Other Cover Types</b>					
Disturbed Habitat	3.30	2.64	5.94	N/A	0.00
Developed	0.01	2.54	2.55	N/A	0.00
<i>Subtotal</i>	<i>3.31</i>	<i>5.18</i>	<i>8.49</i>		<i>0.00</i>
<b>Totals<sup>4</sup></b>	<b>7.12</b>	<b>11.83</b>	<b>18.95<sup>5</sup></b>		<b>11.43</b>

<sup>1</sup> Habitat mitigation ratios (Outside of approved MSCP Plan areas) are provided from the County's Guidelines for Determining Significance for Biological Resources (September 2010).

<sup>2</sup> Mitigation for impacts outside of mining phases will occur within the post-mining Phase 1 area.

<sup>3</sup> Tamarisk Scrub will be mitigated by a combination of restoration of native Riparian Scrub habitat within post-mining areas, and restoration of riparian and transitional habitat outside of mining limits but within the project site via exotic plant removal and activities to promote native plant revegetation.

<sup>4</sup> Non-Native Grassland will be mitigated by restoration of Diegan Coastal Sage Scrub.

<sup>5</sup> Due to rounding, totals may differ slightly from numbers in column.

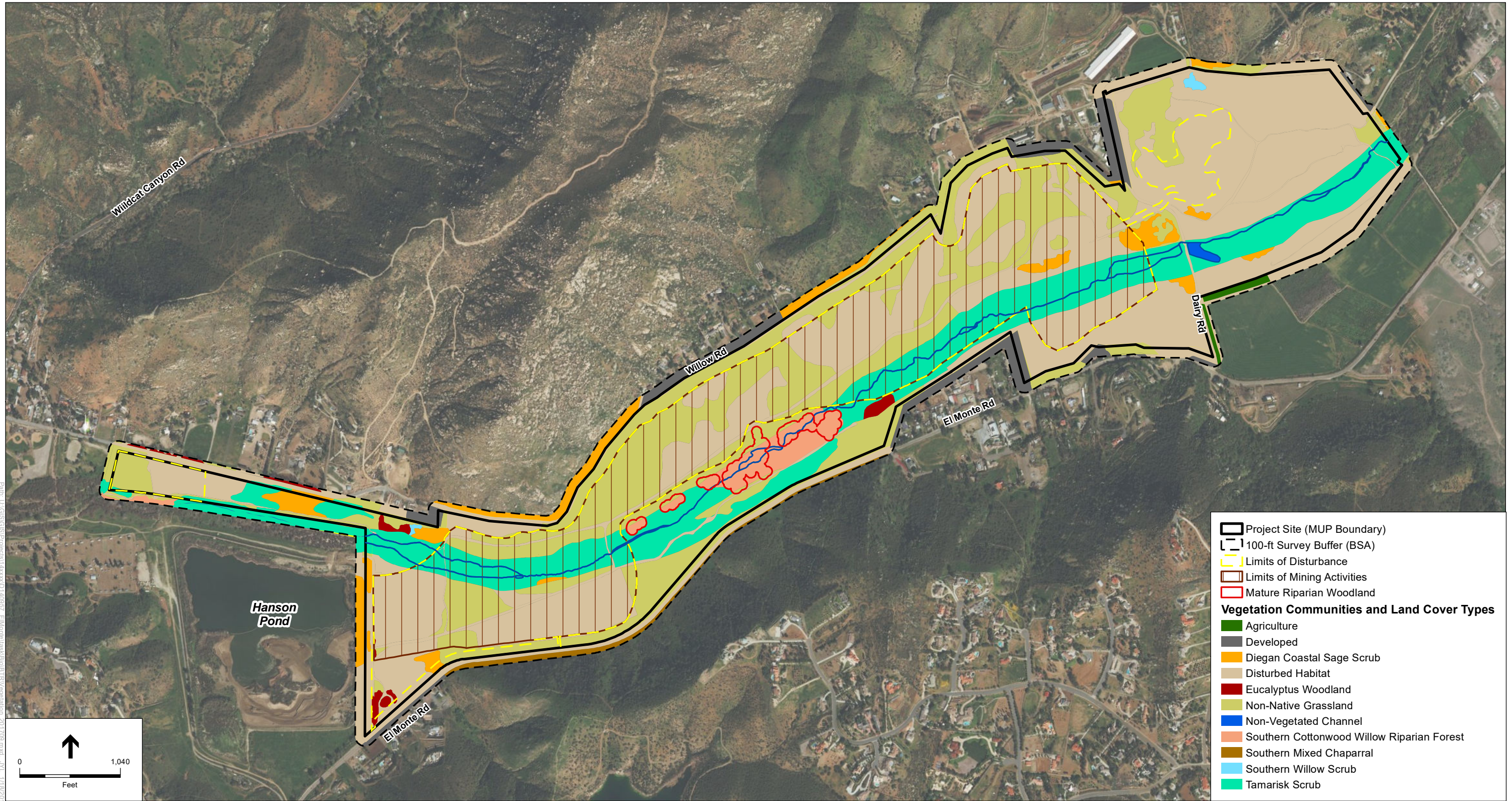
**Table 2.3-11 Mitigation for Impacts to Jurisdictional Resources (acres)**

<b>Jurisdictional Resource</b>	<b>Impacts</b>	<b>Mitigation Ratio<sup>1</sup></b>	<b>Required Mitigation</b>
Riparian (CDFW and County)	41.46	3:1	124.38
Unvegetated Streambed/Non-Wetland Waters (CDFW and USACE)	0.36	1:1	0.36

<sup>1</sup> Wetland mitigation shall include a minimum 1:1 creation component, while restoration of existing habitats may be used to make up the remaining requirements.

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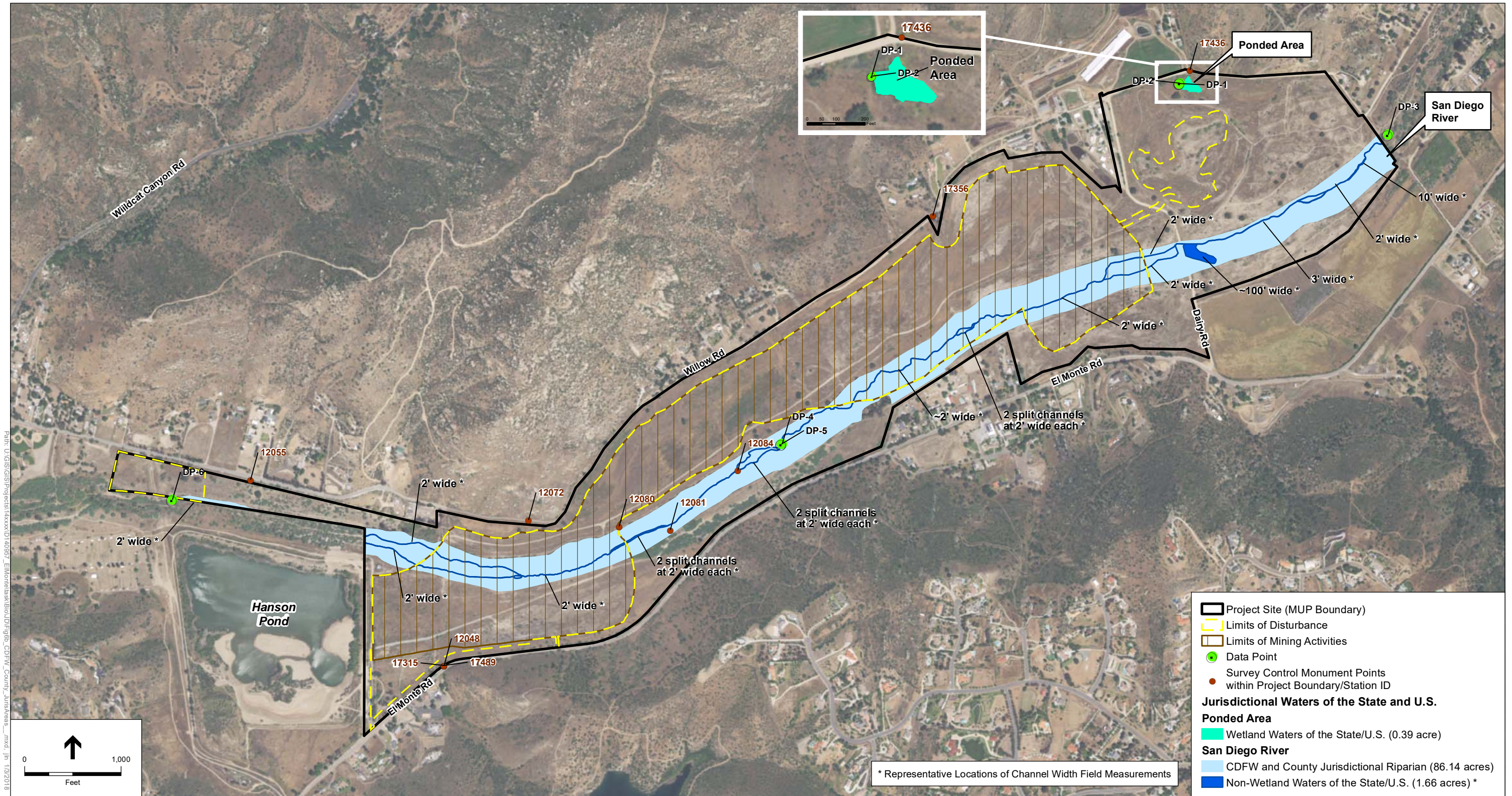
SOURCE: ESRI; EnviroMine; The Altum Group; Chang Consultants; ESA; SanGIS

El Monte Sand Mining Project . 140957

**Figure 2.3-1**

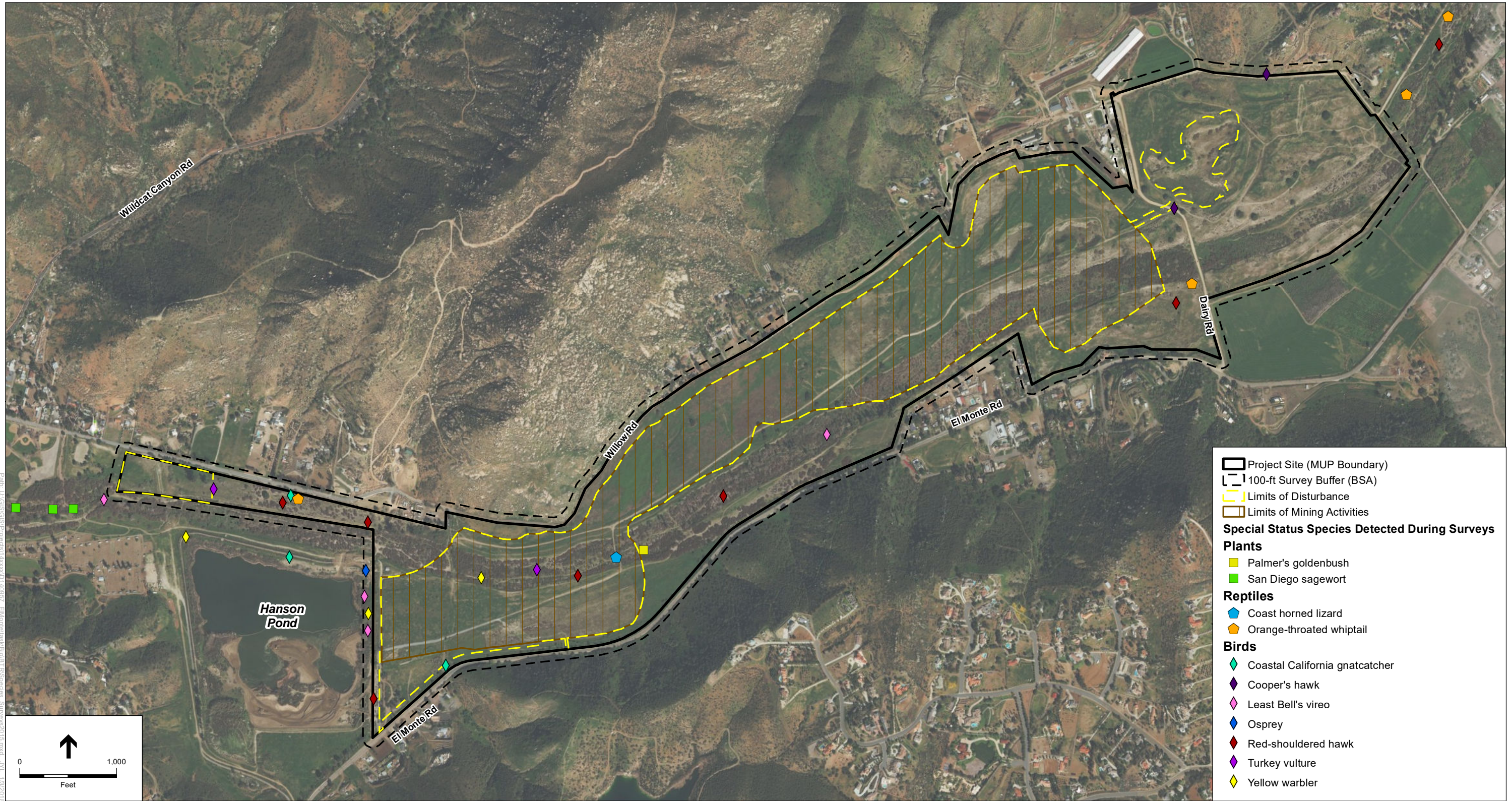
Vegetation Communities and Cover Types (Existing Condition)





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SOURCE: ESRI; EnviroMine; The Altum Group; Chang Consultants; ESA; DFG

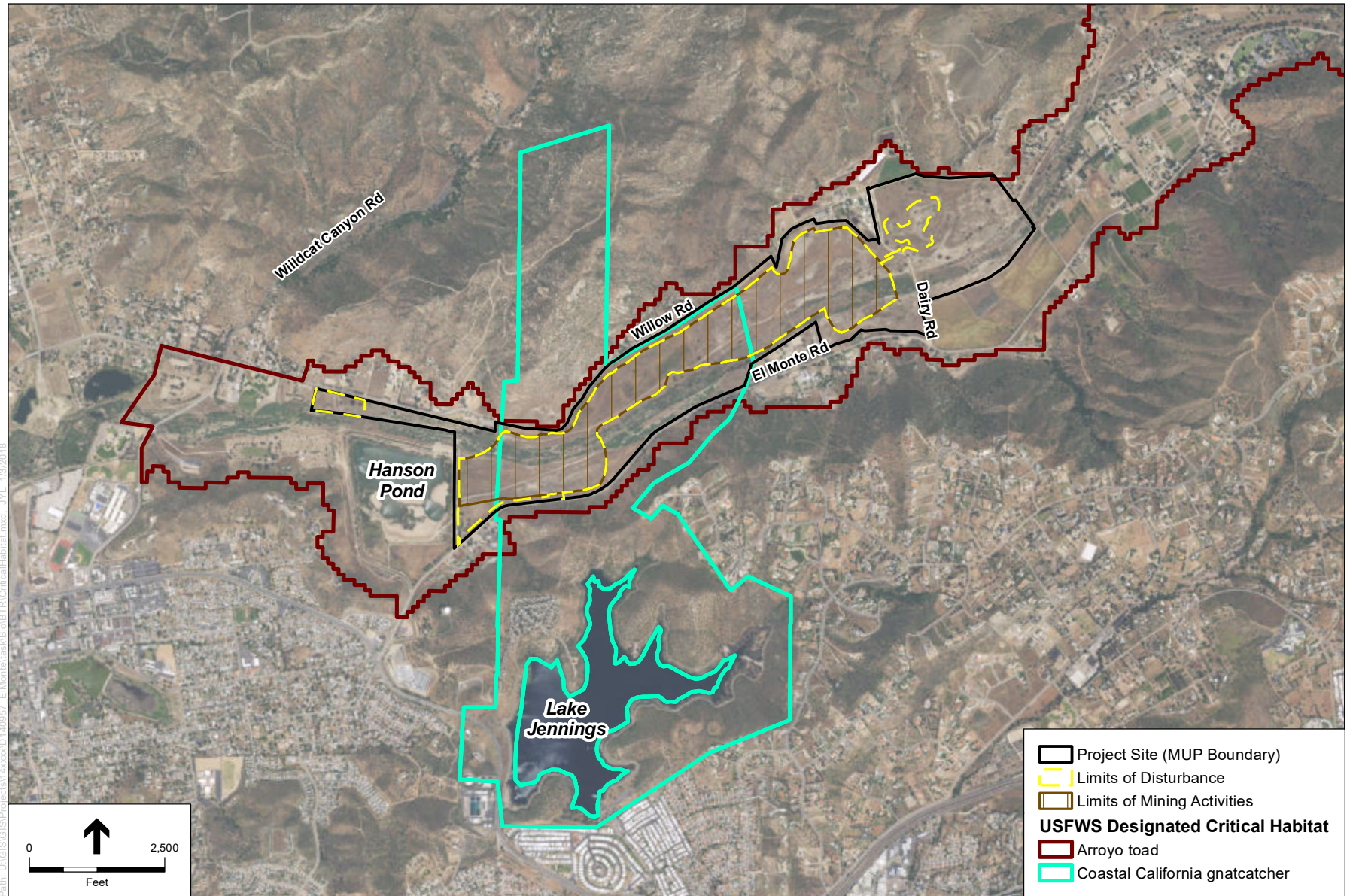
El Monte Sand Mining Project . 140957

**Figure 2.3-3**  
 Special Status Species Detected During 2015 Surveys



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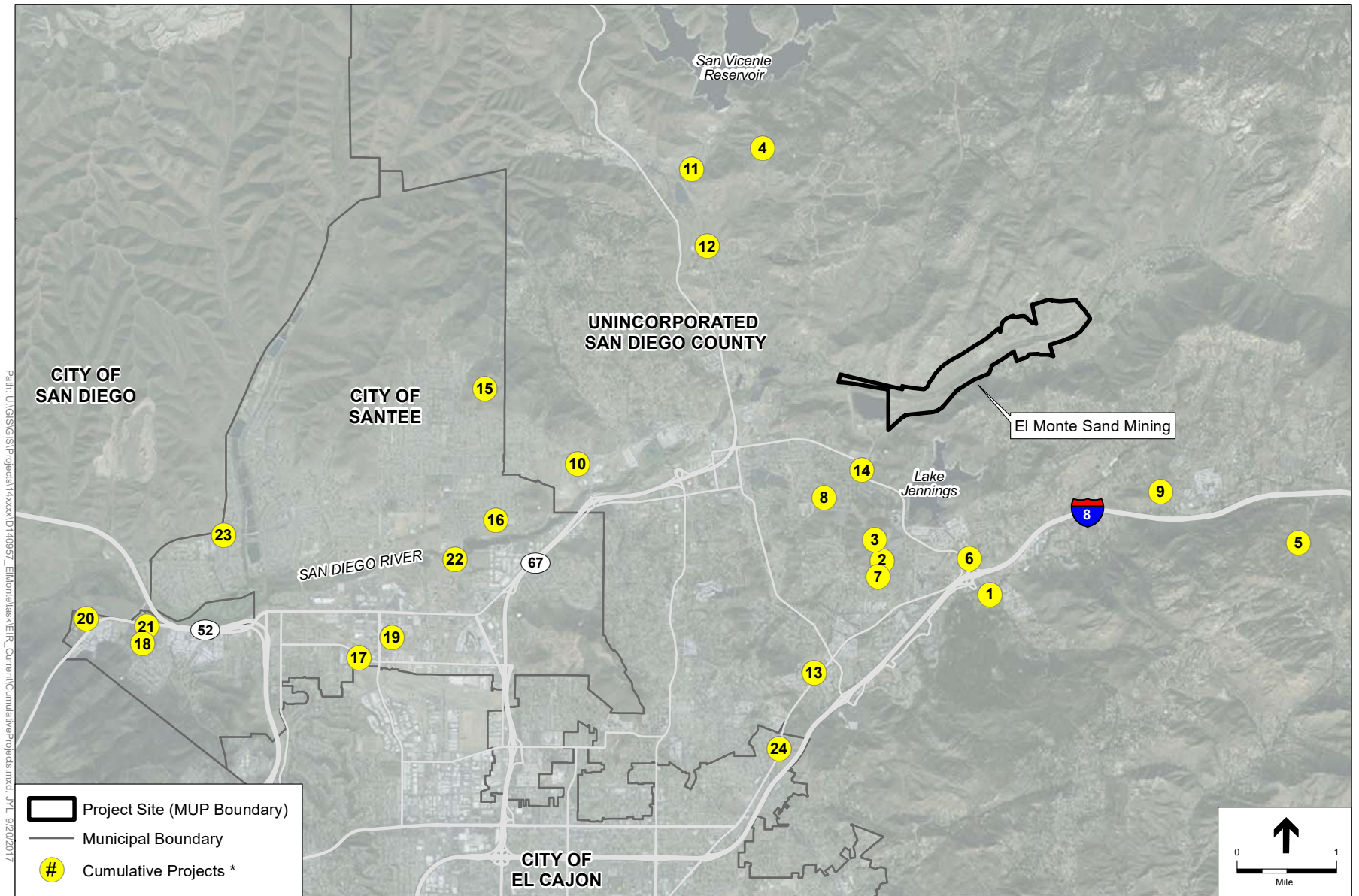




SOURCE: ESRI; EnviroMine; The Altum Group; Chang Consultants; ESA; USFWS

El Monte Sand Mining Project. 140957  
**Figure 2.3-4**  
 USFWS Designated Critical Habitat





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\* Refer to Table 1-9 for cumulative project list.

SOURCE: ESRI 2015; EnvironMine, ESA, 2015; SanGIS 2015; San Diego County

El Monte Sand Mining Project . 140957  
**Figure 2.3-5**  
 Cumulative Projects



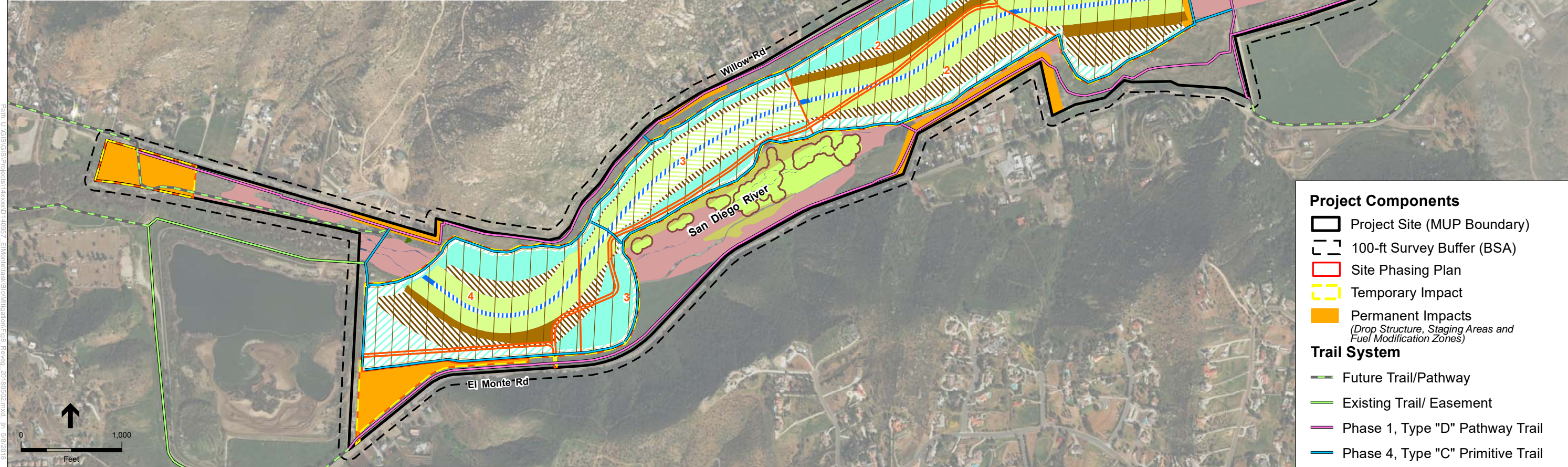
**Mitigation By Phase  
(Inside phasing plan)**

Mitigation	Reclamation	Phase 1		Phase 2		Phase 3		Phase 4		Total	
		Mitigation	Reclamation	Mitigation	Reclamation	Mitigation	Reclamation	Mitigation	Reclamation	Mitigation	Reclamation
Coastal Sage Scrub		20.97 ac	13.13 ac	8.86 ac	9.23 ac	13.00 ac	8.37 ac	7.66 ac	13.99 ac	50.49 ac <sup>1</sup>	44.72 ac
Southern Willow Scrub		8.87 ac	18.87 ac	4.33 ac	12.28 ac	0.00 ac	5.24 ac	3.44 ac	10.39 ac	16.64 ac <sup>2</sup>	46.78 ac
Southern Cottonwood Willow Riparian Forest		13.11 ac	0.00 ac	15.01 ac	0.00 ac	5.67 ac	12.43 ac	12.64 ac	0.00 ac	46.43 ac <sup>3</sup>	12.43 ac
Vegetated Streambed		0.09 ac	1.76 ac	0.11 ac	2.18 ac	0.03 ac	2.86 ac	0.13 ac	1.75 ac	0.36 ac	8.55 ac
<b>Total</b>		<b>43.04 ac</b>	<b>33.75 ac</b>	<b>28.31 ac</b>	<b>23.69 ac</b>	<b>18.70 ac</b>	<b>28.90 ac</b>	<b>23.87 ac</b>	<b>26.13 ac</b>	<b>113.92 ac</b>	<b>112.48 ac</b>

**Mitigation Habitats to be Enhanced<sup>4</sup>  
(Outside of site phasing plan)**

**Total 64.16 ac**

- Tamarisk Scrub - 43.87 ac
- Southern Willow Scrub - 0.58 ac
- Southern Cottonwood Willow Riparian Forest - 11.17 ac
- Non-Native Grassland - 7.24 ac
- Non-Vegetated Channel - 1.30 ac
- Mature Riparian Woodland with 50' Buffer



**Project Components**

- Project Site (MUP Boundary)
- 100-ft Survey Buffer (BSA)
- Site Phasing Plan
- Temporary Impact
- Permanent Impacts (Drop Structure, Staging Areas and Fuel Modification Zones)

**Trail System**

- Future Trail/Pathway
- Existing Trail/ Easement
- Phase 1, Type "D" Pathway Trail
- Phase 4, Type "C" Primitive Trail

SOURCE: ESRI; ESA 2016; EnviroMine 2016

<sup>1</sup> Coastal sage scrub mitigation includes mitigation for coastal sage scrub (7.22 acres) and nonnative grassland (43.27 acres).  
<sup>2</sup> Southern willow scrub mitigation includes mitigation for southern willow scrub (0.36 acre) and a portion of mitigation for tamarisk scrub (16.28 acres) within the site phasing plan.

<sup>3</sup> Southern cottonwood willow riparian forest mitigation includes mitigation for a portion of mitigation for tamarisk scrub within the site phasing plan (46.43 acres)

<sup>4</sup> Mitigation habitats to be enhanced include restoration of riparian and transitional habitat via exotic plant removal and activities to promote native plant revegetation (62.72 acres required, rounded to 64.16 acres).

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**Figure 2.3-6**  
Habitat Mitigation and Reclamation / Revegetation



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