4.3 Biological Resources

This section describes the existing biological resources of the proposed Sand Canyon Resort Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project. A survey area was established to evaluate biological resources that occur or have the potential to occur on and immediately adjacent to the project site. The survey area consists of approximately 68 acres (the proposed development area plus an additional buffer) of an existing, but inactive, golf course. The existing conditions as they pertain to biological resources are discussed in relation to the survey area; potential impacts to biological resources from the proposed project are discussed later in this chapter in relation to the project site.

The biological resources described in this section are based on the findings provided in the Sand Canyon Resort Jurisdictional Delineation and Biological Resources Assessment (Appendix D). This reference document and a review of relevant state and federal databases documenting special-status biological resources in the region were used to determine the existing conditions on the project site, and are included in Appendix D. This section also includes the results of an initial biological survey conducted in December 2018 and focused surveys conducted for the survey area between May and June 2019 (Appendix D).

4.3.1 Environmental Setting

4.3.1.1 Regional Setting

Regionally, the project site occurs in the City of Santa Clarita (City), which is in the Santa Clarita Valley, which is part of the upper watershed of the Santa Clara River in Los Angeles County. The site is located in the Santa Clara River Valley Groundwater Basin, Santa Clara River Valley East Sub-basin (Appendix D). The Santa Clara River Valley East Sub-basin is bordered on the north by the Piru Mountains, on the west by impervious rocks of the Modelo and Saugus Formations and a constriction in the alluvium, on the south by the Santa Susana Mountains, and on the southeast by the San Gabriel Mountains. The surface is drained by the Santa Clara River, Bouquet Creek, and Castaic Creek.

4.3.1.2 Project Setting

The project site is located in the Sand Canyon area of the City within the former Robinson Ranch Golf Course (now the Sand Canyon Country Club). The project site is currently vacant and comprises an abandoned nine-hole golf course (the Mountain Course) and a single small restroom structure that is no longer in service. Since 2016 the project site has been unmaintained and has been subject to wildfire and flooding. The existing Sand Canyon Country Club property comprises a 27-hole golf course, a driving range, a maintenance building, and clubhouse; however, all of the aforementioned features are outside of the project site boundaries.

The project area is bounded to the north by hills covered largely in native chamise chaparral, to the south and east by the remaining active golf courses of the Sand Canyon Country Club, and to the west by residences and ranch property. The proposed debris basin to the south of Robinson Ranch Road is surrounded by existing golf course fairway and associated developments. The survey area is generally dry and exposed (south-facing). The average high/low summer temperatures in the survey area are 92°F/53°F, average high/low winter temperatures are 66°F/37°F, and average precipitation is 14 inches per year.

The soils at the site are Saugus loam, 30% to 50% slopes; Hanford sandy loam, 2% to 9% slopes; and Metz loam, 2% to 5% slopes. The Saugus loam tends to have rapid runoff and is therefore subject to high erosion, whereas the Hanford sandy loam tends to have slow runoff and be more resistant to erosion. Metz loam is typified by very slow runoff, with low potential for erosion, and is therefore subject to periodic flooding in low-lying areas. These soils are typical of former grazing lands, and none are considered hydric (NRCS 2018).

Vegetation throughout the survey area is predominantly native and non-native grassland, which encompasses the majority of the area that used to be golf course. Surrounding it and in vegetation islands within it are stands of mixed chamise and California buckwheat chaparral, California brittlebush scrub, and Great Basin sagebrush scrub. Land uses adjacent to the site include active irrigated golf courses to the south and east, vegetated hills and residences to the north, and residential and ranch land to the west.

Vegetation

The majority of the planned development area is occupied by mixed native and non-native grassland (the former golf course), but the area also encompasses several coast live oak woodlands and both hillsides and vegetation islands within the grassland that are covered with mixed chaparral and scrub communities. Areas surrounding the proposed project area are vegetated hillsides, existing active golf course, and residential and ranch properties.

To the extent possible, plant communities were correlated with plant communities included in the California Department of Fish and Wildlife (CDFW) California Natural Communities List (CDFW 2019), which provides a list of officially recognized plant communities occurring within the State of California. The list assigns a conservation status rank (also known as a rarity rank) to each plant community, which is used to determine the sensitivity of the plant community. Plant communities with global or state status ranks of G1 through G3 or S1 through S3, respectively, are considered to be sensitive, and are referred to as "natural communities of special concern." Plant communities are classified based on plant species composition and abundance, as well as the underlying abiotic conditions of the stand, such as slope, aspect, or soil type.

Of the communities mapped, four are considered sensitive by CDFW. Table 4.3-1 provides a summary of vegetation types/land uses under existing conditions and the corresponding acreage. Figure 4.3-1, Biological Resources Map, depicts the existing vegetation conditions with an overlay of the planned development footprint. Below is a discussion of each vegetation/land use type.

Table 4.3-1. Summary of Potential Jurisdictional Features in the Survey Area

Habitat Class	Plant Community or Land Cover[1]	Conservation Status Rank[2]	Acres
Woodland	Fremont Cottonwood (*Populus fremontii*) Alliance [61.130.06]*	G2QS3	0.57
	Coast Live Oak (*Quercus agrifolia*) Woodland Alliance [71.060.02]	G5S4	1.78
	Individual Coast Live Oak (*Quercus agrifolia*) Trees	Not ranked	0.26
Scrub/Shrubland	Tamarisk (Tamarix *ramosissima*) Semi-Natural Stands [63.810.01]	Not ranked	0.07
	California Sagebrush (*Artemisia californica*) Scrub Alliance [32.010.01]	G5S5	0.34
	California Brittlebush (*Encelia californica*) Scrub Alliance [33.050.02]*	G3S3	3.82

Table 4.3-1. Summary of Potential Jurisdictional Features in the Survey Area

Habitat Class	Plant Community or Land Cover[1]	Conservation Status Rank[2]	Acres
	Chamise (*Adenostoma fasciculatum*) Chaparral Alliance [37.101.16]	G5S5	0.89
	Chamise - California Buckwheat (*Adenostoma fasciculatum - Eriogonum fasciculatum*) Chaparral Alliance [37.101.14]	G5S5	14.54
	Great Basin Sagebrush – California Buckwheat (*Artemisia tridentata – Eriogonum fasciculatum*) Scrub Alliance [35.110.09]	G5S5	7.68
	California Brittlebush – California Sagebrush (*Encelia californica – Artemisia californica*) Scrub Association [32.050.01]*	G3S3	0.47
	Purple Sage – California Sagebrush (Salvia *leucophylla – Artemisia californica*) Scrub Alliance [32.090.01]	G4S4	0.18
Herbaceous	Desert Saltgrass (*Distichlis spicata*) Alliance [41.200.09]	G5S4	0.08
	Native and Non-Native Grassland (Formerly Golf Course Fairways)	Not ranked	26.08
	Narrowleaf Cattail Marshes (*Typha domingensis*) Alliance [52.050.03]	G5S5	0.03
	Creeping Ryegrass (*Elymus triticoides*) Herbaceous Alliance [41.080.01]*	G3S3	0.05
Other/Developed	Barren/Sparsely Vegetated	Not ranked	1.73
	Paved	Not ranked	2.99
	Pond	Not ranked	0.57
	Developed	Not ranked	1.13
	Barren/Sparsely Vegetated	Not ranked	4.82
		Total Acreage	**68.1**

Source: Appendix D.

* CDFW Sensitive Community

1 Numbers in brackets are unique codes for each plant community, as provided in the Natural Communities List (CDFW 2019).

2 A conservation status rank (also known as "rarity rank") or a "high inventory priority" designation is used to determine the significance of project impacts to plant communities. The conservation status ranking system consists of a geographic scale (G = Global; S = State) and a degree of threat (1 = critically imperiled; 2 = imperiled; 3 = vulnerable to extirpation or extinction; 4 = apparently secure; and 5 = demonstrably widespread, abundant, or secure). Plant community alliances with global or state conservation status ranks of G1 through G3, or S1 through S3, respectively, are considered to be "natural communities of special concern." A Q within the ranking indicates "Questionable taxonomy"—Taxonomic distinctiveness of this entity at the current level is questionable; resolution of this uncertainty may result in change from a species to a subspecies or hybrid, or the inclusion of this taxon in another taxon, with the resulting taxon having a lower-priority conservation priority.

Woodland

Fremont Cottonwood Woodland Alliance

This woodland association, which is considered sensitive by CDFW (2019a), occurs in several small patches at several locations in the eastern portion of the survey area. Several more patches exist in the southwestern portion of the survey area around the location of the proposed debris basin, though no impacts to the trees in that area are projected.

Coast Live Oak Woodland Alliance

This woodland association occurs in patches scattered within the western portion of the survey area with one smaller patch in the eastern portion. In this association, the tree layer is dominated by coast live oak (*Quercus agrifolia*). Understory within these woodland associations within the survey area is generally dominated by the herbaceous layer, primarily comprised of grasses and forbs. A shrub layer is sometimes present, including California buckwheat (*Eriogonum fasciculatum*) and California sagebrush (*Artemisia californica*). This community is not considered sensitive by CDFW (2019a).

Coast Live Oak Individual Trees

Aside from the coast live oak woodlands, a number of individual coast live oak trees are scattered about the survey area, primarily in the southwestern and western area. These are simply coast live oak trees that are too far apart to constitute woodlands but occupy a large enough area to be mapped. Individual coast live oaks do not possess any state, federal, or local special status, but are protected when meeting designated size criteria by the County of Los Angeles (County) oak tree ordinance. They do not constitute a plant community and therefore cannot be assessed as a potential sensitive plant community.

Scrub/Shrubland

Tamarisk Semi-Natural Stands

Saltcedar trees (*Tamarix ramosissima*) were found in various areas around the survey area. In one place within the survey area, a thicket of saltcedar exists. This community is dominated by tamarisk, with Great Basin sagebrush (*Artemisia tridentata*) growing around and partially underneath it. An herbaceous layer of grasses and forbs also grows around and underneath the tamarisk. Tamarisk is not a native plant and is not considered sensitive by the CDFW (2019a).

California Sagebrush Scrub Alliance

This community is typified by the dominance of California sagebrush in the shrub layer with no other co-dominant plants. One patch was mapped at the far eastern edge of the survey area. While not within the proposed grading limits, the community would potentially be impacted by fuel modification activities. This community is not considered sensitive by the CDFW (2019a).

California Brittlebush Scrub Alliance

This plant community, considered sensitive by CDFW (2019a), occurs on both sides of the survey area, though primarily on the east side in areas often in between the chamise/california buckwheat alliance and the former golf course areas. In this community, California brittlebush (*Encelia californica*) is dominant and often continuous. In places where it is not continuous, it is punctuated by California sagebrush and Great Basin sagebrush.

Chamise Chaparral Alliance

Chamise (*Adenostoma fasciculatum*) is common throughout the survey area, though in most places it is co-dominant with California buckwheat. One patch of this community, where chamise alone is dominant, exists in the far eastern portion of the survey area immediately north of the lone patch of California sagebrush. This plant community is not considered sensitive by the CDFW (2019a).

Chamise–California Buckwheat Shrubland Alliance

This shrub association occupies large swaths of the survey area on the hillsides and slopes north of the existing golf course. Chamise in the survey area is typically dominant or co-dominant with Great Basin sagebrush, with individual chaparral yucca (*Hesperoyucca whipplei*) occurring frequently throughout the association. In transitional areas between communities, Great Basin sagebrush, California brittlebush, California buckwheat, and California sagebrush begin to appear as one approaches the neighboring communities. This community is not considered sensitive by CDFW (2019a).

Great Basin Sagebrush–California Buckwheat Shrubland Association

This shrub association occurs primarily at the southern extreme of the survey area and within vegetation islands surrounded by the existing golf course within both the eastern and western portions of the survey area. These areas are typified by dominant Great Basin sagebrush, or co-dominant California buckwheat and Great Basin sagebrush. California sagebrush and California brittlebush are also found in parts of these areas in lesser quantities. This community is not considered sensitive by CDFW (2019a).

California Brittlebush–California Sagebrush Shrubland Association

This plant community, considered sensitive by CDFW (2019a), occurs in two vegetation "islands" within the non-native grassland in the eastern portion of the survey area. In this community, California brittlebush is co-dominant in the shrub canopy with California sagebrush and occupies greater than 30% of the canopy layer.

Purple Sage–California Sagebrush Scrub Association

This plant community was mapped in only one patch, which grows immediately north of the proposed location for the debris basin in the southwestern portion of the survey area. This community is typified by co-dominance of purple sage (*Salvia dorrii*) and California sagebrush in the shrub layer. This patch in particular is on the edge of the area to be graded for the debris basin. This community is not considered sensitive by CDFW (2019a).

Herbaceous

Desert Saltgrass Alliance

This community occurs only in the western portion of the survey area where a seep was found. No historical imagery indicates the existence of this seep, and therefore the water source for this may be faulty irrigation equipment. A carpet of desert saltgrass (*Distichlis spicata*) grows over an area just downslope of saturated turf, and is punctuated by a small growth of cattail (*Typha* spp.). This community is not considered sensitive by CDFW (2019a).

Native and Non-Native Grassland

This community is the largest within the survey area. This community is comprised of the golf course fairways, which have been left fallow, where they have not been converted. Dominant species within this community now include various grasses and forbs, with non-natives including ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), Bermuda grass (*Cynodon dactylon*), and smilo grass (*Stipa miliacea*) and natives including foothill needlegrass (*Stipa lepida*) and giant wildrye (*Elymus condensatus*).

Narrowleaf Cattail Herbaceous Alliance

This community occurs in two patches, one in the western portion and one in the eastern portion of the survey area. In the eastern portion of the survey area, the narrowleaf cattail (*Typha angustifolia*) exists within the footprint of what used to be a pond. This plastic-lined feature has been drained and most of the cattail observed was dead, though some was still green. In the western portion of the survey area, a concrete-lined pond supports cattail, though at the time of the survey most of it was dead despite the presence of water. This community is not considered sensitive by CDFW (2019a).

Creeping Ryegrass Herbaceous Alliance

This community, considered sensitive by CDFW, occurs along and adjacent to the northern end a modified stream. This area is located near the center of the project site, just north of Robinson Ranch Road, at the eastern edge of the western portion of the survey area. It occurs partially within the riparian zone, portions of which are underneath canopy cover of coast live oak trees.

Other/Developed

Barren or Sparsely Vegetated

Barren or sparsely vegetated areas include areas with sparse cover of non-native ruderal species and areas that have been graded or cleared of vegetation, and may be mowed or otherwise disturbed on a regular basis. These areas are located in the eastern portion of the survey area, where equipment and piled vegetation indicate that the area has been cleared, perhaps to act as a staging area. Selected species observed include hoary mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), and tree tobacco (*Nicotiana glauca*). Due to their highly disturbed condition, these areas generally lack native species and are dominated by non-natives, and are not considered sensitive.

Paved

Paved areas include Robinson Ranch Road, which runs through the property at the southern end of the survey area, and the concrete paths that run throughout the area that used to serve as roads for golf carts to follow throughout the course. Paved areas are not sensitive.

Pond

One artificial decorative pond is maintained within the survey area in the far southwestern corner near the proposed location of the debris basin. The pond is outside of the grading limits for the debris basin, and should not be impacted by project activities.

Developed

Developed areas within the survey area include portions of the buildings that house maintenance operations for the golf course. Developed areas were within the survey area but are not sensitive or projected to be impacted by project activities.

Turf Grass

Portions of the existing golf course occur within the survey area around the proposed debris basin location. These areas are covered in turf grass, which is not sensitive.

Floral Diversity

A total of 179 vascular plant taxa were identified during the surveys of the site, including 2 gymnosperms, 144 dicots, and 33 monocots. Of the plants observed, 110 were native (61%) and 69 were non-native (39%). A complete list of the vascular plant species observed within the survey area is provided in Appendix D.

Wildlife

A list of vertebrate wildlife species observed during surveys is located in Appendix D. Nearly all wildlife species observed during surveys of the site were species common or relatively common to the region. Many other non-special-status wildlife species can also be expected to utilize habitats at the site for cover, foraging, and reproduction. Furthermore, in general, the list in Appendix D includes species that are more easily detected during daytime surveys. Several species (e.g., reptiles, birds, small mammals) may reproduce in the survey area, and a wide range of larger or mobile species can be expected to utilize the site's resources routinely, such as foraging raptors and medium- to large-sized mammals (e.g., striped skunk [*Mephitis mephitis*], coyote [*Canis latrans*], and mule deer [*Odocoileus hemionus*]).

The woodland, scrub/shrubland, and herbaceous habitats provide suitable habitat for a variety of reptile species. No reptiles were observed during the December 5, 2018, survey, likely because of the cold, wet, and overcast conditions, although several common reptile species are very likely to be present. During the spring 2019 surveys, coastal whiptail (*Aspidoscelis tigris stejnegeri*), a California Species of Special Concern (SSC), and western fence lizards (*Sceloporus occidentalis*) were observed within the survey area.

The native and non-native habitats at the project site provide cover and forage resources as well as nesting/breeding habitat for several species of birds. Birds were the most diverse vertebrate wildlife observed and consisted of year-round, summer, and winter residents, as well as potential migrants.

Species observed include acorn woodpecker (*Melanerpes formicivorus*), American coot (*Fulica americana*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), ash-throated flycatcher (*Myiarchus cinerascens*), Bewick's wren (*Thryomanes bewickii*), blue-grey gnatcatcher (*Polioptila caerulea*), bushtit (*Psaltriparus minimus*), Cassin's kingbird (*Tyrannus vociferans*), California quail (*Callipepla californica*), California scrub-jay (*Aphelocoma californica*), California thrasher (*Toxostoma redivivum*), California towhee (*Melozone crissalis*), Canada goose (*Branta canadensis*), cliff swallow (*Petrochelidon pyrrhonota*), common raven (*Corvus corax*), great horned owl (*Bubo virginianus*), great-tailed grackle (*Quiscalus mexicanus*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), killdeer (*Charadrius vociferus*), lesser goldfinch (*Spinus psaltria*), mallard (*Anas platyrhynchos*), mourning dove (*Zenaida macroura*), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), phainopepla (*Phainopepla nitens*), red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), red-winged blackbird (*Agelaius phoeniceus*), song sparrow (*Melospiza melodia*), spotted towhee (*Pipilo maculatus*), turkey vulture (*Cathartes aura*), western bluebird (*Sialia mexicana*), western kingbird (*Tyrannus verticalis*), white crowned sparrow (*Zonotrichia leucophrys*), wrentit (*Chamaea fasciata*), and yellow-rumped warbler (*Setophaga coronata*). The woodland and scrub communities, with their abundance of small mammals, open habitat, and presence of large trees, provide excellent foraging habitat for raptors. Several bird species would nest within the survey area in any given year. Nearly all species of birds, while nesting, are protected by California Fish and Game Code Section 3503 and 3503.5, and by the federal Migratory Bird Treaty Act.

Mammals observed during the survey included domestic rooster (*Gallus domesticus*), desert cottontail (*Sylvilagus audubonii*), fox squirrel (*Sciurus niger*), and domestic dog (*Canis lupus familiaris*), and mammals inferred by sign included Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Spermophilus beecheyi*), coyote, big-eared woodrat (*Neotoma macrotis*), raccoon (*Procyon lotor*), and mule deer.

Special-Status Species

For the purposes of this assessment, special-status species are those species that are listed, proposed for listing, or that meet the criteria for listing as endangered, threatened, or rare under the federal Endangered Species Act (FESA) or California Endangered Species Act (CESA); plants on the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants with a California Rare Plant Rank (CRPR) of 1A through 3, which are evaluated on a case-by-case basis; and wildlife that are listed on the CDFW Special Animals list with a designation of SSC or California Fully Protected (CFP). However, plant species with a CRPR of 4 are not considered locally significant. The status codes for special-status plants and special-status wildlife are described in Table 3 and 5, respectively, of Appendix D.

Special-Status Plants

Special-status plant species either have unique biological significance, limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, or a combination of these factors.

An evaluation of the potential for occurrence at the site of special-status plant species known to occur in the region was undertaken through a search of the CNPS Online Inventory of Rare and Endangered Plants, 8th ed. (CNPS 2020), and the CDFW's California Natural Diversity Database (CNDDB) Rarefind 5 application (CDFW 2020) for sensitive "elements" reported within the Mint Canyon quadrangle and eight others that surround it (Warm Springs Mountain, Green Valley, Sleepy Valley, Newhall, Agua Dulce, Oat Mountain, San Fernando, and Sunland). The CNDDB/CNPS derived lists are provided in Appendix D. Based upon a review of the resources and databases listed above, 42 special-status vascular plant species have been documented within the nine U.S. Geological Survey quadrangles.

The analysis of the potential for occurrence of special-status plants is presented in Appendix D, including protection status, primary habitat associations, and an evaluation of their potential for occurrence at the site. The evaluation considers the potential for occurrence within the biological survey area (i.e., within the development footprint and vicinity). The potential for occurrence analysis does not include CRPR 4 plants. As discussed in Appendix D, most special-status plant species known to occur in the region are precluded from occurring at the site due to lack of suitable habitat or because the site is outside of the known range of the species. Other species, particularly shrubs and many perennial herbs, could be confirmed as absent as they were not found during the survey. The following 11 special-status plant species had low potential to occur at the site prior to floristic surveys conducted on the survey area:

- chaparral ragwort (*Senecio aphanactis*) – CRPR 2B.2
- Davidson's bush mallow (*Malacothamnus davidsonii*) – CRPR 1B.1
- Palmer's mariposa lily (*Calochortus palmeri* var. *palmeri*) – CRPR 1B.2
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*) – CRPR 1B.1
- Ross' pitcher sage (*Lepechinia rossii*) – CRPR 1B.2
- San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*) – Federal Endangered/ California Endangered

- San Gabriel bedstraw (*Galium grande*) – CRPR 1B.2
- short-tailed beavertail (*Opuntia basilaris* var. *brachyclada*) – CRPR 1B.2
- slender mariposa lily (*Calochortus clavatus* var. *gracilis*) – CRPR 1B.2
- slender-horned spineflower (*Dodecahema leptoceras*) – Federal Endangered/California Endangered
- white rabbit-tobacco (*Pseudognaphalium leucocephalum*) – CRPR 2B.2

All of these species were confirmed absent by the floristic surveys conducted in spring 2019.

Special-Status Wildlife

For the purposes of this assessment, special-status wildlife species are those species that are listed, proposed for listing, or that meet the criteria for listing as endangered, threatened, or rare under the FESA or CESA; and those that are listed on the CDFW Special Animals list with a designation of SSC or CFP.

Special-Status Wildlife Species Observed

Surveys conducted on the survey area between 2017 and 2019 observed Cooper's hawk (*Accipiter cooperii*), a CDFW watch list species; the presence of San Diego desert woodrat (*Neotoma lepida*), a CDFW SSC, was also found, although Envicom biologists did not see any nests that conformed to that species in their survey. Also documented were the presence of least bittern (*Ixobrychus exilis*), a California SSC, and Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), a CDFW watch-list species. Additionally, the 2019 spring surveys included observations of coastal whiptail, a California SSC. Locations of observations of the special-status coastal whiptail are shown on Figure 4 of Appendix D.

Coastal California gnatcatcher (*Polioptila californica californica*) has been documented in the vicinity of the project area, but not at the project site. Surveys of the project site were conducted for California gnatcatchers in accordance with standard protocols in spring 2017. No coastal California gnatcatchers were observed during the protocol surveys (Appendix D). Also, the site is not within final U.S. Fish and Wildlife Service–designated critical habitat for the species, which occurs north and east of the site.

Potential for Occurrence Analysis

An analysis of the potential for occurrence of special-status wildlife at the site is presented in Appendix D, which includes the species' protected status, primary habitat associations, and an assessment of their potential for occurrence (Presumed Absent, No Potential, Low Potential, Moderate Potential, or High Potential). The potential for occurrence was undertaken through research of the CNDDB (CDFW 2020) using the Rarefind application for special-status "elements" on the Mint Canyon quadrangle and eight adjacent quadrangles. The CNDDB-derived list is provided in Appendix D. The potential for occurrence analysis provides an assessment of the potential for the occurrence at the site of special-status animals on the basis of their known distribution and habitat requirements.

Water features within the project area are all either artificial lined features containing stagnant water, or are overland swales with no standing water, and are not suitable habitat for fishes, precluding the possibility that special-status fish species may occur within the project area.

Several special-status species of reptiles, birds, and mammals have potential to use the site. Species that have been observed at the site are confirmed present and are not included on this list of potentially present species. Four special-

status reptiles, one special-status amphibian, eight special-status birds, and four special-status mammals have potential to occur at the site, with varying probabilities ranging from moderate to very low, including the following.

Reptiles

- California glossy snake (*Arizona elegans occidentalis*) – SSC
- Western pond turtle (*Emys marmorata*) – SSC
- Coast horned lizard (*Phrynosoma blainvillii*) – SSC
- Two-striped gartersnake (*Thamnophis hammondii*) – SSC

Amphibians

- Western spadefoot (*Spea hammondii*) – SSC

Birds

- Tricolored blackbird (*Agelaius tricolor*) – California Threatened
- Grasshopper sparrow (*Ammodramus savannarum*) – SSC
- Burrowing owl (*Athene cunicularia*) – SSC
- Swainson's hawk (*Buteo swainsoni*) – Federal Threatened/California Threatened
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) – Federal Threatened/ California Threatened
- White-tailed kite (*Elanus leucurus*) – California Fully Protected
- Loggerhead shrike (*Lanius ludovicianus*) – SSC
- Coastal California gnatcatcher – Federal Threatened/SSC

Mammals

- Pallid bat (*Antrozous pallidus*) – SSC
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) – SSC
- Southern grasshopper mouse (*Onychomys torridus ramona*) – SSC
- American badger (*Taxidea taxus neglecta*) – SSC

Protected Trees

The City of Santa Clarita oak tree ordinance (City of Santa Clarita Municipal Code Chapter 17.51, Section 17.51.040, Oak Tree Preservation) protects and preserves oak trees in the City. The project site contains 136 protected oak trees, including 121 coast live oak trees and 15 scrub oaks (*Quercus berberidifolia*). Of the 121 coast live oaks, 13 are heritage trees.

Jurisdictional Waters

Potential federal and/or state jurisdictional features within the survey area include a human-made ditch, a pond, an ephemeral drainage, a modified stream, and a swale that was located within upland habitat. All features observed were evaluated per both U.S. Army Corps of Engineers (ACOE) and CDFW guidance and results are

provided in Table 4.3-2. The survey area is located in the Santa Clara River watershed (Hydrologic Unit Code 180701020107) within the larger Ventura-San Gabriel Coastal watershed (Hydrologic Unit Code 1810701). It includes multiple concrete or plastic lined pond features, a wetland feature, and a County Public Works storm drain and detention basin.

Table 4.3-2. Summary of Potential Jurisdictional Features in the Survey Area

Feature	Latitude[1]	Longitude	ACOE Wetland Waters of the United States[2]	ACOE Non-Wetland Waters of the United States	RWQCB Waters of the State	CDFW Streambed and Riparian Habitat
Ditch 1 (DIT1)	34.412305	-118.415586	—	—	0.02/69	0.02/69
Drainage 1 (DR1)	34.413645	-118.412710	—	—	0.03/167	0.10/177
Swale 1 (SW1)	34.412916	-118.414817	—	—	0.09/171	0.09/171
Pond (P1)	34.412042	-118.406985	—	—	0.14/301	0.36/357
Stream 1 (ST1)	34.411111	-118.416861	0.03/117	0.26/713	0.26/712	0.55/716
		Total	**0.03/117**	**0.26/713**	**0.54/1,420**	**1.12/1,490**

Source: Appendix D.
Notes: ACOE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife.
1 North American Datum 1983, California State Plane Zone V. GPS coordinates are given for the upstream origin of the drainage or ditch and center point of debris basins as accessed during field surveys and/or as digitized from aerial imagery.
2 All measurements are acres/linear feet.

Ditches and Drainages

Ditch 1 (DIT1) is a concrete and rock-lined channel that was dug within uplands and presumably supplemented by irrigation or nuisance water. The ditch contained impounded water that appeared be stagnant (i.e., not flowing). There was approximately 3 inches of accumulated soil materials on top of the concrete liner. DIT1 is hydrologically connected to another human-made impoundment south of the survey area via a concrete box culvert that runs under Robinson Ranch Road, which eventually leads to a secondary built pond system within the existing golf course. There is no nexus from the ponds to a traditional navigable water (TNW). The ACOE generally does not assert jurisdiction over ditches or swales excavated wholly in and draining only uplands that do not carry a relatively permanent flow of water. CDFW and Regional Water Quality Control Board (RWQCB) would likely determine that DIT1 constitutes jurisdictional habitat.

Drainage 1 (DR1) is located in the northern portion of the survey area and did not exhibit any criteria indicators to suggest the presence of a wetland. The ACOE will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters," meaning tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). In this case, DR1 does not appear to support continuous flow but is instead the result of erosion from convergent hillsides. For example, the golf cart path appears to have bisected the convergent hillsides and was constructed without adequate drainage control, which has resulted in severe undercutting of the hillside nearest the downhill side (west) of the pathway. The ephemeral drainage area appears to be isolated, ending in an overland flow with no connection to a TNW. Therefore, the drainage is not likely subject to ACOE jurisdiction, but CDFW and RWQCB would likely determine that DR1 constitutes jurisdictional habitat, which would be affected by the proposed project.

In addition, a Los Angeles Department of Public Works debris basin is located west of the survey area. The extent of ACOE and RWQCB jurisdiction is limited to the confined channel within the basin. Conversely, the extent of CDFW jurisdiction is limited to the top of bank (i.e., top of the concrete-lined basin) and would not extend to include the canopy of the oak tree immediately adjacent to the basin because the tree is not dependent on the drainage and basin and it does not contribute to the ecological function of the basin, which is lined with concrete. The drainage continues north of the basin, west of the survey area, and ties into the City's storm drain system that drains into the Santa Clara River.

Swale

There is one swale area within the subject property that appears to be a result of faulty irrigation. This feature does not have a significant nexus to TNW as it ceases at the existing concrete golf cart path and no subsurface flows were detected that suggest a connection to the water course to the southwest. This area is a shallow feature in the landscape that has grass or other low-lying vegetation throughout and conveys nuisance water across upland areas. As such, this feature has been classified as a swale. The ACOE typically does not assert their jurisdiction over swales, especially those that are not tributary to or abutting TNWs or tributaries of TNWs. Furthermore, the condition is likely a result of faulty irrigation, as there is no indication of similar conditions in the vicinity of the swale. Nevertheless, because the swale currently supports cattail marsh and a robust herbaceous layer of salt grass, CDFW and the RWQCB will consider it jurisdictional.

Ornamental Pond and Water Feature

One ornamental pond and its associated water feature were found within the survey area. The boundary of the feature was mapped based on site-specific topography. The area would meet all three criteria to be considered a wetland under ACOE guidance; however, the pond was dug in uplands and was subsequently lined and filled as an ornamental feature for aesthetic purposes. At the time of the spring 2019 survey conducted for this report, the pond was full of water and supported cattail thickets. The pond and associated water feature do not constitute jurisdictional waters of the United States. CDFW and RWQCB would likely consider the pond and water feature to be jurisdictional.

Modified Stream

One modified stream was delineated within the expanded survey area assessed during the spring 2019 surveys. The boundary of the stream was mapped based upon site-specific topography. At three locations, the stream met all three criteria to be considered a wetland under ACOE guidance. The remainder of the stream channel meets criteria of non-wetland waters of the United States. Additional details on the wetlands are provided on the Wetland Determination Data Forms in Appendix 4 to Appendix D of this Environmental Impact Report. The stream connects to a Los Angeles Department of Public Works debris basin to the northwest (the same mentioned above), which does have a nexus to the Santa Clara River. The stream is subject to ACOE, CDFW, and RWQCB jurisdiction.

Habitat Linkages and Wildlife Movement Corridors

Wildlife must to be able to access habitat for water, foraging, breeding, and cover. Examples of barriers or impediments to movement (i.e., access) include housing and other urban development, roads, fencing, unsuitable habitat, or open areas with little vegetative cover. The term wildlife movement corridor is used to describe physical connections that allow wildlife to move between areas of suitable habitat in both undisturbed and fragmented landscapes, such as landscapes fragmented by urban development. Wildlife movement corridors are necessary for

dispersal and migration, to ensure the mixing of genes between populations, and so wildlife can respond and adapt to environmental stress, and thus are necessary to maintain healthy ecological and evolutionary processes. Wildlife crossings are generally small, narrow areas allowing wildlife to pass through an obstacle or barrier, such as a roadway to reach another patch of habitat. These can be critical at both the local and regional level. Wildlife crossings include culverts, drainage pipes, underpasses, tunnels, and, more recently, crossings created specifically for wildlife movement over highways.

Based on a review of the following documents, the project site and the survey area are near but not within an area that has been identified as important to wildlife movement, such as a regional-scale habitat linkage or a wildlife movement corridor:

- California Essential Connectivity Project: A Strategy for Conserving a Connected California (Spencer et al. 2010)
- South Coast Missing Linkages Project: A Linkage Design for the San Gabriel – Castaic Connection (Penrod et al. 2004)
- South Coast Missing Linkages Project: A Linkage Design for the Santa Monica Mountains – Sierra Madre Connection (Penrod et al. 2006)
- City of Santa Clarita General Plan: Conservation and Open Space Element (City of Santa Clarita 2011a).

The potential importance of the project site to wildlife movement was also evaluated both in the field and by reviewing recent aerial photographs of the site and the surrounding area. The scrub and woodland communities within the project area provide coverage/foraging areas for local wildlife. A diversity of wildlife species could potentially move through the survey area, as it contains vegetative cover and suitable habitat for many species.

4.3.2 Regulatory Framework

Federal

Federal Endangered Species Act

The FESA of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service for most plant and animal species and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend and provide programs for the conservation of those species, thus preventing the extinction of plants and wildlife. The FESA defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under FESA, it is unlawful to "take" any listed species, and take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of Habitat Conservation Plans on private property without any other federal agency involvement.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others. The MBTA protects over 800 species of birds (including their parts, eggs, and nests) from killing, hunting, pursuing, capturing, selling, and shipping unless expressly authorized or permitted.

Clean Water Act

The Clean Water Act provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project operator for a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the Clean Water Act. The RWQCB administers the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by ACOE that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. ACOE implementing regulations are found at Title 33 of the Code of Federal Regulations Sections 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency in conjunction with ACOE (Title 40 Code of Federal Regulations Section 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Wetlands and Other Waters of the United States

Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities, are considered sensitive biological resources and can fall under the jurisdiction of several regulatory agencies. ACOE exerts jurisdiction over waters of the United States, including all waters that are subject to the ebb and flow of the tide; wetlands and other waters such as lakes, rivers, streams (including intermittent or ephemeral streams), mudflats, sandflats, sloughs, prairie potholes, vernal pools, wet meadows, playa lakes, or natural ponds; and tributaries of the previously described features. The extent of waters of the United States is generally defined as that portion that falls within the limits of the ordinary high water mark. Typically, the ordinary high water mark corresponds to the 2-year flood event.

Wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, are defined by ACOE as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Title 33 Code of Federal Regulations Section 328.3[b]; Title 40 Code of Federal Regulations Section 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by ACOE (ACOE 1987).

State

California Endangered Species Act

The CESA (California Fish and Game Code Section 2050 et seq.) provides protection and prohibits the take of plant, fish, and wildlife species listed by the State of California. Unlike FESA, state-listed plants have the same degree of protection as wildlife, but insects and other invertebrates may not be listed. Take is defined similarly to FESA and is prohibited for both listed and candidate species. Take authorization may be obtained by the project applicant from the CDFW under CESA Section 2081, which allows take of a listed species for educational, scientific, or management purposes. In this case, private developers consult with CDFW to develop a set of measures and standards for managing the listed species, including full mitigation for impacts, funding of implementation, and monitoring of mitigation measures.

California Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Furthermore, it is the responsibility of the CDFW to maintain viable populations of all native species. Toward that end, the CDFW has designated certain vertebrate species as SSC, because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 directed the CDFW to carry out the legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. The CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, the CESA created the categories of "threatened" and "endangered" species. It converted all rare animals into the act as threatened species, but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in the CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the project proponent.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires identification of a project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. The act also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

CEQA Guidelines Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors." A rare animal or plant is defined in Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists "in such

small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or . . . [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of "Special Species" as "a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status." This is a broader list than those species that are protected under the FESA, CESA, and other California Fish and Game Code provisions, and includes lists developed by other organizations, including for example the Audubon Watch List Species. Guidance documents prepared by other agencies, including the U.S. Fish and Wildlife Service Birds of Special Concern, are also included on this CDFW Special Species list. Additionally, CDFW has concluded that plant species included on the CNPS's CRPR List 1 and 2, and potentially some List 3 plants, are covered by CEQA Guidelines Section 15380.

Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines requires an evaluation of impacts to "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service."

California Fish and Game Code Section 1602

Under these sections of the California Fish and Game Code, the project operator is required to notify CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the code, a "stream" is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that supports or has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial watercourses valuable to fish and wildlife are subject to CDFW jurisdiction. CDFW also has jurisdiction over dry washes that carry water during storm events.

Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement, which becomes part of the plans, specifications, and bid documents for the project.

California Wetland Definition

Unlike the federal government, California has adopted the Cowardin et al. (1979) definition of wetlands. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes (at least 50% of the aerial vegetative cover); (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and saturated with water or covered by shallow water at some time during the growing season of each year.

Under normal circumstances, the federal definition of wetlands requires all three wetland identification parameters to be met, whereas the Cowardin definition requires the presence of at least one of these parameters. For this reason, identification of wetlands by state agencies consists of the union of all areas that are periodically inundated or saturated or in which at least seasonal dominance by hydrophytes may be documented or in which hydric soils are present.

Section 401 Clean Water Act

Under Section 401 of the Clean Water Act, the local RWQCB, Santa Ana RWQCB, must certify that actions receiving authorization under Section 404 of the Clean Water Act also meet state water quality standards. The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. Compensatory mitigation for impacts to wetlands and/or waters of the state is required.

Porter-Cologne Water Quality Control Act

The RWQCB also has jurisdiction over waters deemed isolated or not subject to Section 404 jurisdiction under the *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* decision. Dredging, filling, or excavation of isolated waters constitutes a discharge of waste to waters of the state and prospective dischargers are required to obtain authorization through an Order of Waste Discharge or waiver thereof from the RWQCB and comply with other requirements of Porter-Cologne Act.

Local

Los Angeles County Significant Ecological Areas

As part of the Conservation and Open Space and Land Use elements of the City of Santa Clarita General Plan (General Plan), the County has identified and adopted policies since 1970 for the establishment of Significant Ecological Areas (SEAs) (City of Santa Clarita 2011a, 2011b). These SEAs were developed to maintain biological diversity by establishing natural biological parameters (key species, habitat types, and linkages) and recommended management practices. The final boundaries and categories for the 21 SEAs (and 9 Coastal Resource Areas) were established in 2015 with the County Board of Supervisors approval of the General Plan. The survey area does not include any mapped SEAs; the nearest mapped SEA (Santa Clara River SEA) is located within 0.15 miles of the project site.

City of Santa Clarita General Plan

The General Plan is the primary planning document for the incorporated areas of the City, including the Sand Canyon Community. The General Plan outlines goals and policies that are intended to guide new planning and development efforts within the City in compliance with state requirements. The City's General Plan is part of a larger collaborative planning effort between the City and the County called the "One Valley One Vision" project. This project involves coordination between the City and County for a unified vision for a larger planning area made up of the incorporated and unincorporated areas of the Santa Clarita Valley. While the incorporated areas of the valley are regulated by the City's General Plan, the plan has been prepared to reflect the common goals and policies agreed to as part of the One Valley One Vision project. For unincorporated areas, the County prepared the Santa Clarita Valley Area Plan, which is consistent with the City's General Plan. As such, both plans reflect the common goals and policies agreed to as part of the One Valley One Vision project (City of Santa Clarita 2011a). The theme of the City's General Plan and Santa Clarita Valley Area Plan is "Valley of Villages," in recognition of the various communities and neighborhoods within the Santa Clarita Valley that wish to maintain a distinctive character, while at the same time recognizing their place in the big picture plan for development within the entire planning area.

The Conservation and Open Space Element of the City's General Plan contains goals and policies that are applicable to the potential biological resources impacts of the project (City of Santa Clarita 2011a). The Conservation and

Open Space Element manages developments' impact on natural resources and recreational amenities within the City by ensuring that goals and policies are in place to regulate the preservation of existing natural and recreational resources while continuing to foster economic growth and development. The goals and policies within the Conservation and Open Space Element outline the City's long-term vision of maintaining and providing open space for the residents of Santa Clarita Valley while also ensuring that new open space and recreational resources contribute to the community character of the region (City of Santa Clarita 2011a).

Goal CO 3: Conservation of biological resources and ecosystems, including sensitive habitats and species.

Objective CO 3.1: In review of development plans and projects, encourage conservation of existing natural areas and restoration of damaged natural vegetation to provide for habitat and biodiversity.

Policy CO 3.1.1: On the Land Use Map and through the development review process, concentrate development into previously developed or urban areas to promote infill development and prevent sprawl and habitat loss, to the extent feasible.

Policy CO 3.1.2: Avoid designating or approving new development that will adversely impact wetlands, floodplains, threatened or endangered species and habitat, and water bodies supporting fish or recreational uses, and establish an adequate buffer area as deemed appropriate through site specific review.

Policy CO 3.1.3: On previously undeveloped sites ("greenfields"), identify biological resources and incorporate habitat preservation measures into the site plan, where appropriate. (This policy will generally not apply to urban infill sites, except as otherwise determined by the reviewing agency).

Policy CO 3.1.4: For new development on sites with degraded habitat, include habitat restoration measures as part of the project development plan, where appropriate.

Policy CO 3.1.5: Promote the use of site-appropriate native or adapted plant materials, and prohibit use of invasive or noxious plant species in landscape designs.

Policy CO 3.1.6: On development sites, preserve and enhance natural site elements including existing water bodies, soil conditions, ecosystems, trees, vegetation and habitat, to the extent feasible.

Policy CO 3.1.7: Limit the use of turf-grass on development sites and promote the use of native or adapted plantings to promote biodiversity and natural habitat.

Policy CO 3.1.8: On development sites, require tree planting to provide habitat and shade to reduce the heat island effect caused by pavement and buildings.

Policy CO 3.1.9: During construction, ensure preservation of habitat and trees designated to be protected through use of fencing and other means as appropriate, so as to prevent damage by grading, soil compaction, pollution, erosion or other adverse construction impacts.

Policy CO 3.1.10: To the extent feasible, encourage the use of open space to promote biodiversity.

Policy CO 3.1.11: Promote use of pervious materials or porous concrete on sidewalks to allow for planted area infiltration, allow oxygen to reach tree roots (preventing sidewalk lift-up from roots seeking oxygen), and mitigate tree-sidewalk conflicts, in order to maintain a healthy mature urban forest.

Objective CO 3.2: Identify and protect areas which have exceptional biological resource value due to a specific type of vegetation, habitat, ecosystem, or location.

Policy CO 3.2.1: Protect wetlands from development impacts, with the goal of achieving no net loss (or functional reduction) of jurisdictional wetlands within the planning area.

Policy CO 3.2.2: Ensure that development is located and designed to protect oak, and other significant indigenous woodlands.

Policy CO 3.2.3: Ensure protection of any endangered or threatened species or habitat, in conformance with State and federal laws.

Policy CO 3.2.4: Protect biological resources in the designated Significant Ecological Areas (SEAs) through the siting and design of development which is highly compatible with the SEA resources. Specific development standards shall be identified to control the types of land use, density, building location and size, roadways and other infrastructure, landscape, drainage, and other elements to assure the protection of the critical and important plant and animal habitats of each SEA. In general, the principle shall be to minimize the intrusion and impacts of development in these areas with sufficient controls to adequately protect the resources.

Objective CO 3.3: Protect significant wildlife corridors from encroachment by development that would hinder or obstruct wildlife movement.

Policy CO 3.3.1: Protect the banks and adjacent riparian habitat along the Santa Clara River and its tributaries, to provide wildlife corridors.

Policy CO 3.3.2: Cooperate with other responsible agencies to protect, enhance, and extend the Rim of the Valley trail system through Elsmere and Whitney Canyons, and other areas as appropriate, to provide both recreational trails and wildlife corridors linking the Santa Susana and San Gabriel Mountains.

Policy CO 3.3.3: Identify and protect one or more designated wildlife corridors linking the Los Padres and Angeles National Forests through the Santa Clarita Valley (the San Gabriel-Castaic connection).

Policy CO 3.3.4: Support the maintenance of Santa Clarita Woodlands Park, a critical component of a cross-mountain range wildlife habitat corridor linking the Santa Monica Mountains to the Angeles and Los Padres National Forests.

Policy CO 3.3.5: Encourage connection of natural open space areas in site design, to allow for wildlife movement.

Objective CO 3.5: Maintain, enhance, and manage the urban forest throughout developed portions of the Santa Clarita Valley to provide habitat, reduce energy consumption, and create a more livable environment.

Policy CO 3.5.1: Continue to plant and maintain trees on public lands and within the public right-of-way to provide shade and walkable streets, incorporating measures to ensure that roots have access to oxygen at tree maturity, such as use of porous concrete.

Policy CO 3.5.2: Where appropriate, promote planting of trees that are native or climactically appropriate to the surrounding environment, emphasizing oaks, sycamores, maple, walnut, and other native species in order to enhance habitat, and discouraging the use of introduced species such as eucalyptus, pepper trees, and palms except as ornamental landscape features.

Policy CO 3.5.3: Pursuant to the requirements of the zoning ordinance, protect heritage oak trees that, due to their size and condition, are deemed to have exceptional value to the community.

Municipal Code

The City established the City of Santa Clarita Municipal Code to provide organization for the classification and grouping of ordinances adopted by the City Council. The proposed project must comply with all applicable ordinances in the City's Municipal Code. The City's oak tree ordinance (Municipal Code Chapter 17.51, Section 17.51.040, Oak Tree Preservation) protects and preserves oak trees in the City. The ordinance protects oak trees in the genus *Quercus* that measure at least 6 inches or more in circumference when measured at a point 4.5 feet above the tree's natural grade, or, for those trees on properties occupied by a single-family residence, that exceed 12.5 inches in circumference when measured 4.5 feet above the tree's natural grade. A heritage tree is defined as any oak measuring 108 inches or more in circumference or, in the case of a multiple-trunk oak tree, two or more trunks measuring 72 inches each or greater in circumference, measured 4.5 feet above natural grade. Unless allowed by an Oak Tree Permit, no person shall cut, remove, or encroach into the protected zone or relocate a protected oak tree.

Per the oak tree ordinance, for mitigation of oaks due to removal and/or major encroachment of non-heritage oak trees on a property occupied by a single-family residence, any required tree replacements shall be based on a 6-inch increment as follows:

1. 8 inches to 12 inches = Two 24-inch box native oaks
2. 12 inches to 18 inches = Three 24-inch box native oaks
3. 18 inches to 24 inches = Four 24-inch box native oaks

4. 24 inches to 30 inches = Five 24-inch box native oaks
5. 30 inches to 36 inches = Six 24 inch box native oaks
6. One additional 24-inch box native oak per incremental increase of 6 inches

Replacement trees shall be planted on the same property from which they were removed unless there is no appropriate place for planting. If an appropriate on-site location for replanting does not exist, mitigation trees may be donated to the City following the replacement schedule above or their monetary value may be paid to the City to the satisfaction of the Director of Community Development.

4.3.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to biological resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to biological resources would occur if the project would:

1. 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 California Department of Fish and Game or U.S. Fish and Wildlife Service.
2. 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 California Department of Fish and Game or U.S. Fish and Wildlife Service.
3. 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.
4. 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.
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Additionally, the City's Local Guidelines include the following additional City-specific thresholds related to biological resources, in which a significant impact would occur due to (City of Santa Clarita 2005):

7. Removal of any heritage oak tree, as defined in Uniform Development Code §17.16.090, removal of more than five (5) oak trees for a project on a site that has an existing single-family residence, or the removal of more than three (3) oak trees, proposed as part of any other project.
8. Disturbance of, or encroachment into, any river, river tributary, riparian habitat, stream or similar waterway identified on a United States Geological Survey map as a "blue-line" watercourse, or any waterway otherwise identified as a significant resource by the City of Santa Clarita.
9. Disturbance of any habitat known or suspected to contain a plant or animal species listed as endangered on such Federal and/or State lists.

4.3.4 Impacts Analysis

Threshold BIO-1. ***Would the project 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Special-Status Plants

This evaluation of impacts to special-status plants considers those species that require mandatory special consideration and/or protection pursuant to the FESA, the CESA, and/or CEQA. CRPR 4 species are also considered if protected by local policy or if they meet criteria to be locally significant. The 11 federal- or state-listed plant species with low potential to occur at the project site were confirmed absent by the floristic surveys conducted in spring 2019. Furthermore, no CRPR 4 species at the site are protected by City policy or otherwise meet criteria to be considered locally significant. Therefore, impacts to special-status plants would be **less than significant**, and no mitigation is required.

Special-Status Wildlife

This assessment of impacts to special-status wildlife considers those species that are listed, proposed for listing, or that meet the criteria for listing as Endangered or Threatened under the FESA or CESA; and those with a designation of SSC or CFP, as mandatory special consideration and/or protection of these species is required pursuant to the federal Endangered Species Act, the state Endangered Species Act, and/or CEQA.

The coastal whiptail, which is a California SSC, was observed within the project grading footprint in June 2019. Observations of coastal whiptail made during the spring 2019 surveys are indicated on Figure 4 in Appendix D. An August 2017 survey also indicated the presence of San Diego desert woodrat, a California SSC, though biologists did not find any nests that conformed to that species in their survey in December 2018 or Spring 2019 (Appendix D). Vocalizations of least bittern, a California SSC, were also heard at a human-made pond at the project site in 2017.

Several other special-status wildlife species have potential to occur at the site. Most of the special-status wildlife species that may potentially occur at the site are capable of escaping harm during project development, including grading and construction, landscaping, or fuel modification, while others are potentially vulnerable to direct impacts, including injury and mortality. In this case, the special-status species that could be directly impacted include the California glossy snake (SSC), coastal whiptail (SSC), coast horned lizard (SSC), western spadefoot (SSC), two-striped gartersnake (SSC), San Diego black-tailed jackrabbit (SSC), San Diego desert woodrat (SSC), and a few species of special-status bats, which could potentially roost in tree cavities or in tree foliage at the site. Additionally, some potentially occurring special-status bird species could be impacted if nesting at the site.

Habitat loss associated with the project is not expected to significantly impact a population of a potentially occurring special-status wildlife species, given the relatively limited amount of habitat that would be lost and the relatively abundant amount of remaining suitable habitat in the surrounding area. However, the direct loss of or injury to a special-status wildlife species would be a **potentially significant impact**.

Nesting Birds

Ground- and vegetation-disturbing activities, if conducted during the nesting bird season (typically February 1 to August 31), would have the potential to result in removal of or disturbance to trees and shrubs that could contain active bird nests. In addition, these activities would also affect herbaceous vegetation that could support and conceal ground-nesting species. Project activities that result in the loss of bird nests, eggs, and young would be in violation of one or more of California Fish and Game Code Sections 3503 (any bird nest), 3503.5 (birds of prey), or 3511 (Fully Protected birds). In addition, removal or destruction of one or more active nests of any other birds listed by the federal MBTA, whether nest damage was due to vegetation removal or to other construction activities, would be considered a violation of the MBTA and California Fish and Game Code Section 3511. The loss of protected bird nests, eggs, or young due to project activities would be a **potentially significant impact**.

Threshold BIO-2. ***Would the project 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?***

The project includes approximately 39 acres of development with an additional 21 acres of potential impacts related to fuel modification. The primary vegetation communities impacted by the proposed project include mixed native and non-native grassland, chamise–California buckwheat scrub, California buckwheat–Great Basin sage scrub, California brittlebush scrub, and coast live oak woodland, as well as existing paved and barren areas. Permanent disturbances are assumed to be located within the proposed development footprint and fuel modification areas. The proposed project is shown overlaid on the site's biological resources on Figure 4 in Appendix D.

Four CDFW sensitive plant communities exist within the project site and would be impacted by the project: Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance. Proposed impacts to the sensitive plant communities located within the project site are listed in Table 4.3-3.

Table 4.3-3. Impacts to Sensitive Plant Communities and Land Covers

Habitat Class	Plant Community or Land Covers	Existing Acres	Project Impact Acres	
			Development Footprint	*Fuel Modification**
Woodland	*Fremont Cottonwood (*Populus fremontii*) Alliance	0.57	0.09	0.04
Scrub/ Shrubland	*California Brittlebush (*Encelia californica*) Scrub Alliance	3.82	2.68	1.14
	*California Brittlebush – California Sagebrush (*Encelia californica – Artemisia californica)* Scrub Association	0.47	0.47	0
Herbaceous	*Creeping Ryegrass (*Elymus triticoides*) Herbaceous Alliance	0.11	0.0	0.05
	Total Acreage	**4.97**	**3.24**	**1.23**

* Fuel modification impacts are based on the standard Los Angeles County Fire Department (LACFD) distances of 200 feet from structures and 10 feet from roadways.

Source: Appendix D.

As shown in Table 4.3-3, the project would have a **potentially significant impact** on riparian habitat or other sensitive natural communities.

Threshold BIO-3. ***Would the project 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?***

The project site contains waters of the United States, waters of the state, and riparian habitat that would be subject to ACOE, RWQCB, and CDFW jurisdiction under Section 404 and 401 of the Clean Water Act, the Porter-Cologne Water Quality Control Act, and California Fish and Game Code Section 1600. The project limits of disturbance are overlaid on potential jurisdictional areas on Figure 5 in Appendix D**.** The jurisdictional acreage within the features that would be impacted by the project is provided in Table 4.3-4.

Table 4.3-4. Permanent Impacts to Jurisdictional Areas

Feature	ACOE Wetland Waters of the United States (acres/ linear feet)	ACOE Non-Wetland Waters of the United States (acres/ linear feet)	RWQCB Waters of the State (acres/ linear feet)	CDFW Streambed and Riparian Habitat	
				Grading Impacts (acres/ linear feet)	*Fuel Modification Impacts (acres/ linear feet)*
Drainage 1 (DR1)	—	—	0.03/167	0.10/173	0.0007/8
Ditch 1 (DIT1)	—	—	—	—	0.02/69
Swale 1 (SW1)	—	—	0.002/37	0.002/37	0.09/144
Stream 1 (ST1)	0.03/181	0.20/462	0.28/462	0.28/462	—
Total	**0.03/181**	**0.20/462**	**0.23/666**	**0.38/672**	**0.11/221**

Source: Appendix D.
Note: ACOE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife.

Prior to issuance of the grading permit, the applicant shall consult with and prepare and submit a Preliminary Delineation Report for Waters of the United States to ACOE, a Preliminary Delineation Report for Waters of the State to RWQCB, and a Streambed Alteration Notification package to CDFW. If required by ACOE, a Clean Water Act Section 404 permit shall be obtained, and the applicant shall comply with the permit conditions. If required by CDFW, a Streambed Alteration Agreement shall be entered into with the CDFW under Section 1602 of the California Fish and Game Code, and the applicant shall comply with the associated conditions. If required by RWQCB, a Clean Water Act Section 401 Water Quality Certification shall be obtained from the RWQCB, and the applicant shall comply with the certification conditions. The applicant shall provide evidence to the City of Santa Clarita Planning Division that the required permits have been obtained prior to issuance of a grading permit. However, the project would have a **potentially significant impact** on affect protected wetlands.

Threshold BIO-4. *Would the project 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?*

The scrub and woodland communities within the project area provide coverage/foraging areas for local wildlife. A diversity of wildlife species could potentially move through the survey area, as it contains vegetative cover and suitable habitat for many species. Although wildlife may potentially move through the survey area, the habitats within the survey area are not of special or particular importance for wildlife movement at a local or regional scale. For example, the project site is not within an important bottleneck of habitat between larger areas of natural habitat and there are extensive natural habitats in the surrounding area that can be used by wildlife for movement through the surrounding area. For example, to the northeast of the project area is a protected SEA that connects the Santa Clara River SEA to the San Gabriel Mountains, a corridor that will not be impacted by this project. Also, the project site does not contain an important nursery site or other resources of special or particular importance to wildlife, and development of the project would not impede access to a nursery site or other important resources. Therefore, impacts to wildlife movement are considered to be **less than significant**.

Threshold BIO-5. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Based on the current site design, 21 oak trees would be removed to implement the project as currently designed, which would be significant under the City's oak tree ordinance (Municipal Code Section 17.51.040). The project would be subject to conditions imposed as part of the Oak Tree Permit per the oak tree ordinance (Municipal Code Section 17.51.040.B), including required mitigation for the 21 proposed removals. Conditions of the permit can include, but not are limited to, requiring the applicant to plant compensation trees on site or pay into the City's Oak Tree Fund the equivalent value of the trees to be removed as calculated by the International Society of Arboriculture standards. The remaining oak trees could be impacted by project construction, resulting in the loss of protected trees, which would result in a **potentially significant impact**.

Threshold BIO-6. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The survey area is located within the City of Santa Clarita and within the County of Los Angeles. The survey area does not occur within any local or regional Natural Community Conservation Plans or Habitat Conservation Plans. Additionally, the survey area does not occur within any local coastal plans or SEAs as defined and mapped by the County. Therefore, the project would result in **no impact** to any Natural Community Conservation Plans or Habitat Conservation Plans.

Threshold BIO-7. *Would the project result in the removal of any heritage oak trees, as defined in Unified Development Code §17.17.090, removal of more than five (5) oak trees from a project on a site that has an existing single-family residence, or the removal of more than three (3) oak trees?*

As discussed under Threshold BIO-5, based on the current site design, 21 oak trees would be removed to implement the project, which would be significant under the City's oak tree ordinance (Municipal Code Section 17.51.040). None of the oak trees to be removed are identified as heritage oak trees. The project would be subject to conditions imposed as part of the Oak Tree Permit per the oak tree ordinance (Municipal Code Section 17.51.040.B), including

required mitigation for the 21 proposed removals. Conditions of the permit can include, but not are limited to, requiring the applicant to plant compensation trees on site or pay into the City's Oak Tree Fund the equivalent value of the trees to be removed as calculated by the International Society of Arboriculture standards. The remaining oak trees could be impacted by project construction, resulting in the loss of protected trees, which would result in a **potentially significant impact**.

Threshold BIO-8. ***Would the project result in the disturbance of, or encroachment into, any river, river tributary, riparian habitat, stream or similar waterway identified on a United States Geological Survey map as a "blue-line" watercourse, or any waterway otherwise identified as a significant resource by the City of Santa Clarita?***

As discussed under Threshold BIO-3, the project site contains waters of the United States, waters of the state, and riparian habitat that would be subject to ACOE, RWQCB, and CDFW jurisdiction under Section 404 and 401 of the Clean Water Act, the Porter-Cologne Water Quality Control Act, and California Fish and Game Code Section 1600. The project limits of disturbance are overlaid on potential jurisdictional areas on Figure 5 in Appendix D. The jurisdictional acreage within the features that would be impacted by the project is provided in Table 4.3-4.

Prior to issuance of the grading permit, the applicant shall consult with and prepare and submit a Preliminary Delineation Report for Waters of the United States to ACOE, a Preliminary Delineation Report for Waters of the State to RWQCB, and a Streambed Alteration Notification package to CDFW. If required by ACOE, a Clean Water Act Section 404 permit shall be obtained, and the applicant shall comply with the permit conditions. If required by CDFW, a Streambed Alteration Agreement shall be entered into with the CDFW under Section 1602 of the California Fish and Game Code, and the applicant shall comply with the associated conditions. If required by RWQCB, a Clean Water Act Section 401 Water Quality Certification shall be obtained from the RWQCB, and the applicant shall comply with the certification conditions. The applicant shall provide evidence to the City of Santa Clarita Planning Division that the required permits have been obtained prior to issuance of a grading permit. However, the project would have a **potentially significant impact** on protected wetlands.

Threshold BIO-9. ***Would the project result in the disturbance of any habitat known or suspected to contain a plant or animal species listed as endangered on such Federal and/or State lists?***

As discussed under Threshold BIO-1, the following potential impacts could occur to either plant or animal species listed as endangered on a federal and/or state list.

Special-Status Plants

This evaluation of impacts to special-status plants considers those species that require mandatory special consideration and/or protection pursuant to the FESA, the CESA, and/or CEQA. CRPR 4 species are also considered if protected by local policy or if they meet criteria to be locally significant. The 11 federal- or state-listed plant species with low potential to occur at the project site were confirmed absent by the floristic surveys conducted in spring 2019. Furthermore, no CRPR 4 species at the site are protected by City policy or otherwise meet criteria to be considered locally significant. Therefore, impacts to special-status plants would be **less than significant**, and no mitigation is required.

Special-Status Wildlife

This assessment of impacts to special-status wildlife considers those species that are listed, proposed for listing, or that meet the criteria for listing as endangered or threatened under the FESA or CESA and those with a designation of SSC or CFP, as mandatory special consideration and/or protection of these species is required pursuant to the FESA, the CESA, and/or CEQA.

The coastal whiptail, which is a California SSC, was observed within the project grading footprint in June 2019. Observations of coastal whiptail made during the spring 2019 surveys are indicated on Figure 4 in Appendix D. An August 2017 survey also indicated the presence of San Diego desert woodrat, a California SSC, though biologists did not find any nests that conformed to that species in their survey in December 2018 or spring 2019 (Appendix D). Vocalizations of least bittern, a California SSC, were also heard at a human-made pond at the project site in 2017.

Several other special-status wildlife species are potentially occurring at the site. Most of the special-status wildlife species that may potentially occur at the site are capable of escaping harm during project development, including grading and construction, landscaping, or fuel modification, while others are potentially vulnerable to direct impacts, including injury and mortality. In this case, the special-status species that could be directly impacted include the California glossy snake (SSC), coastal whiptail (SSC), coast horned lizard (SSC), western spadefoot (SSC), two-striped gartersnake (SSC), San Diego black-tailed jackrabbit (SSC), San Diego desert woodrat (SSC), and a few species of special-status bats, which could potentially roost in tree cavities or in tree foliage at the site. Additionally, some potentially occurring special-status bird species could be impacted if nesting at the site.

Habitat loss associated with the project is not expected to significantly impact a population of a potentially occurring special-status wildlife species, given the relatively limited amount of habitat that would be lost and the relatively abundant amount of remaining suitable habitat in the surrounding area. However, the direct loss of or injury to a special-status wildlife species would be a **potentially significant impact**.

Nesting Birds

Ground- and vegetation-disturbing activities, if conducted during the nesting bird season (typically February 1 to August 31), would have the potential to result in removal of or disturbance to trees and shrubs that could contain active bird nests. In addition, these activities would also affect herbaceous vegetation that could support and conceal ground-nesting species. Project activities that result in the loss of bird nests, eggs, and young would be in violation of one or more of California Fish and Game Code Sections 3503 (any bird nest), 3503.5 (birds of prey), or 3511 (Fully Protected birds). In addition, removal or destruction of one or more active nests of any other birds listed by the federal MBTA, whether nest damage was due to vegetation removal or to other construction activities, would be considered a violation of the MBTA and California Fish and Game Code Section 3511. The loss of protected bird nests, eggs, or young due to project activities would be a **potentially significant impact**.

4.3.5 Mitigation Measures

The following mitigation measures (MMs) shall be implemented during and prior to project construction in order to reduce potential project-related impacts to biological resources to a less-than-significant level.

MM-BIO-1 **Special-Status Wildlife**. Beginning no more than 2 weeks prior and ending no more than 3 days prior to ground-disturbing construction at the project site, pre-construction surveys for the California glossy snake, coastal whiptail, coast horned lizard, western spadefoot, two-striped gartersnake, San Diego

black-tailed jackrabbit, roosting special-status bats, and San Diego desert woodrat, as well as any other potentially occurring special-status species, shall be conducted by a qualified biologist and submitted to the City of Santa Clarita Planning Division prior to commencement of any ground or vegetation disturbance. The pre-construction surveys shall incorporate appropriate methods and timing to detect the special-status wildlife species that could potentially occur at the site, as well as appropriate methods to identify and relocate potentially occurring San Diego desert woodrats and their nest materials, if this species is determined to be present.

If a special-status species is found, project activities shall avoid disturbing the special-status species. If avoidance is not feasible, these species shall be captured, when possible, and transferred to adjacent appropriate habitat and location where they would not be harmed by project activities, preferably within the open space areas either on site or directly adjacent to the project area. Only a California Department of Fish and Wildlife (CDFW) approved biologist shall perform this. The CDFW and the City of Santa Clarita Planning Division shall be formally notified and consulted regarding the presence of these species on site. If a federally listed species is found prior to grading of the site, the U.S. Fish and Wildlife Service shall also be notified. A letter report summarizing the methods and results of the surveys and relocation efforts, if applicable, shall be submitted to the City of Santa Clarita and CDFW prior to commencement of project activities.

MM-BIO-2 **Nesting Birds**. Project activities, including but not limited to site preparation, construction, or fuel modification activities, with potential to disturb suitable bird-nesting habitat shall be prohibited within the breeding/nesting season for native bird species (typically February 1 through August 31). If the breeding/nesting season cannot be avoided, then no earlier than 7 days prior to ground- or vegetation-disturbing activities that would occur during the nesting/breeding season of native bird species potentially nesting on the site, a qualified biologist shall perform two field surveys to determine if active nests of any bird species protected by the state or federal Endangered Species Acts, Migratory Bird Treaty Act, and/or the California Fish and Game Code Sections 3503, 3503.5, or 3511 are present in the disturbance zone, within 300 feet of the disturbance zone for songbirds, or within 500 feet of the disturbance zone for raptors and special-status bird species.

The second nesting bird survey shall be conducted within 3 days of the start of ground- or vegetation-disturbing activities. A letter report summarizing the methods and results of the surveys shall be submitted to the City of Santa Clarita Planning Division and the California Department of Fish and Wildlife prior to commencement of project activities. In the event an active nest is found within the survey area, site preparation, construction, and fuel modification activities shall stop until the biologist can establish an appropriate setback buffer around the nest. Buffer size will be determined on a case-by-case basis by the biologist based on site conditions, the species' life history and disturbance tolerance, the nest's distance to construction activities, and the type of construction ongoing in the vicinity of the nest. Buffers will be clearly delineated (e.g., using rope, flagging, signage), or they may also be defined by natural or constructed features that are deemed sufficient to prohibit access (e.g., tree rows, fences). Project activities within the buffer shall be postponed or halted, at the discretion of the biologist, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting.

MM-BIO-3 **Sensitive Plant Communities**. Grading and fuel modification impacts to the Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance plant communities

shall be mitigated at a 2:1 ratio in an area to be preserved as permanent open space. Compensatory mitigation shall be accomplished by one or a combination of the following methods and shall be based on the following preference hierarchy:

1. Mitigation bank credits
2. Contribution to an in-lieu fee program
3. On-site restoration of in-kind habitat
4. Off-site restoration of in-kind habitat

The mitigation method(s) shall be approved by the City of Santa Clarita Planning Division and the California Department of Fish and Wildlife (CDFW) (if applicable).

Prior to issuance of a grading permit for the project, the limits of fuel modification shall be mapped and a qualified biologist shall determine the final acreage of fuel modification impacts to the Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance plant communities.

If impacts to the Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance plant communities are to be mitigated by mitigation bank credits or by contribution of an in-lieu fee, the applicant shall provide evidence of purchase of mitigation bank credits or payment of the in-lieu fee prior to issuance of the first grading permit for the project. The in-lieu fee shall be based on the cost per acre to restore or create in-kind habitat and the acreage of the plant community impacted. In-lieu fees shall be used for the restoration of in-kind habitat.

If compensatory mitigation is to be accomplished by on-site or off-site restoration, a Mitigation and Monitoring Plan shall be developed by a qualified biologist, restoration ecologist, or resource specialist, and approved by the City of Santa Clarita Planning Division and CDFW (if applicable) prior to issuance of the grading permit for the project. The plan shall at a minimum include the following:

- Description of the project/impact and mitigation sites
- Specific objectives
- Success criteria
- Plant palettes
- Implementation plan
- Maintenance activities
- Monitoring plan
- Contingency measures

Off-site restoration shall be in the vicinity of the project site, or if off-site restoration in the vicinity of the project site is infeasible, off-site restoration shall be conducted within the same watershed. Restoration should be implemented only where suitable conditions exist to support viable in-kind habitats. Disturbed habitats within the Santa Clara River Significant Ecological Area immediately

adjacent to the northeastern portion of the subject property may provide a suitable opportunity for off-site restoration that is proximal to the impacted areas and within the same watershed.

The plant palettes shall include dominant species for each community (Fremont cottonwood, California brittlebush, California sagebrush, and creeping wildrye) as well as a diversity of appropriate native species that occur within these plant communities at the site.

Success criteria shall at a minimum be evaluated based on percent cover of planted native species, as well as control of invasive plant species within the restoration area.

The performance standards for the Mitigation and Monitoring Plan shall be at a minimum the following:

- Within 5 years of the introduction of the native plants to the mitigation site, the acreage of restored plant communities shall be no less than two times the acreage lost to project construction.
- Within 5 years of the introduction of the native plants to the mitigation site, the absolute cover of native species shall be no less than 80% within the restoration area.
- Non-native species in the treated area shall be less than 15% relative cover by the end of the third year of treatment and less than 5% relative cover by the end of the fifth year of treatment.
- Restoration will be considered successful after the success criteria have been met for a period of at least 2 years without any maintenance or remediation activities other than invasive species control.

Prior to issuance of a grading permit, the applicant shall secure a bond for an amount equal to the cost of the restoration effort. The bond shall be released by the City of Santa Clarita Planning Division upon satisfaction of the approved performance criteria.

The restoration project shall be initiated prior to issuance of the first grading permit for the project, and shall be implemented over a 5-year period. The restoration project shall incorporate an iterative process of annual monitoring and evaluation of progress, and allow for adjustments to the restoration plan, as necessary, to achieve desired outcomes and meet success criteria. Annual reports discussing the implementation, monitoring, and management of the restoration project shall be submitted to City of Santa Clarita Planning Division and CDFW (if applicable). Five years after project start, a final report shall be submitted to the City of Santa Clarita Planning Division and CDFW (if applicable), which shall at a minimum discuss the implementation, monitoring, and management of the restoration project over the 5-year period, and indicate whether the restoration project has been successful based on established success criteria. The annual reports and the final report shall include as-built plans submitted as an appendix to the report. The project shall be extended if success criteria have not been met at the end of the 5-year period to the satisfaction of the City of Santa Clarita Planning Division and CDFW (if applicable).

If restoration cannot be achieved, compensation for the loss or modification of Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance shall be accomplished by on-site preservation of an in-kind habitat at a 3:1 ratio in an area to be preserved as permanent open space, subject to approval by City of Santa Clarita Planning Division and CDFW (if applicable).

To the extent possible, preservation shall be accomplished on site, or if on-site preservation is not feasible, at a location within the same watershed.

MM-BIO-4 **Habitat Mitigation and Monitoring Plan**. The applicant shall compensate for the loss of 0.20 acres (462 linear feet) of non-wetland waters of the United States, 0.03 acres (181 linear feet) of wetland waters of the United States, 0.49 acres (893 linear feet) of California Department of Fish and Wildlife jurisdictional riparian habitat, and 0.23 acres (666 linear feet) of Regional Water Quality Control Board waters of the state at a 2:1 ratio (compensation area: impact area), or as required by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife. The same or similar habitat shall be restored as close to the impact area as possible. If a location in the general area of the project is not feasible, as determined by the Director of Community Development of the City of Santa Clarita (City), then the applicant shall restore another appropriate area within the City limits as close to the impacted area as possible. If a location in the City is determined infeasible, mitigation shall occur elsewhere in the watershed but as close to the project site as possible, or an in-lieu fee to compensate for the loss of habitat may be provided to a qualified agency or other entity acceptable to the City and the regulatory agencies, as applicable. The appropriate in-lieu fee would be determined by the applicant and receiving entity/agency, as approved by the City of Santa Clarita Planning Division.

The mitigation program or in-lieu fee contribution shall be initiated prior to development of the project, and shall be implemented over a 5-year period. A mitigation plan and monitoring program shall be prepared and submitted to the City of Santa Clarita Planning Division and other regulatory agencies, as applicable, for acceptance prior to issuance of a Grading Permit or Building Permit or the start of construction of the project, whichever is sooner. The mitigation plan and monitoring program shall outline methods of mitigation; planting sizes, quantities, and receiver sites; and performance standards, including maintenance and monitoring (with periodic status reports and documentation). Success criteria shall at a minimum be evaluated based on appropriate survival rates and percent cover of planted native species, which shall be determined by examining reference sites, as well as eradication and control of invasive species within the mitigation area.

In the case of in-lieu fees, evidence of payment of such fees shall be provided to the City of Santa Clarita Planning Division and other regulatory agencies, as applicable, prior to issuance of a Grading Permit, a Building Permit, or prior to start of construction of the project, whichever occurs first.

MM-BIO-5 **Protection Zone Fence Installation**. To protect trees within the vicinity of major construction, trees should be temporarily fenced at the edge of the protected zone prior to the beginning of construction operations on the project site. The protected zone is an area surrounding a tree, defined within the City of Santa Clarita (City) oak tree ordinance. It includes all area within the dripline of the tree, plus 5 feet beyond the dripline. This distance must be no less than 15 feet from the trunk. The fence should be constructed of chain-link material and be a minimum of 5 feet in height. The project arborist will develop a fencing plan that will be approved by the City prior to fence installation. The fence will be removed at the completion of the construction upon approval by the City.

4.3.6 Level of Significance After Mitigation

Threshold BIO-1. ***Would the project 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Special-Status Wildlife

MM-BIO-1 requires that pre-construction surveys for the California glossy snake, coastal whiptail, coast horned lizard, western spadefoot, two-striped gartersnake, San Diego black-tailed jackrabbit, roosting special-status bats, and San Diego desert woodrat, as well as any other potentially occurring special-status species, be conducted prior to commencement of any ground or vegetation disturbance. As such, potentially significant impacts to special-status wildlife species would be reduced to a **less-than-significant level with implementation of mitigation**.

Nesting Birds

MM-BIO-2 requires limiting site preparation, construction, or fuel modification activities within the breeding/nesting season for native bird species (typically February 1 through August 31). Further, it requires that if activities must occur within the breeding/nesting season, 7 days prior to ground- or vegetation-disturbing activities, two field surveys shall be conducted to confirm the presence/absence of breeding/nesting birds. As such, potentially significant impacts to nesting birds would be reduced to **less than significant with implementation of mitigation**.

Threshold BIO-2. ***Would the project 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?***

MM-BIO-3 requires compensatory mitigation for impacts to riparian habitat. As such, potentially significant impacts to riparian habitat would be reduced to **less than significant with implementation of mitigation**.

Threshold BIO-3. ***Would the project 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?***

MM BIO-4 requires compensation for the loss of 0.20 acres (462 linear feet) of non-wetland waters of the United States, 0.03 acres (181 linear feet) of wetland waters of the United States, 0.49 acres (893 linear feet) of CDFW jurisdictional riparian habitat, and 0.23 acres (666 linear feet) of RWQCB waters of the state at a 2:1 ratio (compensation area: impact area), or as required by the ACOE, RWQCB and CDFW. As such, potentially significant impacts would be reduced to **less than significant with mitigation incorporated**.

Threshold BIO-5. ***Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

MM-BIO-5 requires installation of a protection zone fence around oak woodlands not being removed as part of the project. Therefore, potentially significant impacts would be reduced to **less than significant with mitigation incorporated**.

Threshold BIO-7. *Would the project result in the removal of any heritage oak trees, as defined in Unified Development Code §17.17.090, removal of more than five (5) oak trees from a project on a site that has an existing single-family residence, or the removal of more than three (3) oak trees?*

MM-BIO-5 requires installation of a protection zone fence around oak woodlands not being removed as part of the project. Therefore, potentially significant impacts to oak trees would be reduced to **less than significant with mitigation incorporated**.

Threshold BIO-8. *Would the project result in the disturbance of, or encroachment into, any river, river tributary, riparian habitat, stream or similar waterway identified on a United States Geological Survey map as a "blue-line" watercourse, or any waterway otherwise identified as a significant resource by the City of Santa Clarita?*

MM-BIO-4 requires compensation for the loss of 0.20 acres (462 linear feet) of non-wetland waters of the United States, 0.03 acres (181 linear feet) of wetland waters of the United States, 0.49 acres (893 linear feet) of CDFW jurisdictional riparian habitat, and 0.23 acres (666 linear feet) of RWQCB waters of the state at a 2:1 ratio (compensation area: impact area), or as required by the ACOE, RWQCB and CDFW. As such, potentially significant impacts would be reduced to **less than significant with mitigation incorporated**.

Threshold BIO-9. *Would the project result in the disturbance of any habitat known or suspected to contain a plant or animal species listed as endangered on such Federal and/or State lists?*

Special-Status Wildlife

MM-BIO-1 requires that pre-construction surveys for the California glossy snake, coastal whiptail, coast horned lizard, western spadefoot, two-striped gartersnake, San Diego black-tailed jackrabbit, roosting special-status bats, and San Diego desert woodrat, as well as any other potentially occurring special-status species be conducted prior to commencement of any ground or vegetation disturbance. As such, potentially significant impacts to special-status wildlife species would be reduced to a **less-than-significant level with implementation of mitigation**.

Nesting Birds

MM-BIO-2 requires limiting site preparation, construction, or fuel modification activities within the breeding/nesting season for native bird species (typically February 1 through August 31). Further, it requires that if activities must occur within the breeding/nesting season, 7 days prior to ground- or vegetation-disturbing activities, two field surveys shall be conducted to confirm the presence/absence of breeding/nesting birds. As such, potentially significant impacts to nesting birds would be reduced to **less-than-significant levels with mitigation incorporated**.

4.3.7 References Cited

16 USC 703–712. Migratory Bird Treaty Act, as amended.

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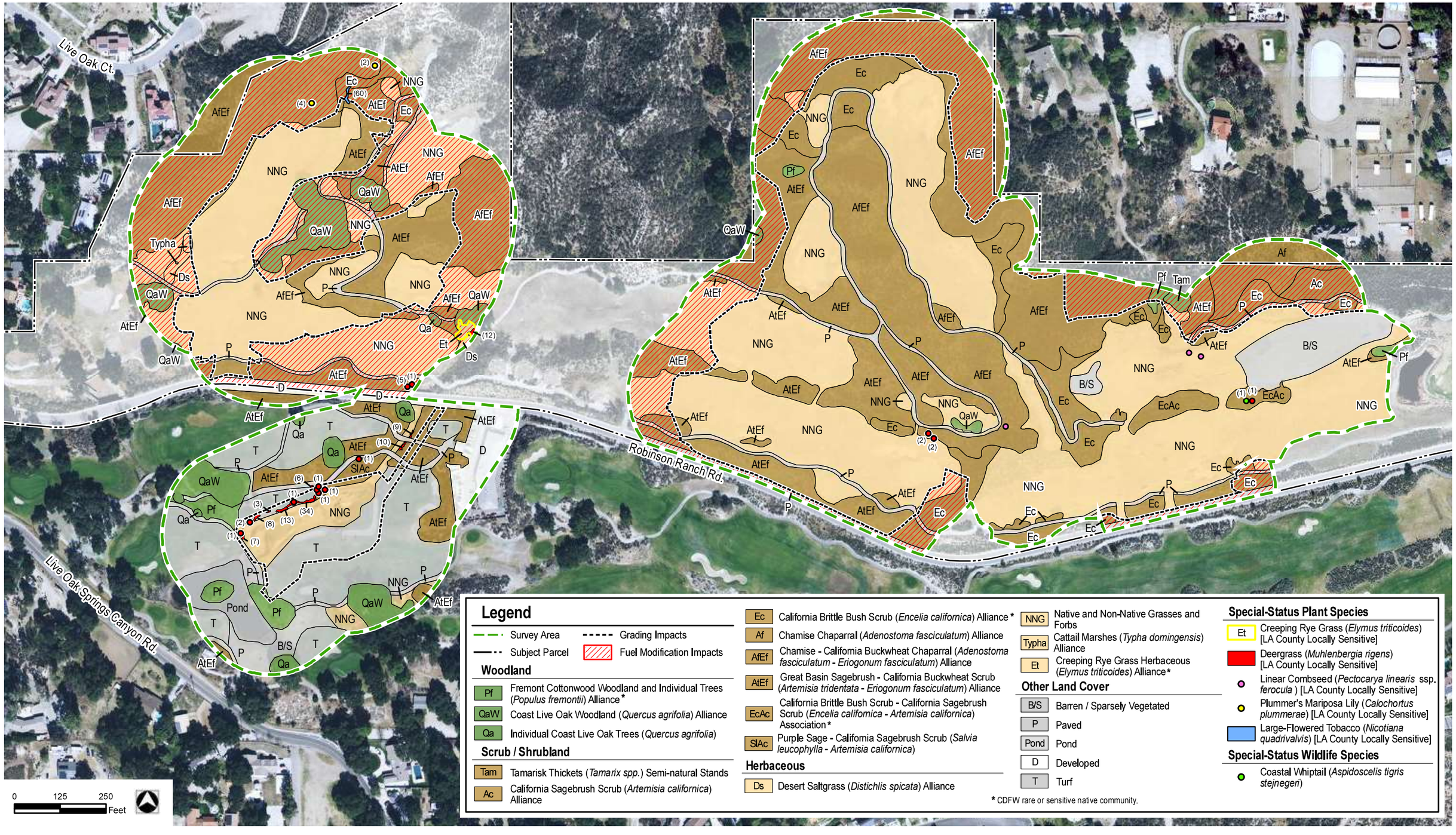
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SOURCE: Envicom 2020

FIGURE 4.3-1

Biological Resources Map

Sand Canyon Resort Project

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