

6.3 BIOLOGICAL RESOURCES

This section describes the existing biological resources (including potentially jurisdictional waters and riparian habitat) on the project site and in the vicinity, potential environmental impacts, recommended mitigation measures to reduce potentially significant impacts to biological resources, and determination of the level of significance of those impacts after mitigation.

The project description is provided in Section 4.0 (Project Description) of the Draft Environmental Impact Report (DEIR). Variation 1 involves filling an existing landfilled area higher. Variation 2 involves filling an existing landfilled area higher and extending the footprint of refuse placement northward as shown in Figure 6.3-1. The extension of the footprint will require excavation of a native hill including removal of 6.7 acres of native habitat. The remainder of the extension will require disturbance to areas already disturbed by existing landfill operations. Common features to both projects include incremental construction of the landfill gas collection system and the surface water drainage system and a one-time reconstruction of an existing debris basin. With the exception of the 6.7 acres of new disturbance on Variation 2, all of this work would be completed in areas previously disturbed by existing landfill operations. The existing limit of operations is also shown in Figure 6.3-1 and represents the existing limit of ground disturbance.

A reconnaissance survey for biological resources was completed for the new area of disturbance and the surrounding area. The results of this survey are described in Section 6.3.1.2. This reconnaissance survey and vegetation mapping area is referred to as the biological resources study area (study area), which is shown in Figure 6.3-2. For simplicity, vegetation mapping outside the proposed limit of operations (disturbance) is not shown. The analysis in this section was supported by data collection of plant species and plant communities, sensitive plant species and plant communities, and sensitive wildlife species. This data collection is included as Appendix G of the DEIR.

6.3.1 EXISTING CONDITIONS

6.3.1.1 Regulatory Setting

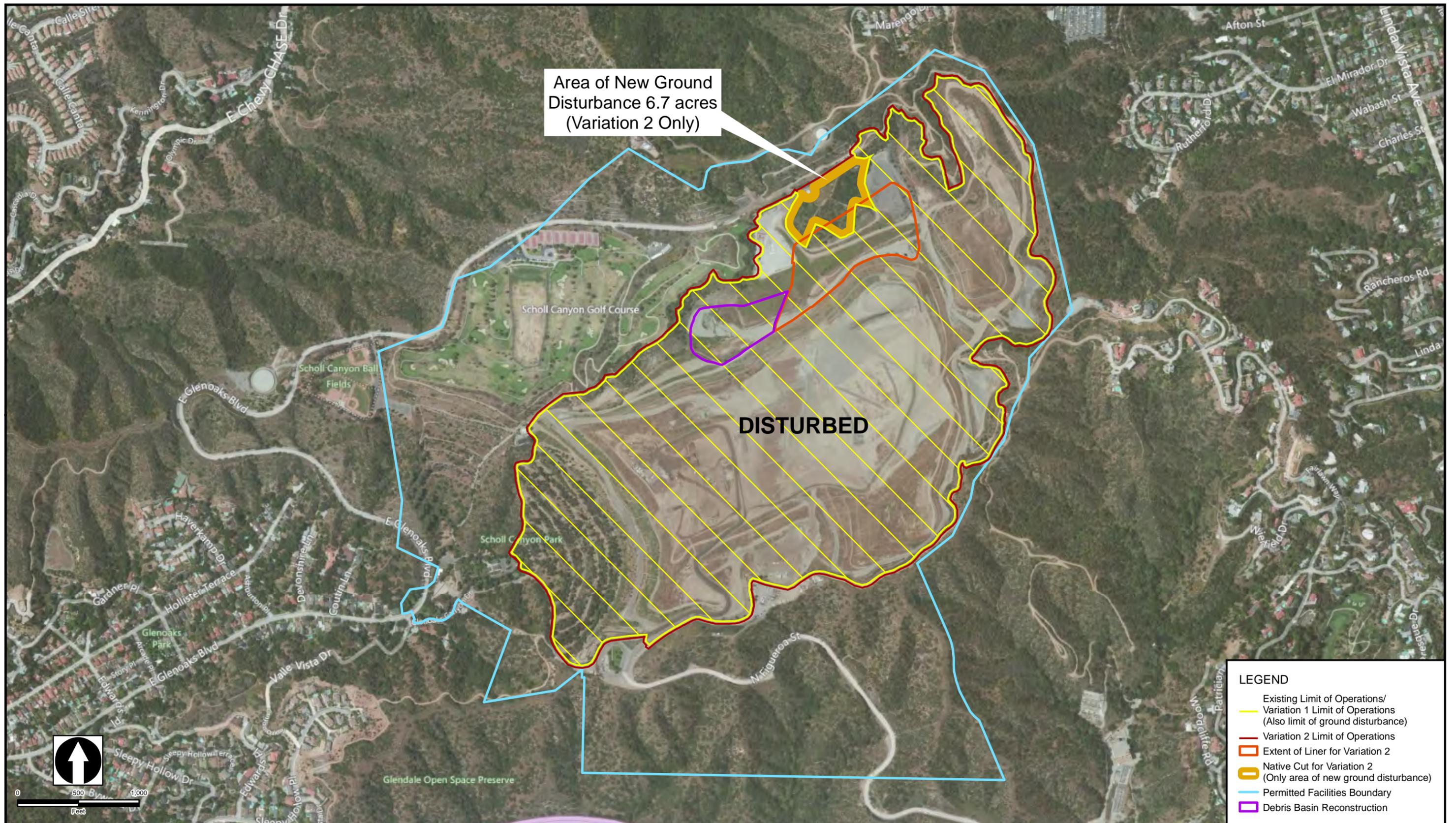
The following section discusses the federal and state laws and regulations, and other regulatory ordinances, laws, and regulations that are applicable to the Scholl Canyon Landfill Expansion (proposed project).

Federal Laws and Regulations

Federal Endangered Species Act (16 U.S.C. 1531–1543)

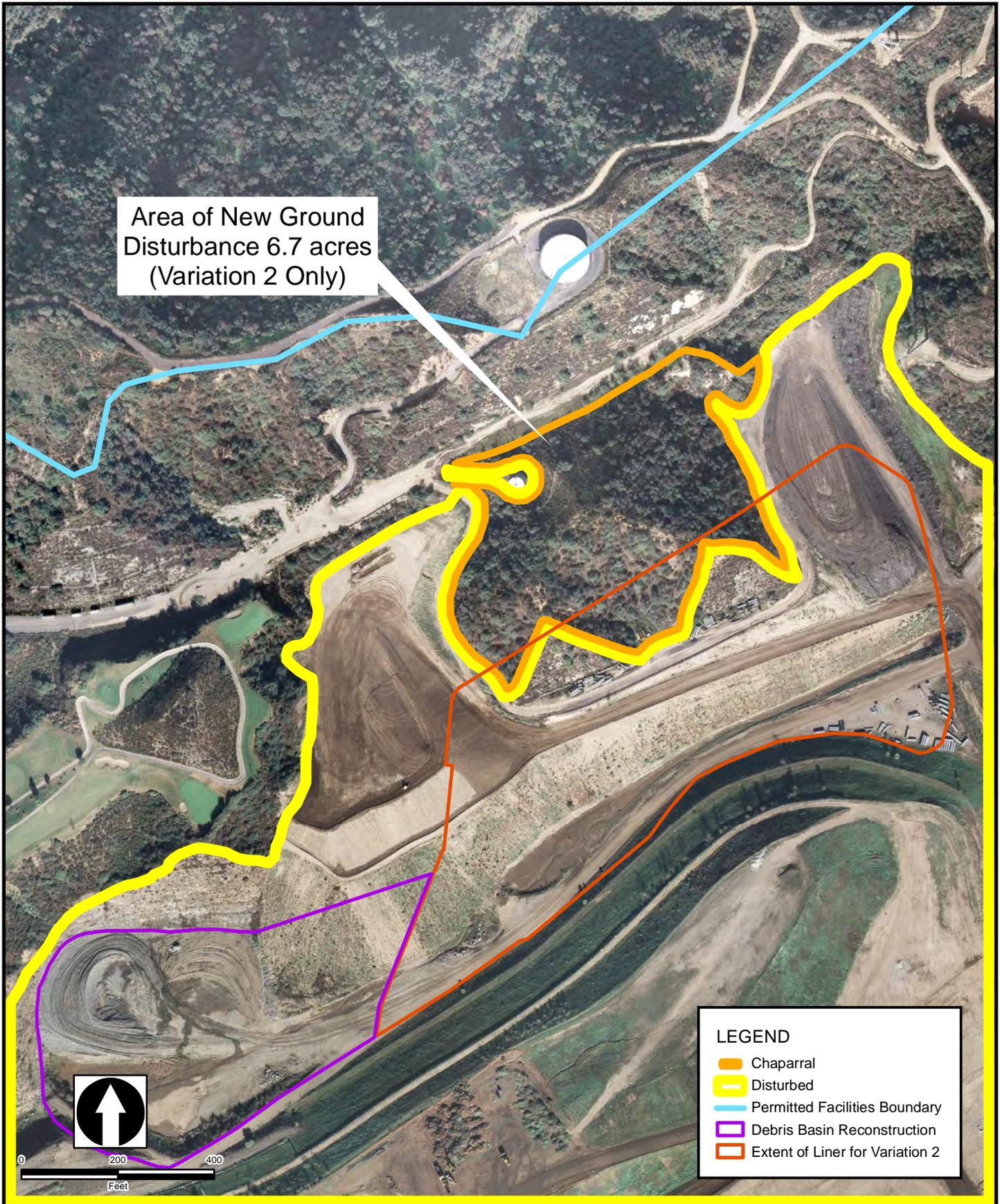
The United States Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries oversee the Federal Endangered Species Act (FESA). The USFWS has jurisdiction over plants, wildlife, and resident fish; NOAA Fisheries has jurisdiction over anadromous fish¹, marine fish, and marine mammals.

¹ Anadromous fish are fish that return to their spawning rivers from the sea or ocean at certain seasons for breeding in fresh water.



Source: Sanitation Districts of Los Angeles County

Figure 6.3-1
Extent of Proposed Expansion Variations
Scholl Canyon Landfill Expansion EIR



Source: Sanitation Districts of Los Angeles County
Aerial: Jan 11-12, 2006

Figure 6.3-2
Vegetation Communities Within Study Area
Scholl Canyon Landfill Expansion EIR

A federally endangered species is a species of invertebrate, plant, or wildlife formally listed under the FESA as facing extinction throughout all or a significant portion of its geographic range. A federally threatened species is one formally listed by the USFWS as likely to become endangered within the foreseeable future throughout all or a significant portion of its range. A proposed threatened or endangered species is one officially proposed by the USFWS for addition to the federal threatened or endangered species lists. Candidate species and species that are proposed for listing receive no protection under the FESA.

Section 7 of the FESA mandates that all federal agencies consult with the USFWS and/or NOAA Fisheries to ensure that federal agencies' actions do not jeopardize the continued existence of a listed species or adversely modify critical habitat for listed species. If there will be direct, indirect, or both, alterations to critical habitat that appreciably diminishes the value of critical habitat for both the survival and recovery of a species, the adverse modification will require a formal consultation with the USFWS or NOAA.

Migratory Bird Treaty Act (16 U.S.C. 703-11)

The Migratory Bird Treaty Act (MBTA) of 1918 states that it is unlawful to pursue, hunt, take, capture, transport, import, or kill any migratory bird.

Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c)

This act makes it illegal to import, export, take (which includes molest or disturb), sell, purchase, or barter any bald eagle or golden eagle or part thereof.

Federal Regulation of Waters of the United States, Including Wetlands (Clean Water Act Sections 404 and 401) (33 U.S.C. 1251-1376)

The United States Army Corps of Engineers (Corps) and the Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into "Waters of the United States (WoUS)," including wetlands, under Section 404 of the Clean Water Act (CWA). Corps-jurisdictional WoUS are defined in the field using standard methodology including: Corps Wetland Delineation Manual (Environmental Laboratory 1987); Corps Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0; Corps 2008a); A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar and McColley 2008); and North American Digital Flora: National Wetland Plant List, version 1.2 (Lichvar and Kartesz 2009).

Section 401 of the CWA requires the issuance of a water quality certification or waiver for all Section 404 nationwide or individual permits issued by the Corps. The EPA has deferred water quality certification authority to the State Water Resources Control Board (SWRCB), which in turn delegates this function to the Regional Water Quality Control Boards (RWQCB). Certifications for projects that overlay more than one region are typically processed by the SWRCB.

Use of the terms WoUS, wetland, and riparian may lead to confusion unless explicitly defined. Within this section, the following definitions apply:

- Aquatic Resource – A general reference to various water-oriented habitats such as rivers, streams, creeks, ponds, and lakes. These resources may be perennial, intermittent, or ephemeral in nature, and may or may not support hydrophytic (i.e., water-loving) plants (also referred to as riparian

vegetation). Aquatic resources may or may not be jurisdictional to the Corps or California Department of Fish and Wildlife (CDFW). The term drainage is used to refer to linear aquatic resources in a general sense, and does not necessarily imply that the feature is in fact jurisdictional. These resources may be classified per several methods; one example is the Cowardin classification (Cowardin et al. 1979).

- Jurisdictional Resource – This term is equivalent to either Corps, CDFW, RWQCB or another agency’s jurisdiction as defined by a wetland delineation/jurisdictional determination (JD) report.
- WoUS – Refers to federally regulated rivers, creeks, streams and lakes, delineated by an OHWM, and extending upstream to the headwaters. The OHWM is defined as the “line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.” WoUS also includes adjacent wetlands (see 33 Code of Federal Regulations [CFR] 328.3(b); 40 CFR 230.3(s) Clean Water Act [CWA] Section 404).
- Wetland – Refers to the federal definition and requires three parameters be present: hydrologic indicators, hydric soil indicators, and the predominance of hydrophytic vegetation (Environmental Laboratory 1987, Reed 1988; Corps 2008a). Wetlands are a subset of WoUS, and are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” Wetlands in a may be regulated by both the Corps and CDFW. Isolated, non-streambed wetlands are typically not regulated by CDFW. Wetlands are also referred to as “special aquatic sites”- rare and/or unique habitats inclusive of wetlands, mudflats, pool and riffle areas, vegetated shallows, and sanctuaries/refuges (as defined in 40 CFR 230.40-45).

State Laws and Regulations

California Endangered Species Act (CFGC 2050 et seq.)

The California Endangered Species Act (CESA) prohibits the take of state-listed endangered and threatened species. However, unlike the federal definition, habitat destruction or modification is not included in the state’s definition of take.

CESA considers an endangered species one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is one present in such small numbers throughout its range that it is considered likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one present in such small numbers throughout its range that it may become endangered if its present environment worsens. The designation rare species applies only to California native plants. State threatened and endangered species include both plants and wildlife, not invertebrates, and are legally protected against take as defined in CESA (California Fish & Game Code [CFGC] Section 2050 et seq.).

California Species of Special Concern (SSC) is an informal designation used by the CDFW for specific declining fish, amphibian, reptile, bird, and mammal species that are not listed as endangered, threatened, or rare under CESA.

In regards to listed rare and endangered plant species, CESA defers to the California Native Plant Protection Act (NPPA) of 1977. In this case, plants listed as rare or endangered under the NPPA are not protected under CESA, but can be protected under the California Environmental Quality Act (CEQA). In addition, plants that are not state listed but meet the state standards for listing, are also protected under CEQA (Guidelines, Section 15380). In practice, this is generally interpreted to mean that all species on lists 1B and 2 of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2010) qualify for protection under CEQA; species of plants listed on list 3 and 4 are not typically given the same protection, and they are not included in this section.

The CNPS Inventory of Rare and Endangered Species include the following lists:

- List 1A – Presumed extinct because they have not been seen or collected in the wild or plants which are presumed extirpated (local extinction, but still may occur elsewhere within its range) in California.
- List 1B – Rare throughout their range with the majority of them endemic to California.
- List 2 – Rare, threatened, or endangered in California, but more common in other states.
- List 3 – Plant species for which additional information is needed before rarity can be determined.
- List 4 – Species of limited distribution or infrequent throughout a broader area in California and while CNPS cannot call these plant species “rare” from a statewide perspective, they are uncommon enough that their status should be monitored regularly.

California Fish and Game Code (CFGC)

CDFW regulates activities that would interfere with the natural flow of, or substantially alter, the channel, bed, or bank of a lake, river, or stream. Section 1602 of the CFGC requires notification of the CDFW for lake or stream alteration activities. If, after notification is complete, the CDFW determines that the activity may substantially adversely affect an existing fish and wildlife resource, the CDFW has authority to issue a streambed alteration agreement under Section 1603 of the CFGC.

Use of the terms streambed and riparian may lead to confusion unless explicitly defined. Within this section, the following definitions apply:

- Riparian – Term used for areas within and adjacent to rivers, streams, and creeks that support plant species adapted to (or can tolerate) occasional or permanent flooding and/or saturated soils.
- Riparian Habitat – In a general sense, riparian habitat (i.e., habitat within a riparian setting) may be used to describe vegetation growing around seasonal wet areas, such as temporary, basin-like features or areas of groundwater seepage. Use of the term riparian does not necessarily imply jurisdiction per the Clean Water Act, State Water Code, or Fish and Game Code. Yet, riparian habitat may include areas within the jurisdiction of both the Corps and CDFW. Riparian habitat may contain three-parameter wetlands (per the federal definition), but often does not. Typically, Corps jurisdiction is much less than that of CDFW jurisdiction, and the lateral extent varies according to watershed position, water availability, and other factors. Unique attributes include hydrologic interaction (both laterally and longitudinally) and distinct geomorphic features (bankfull channel, floodplain, terrace).

- The term Riparian Area may also be used in a more generic sense to mean a riparian corridor along a drainage, or isolated riparian vegetation with a particular area.
- Streambeds – This term refers to the bed, bank, and channel geomorphic features associated with streams (in other words, the land beneath a stream). A streambed may include all or a portion of the riparian zone. The lateral extent of streambeds may reach beyond the OHWM (the extent of Corps jurisdiction), and extend laterally beneath the banks where subsurface hydrologic connectivity exists between the stream and the surrounding land. CDFW jurisdiction extends from top-of-bank to top-of-bank.

California Water Code

The RWQCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Act (Porter-Cologne). These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of storm water runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

Under Porter-Cologne, the RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, with any region that could affect the water of the state” (Water Code 13260(a)). Waters of the state are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code 13050 (e)). The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State, that are not regulated by the Corps due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of a Waste Discharge Requirements (WDR) for these activities.

Use of the terms Waters of the State may lead to confusion unless explicitly defined. Within this section, the following definitions apply:

- Waters of the State – Applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes within the state of California, including wetland and/or riparian vegetation and fish and wildlife resources. As defined in the State’s Porter-Cologne Water Quality Control Act (revised in 2004), Waters of the State refers to any surface water or groundwater, including saline waters, within the boundaries of the State of California. This designation includes isolated, depressional wetlands, and vernal pools. Waters of the State are regulated by the SWRCB and RWQCBs.

Other Laws, Regulations, and Policies

Local Ordinances and Requirements

Los Angeles County General Plan

The Los Angeles County General Plan (2008) identifies Significant Ecological Areas (SEAs) containing biological resources and sets forth the goal of conserving these areas. While development within an SEA is not prohibited, the General Plan does require development to be limited and controlled in order to avoid impacting valuable biological resources. The two SEAs nearest to the SCLF are SEA-37 Griffith Park and SEA-40 Verdugo Mountains.

Other relevant policies relate to:

- Participation in collaborative strategies for protecting biological resources.
- Protection of watercourses and wetlands.
- Support for the restoration and preservation of streams, rivers, wetlands and other areas with significant biological resources.

City of Glendale General Plan

General Plan goals, objectives, and policies related to biological resources are located in the Open Space & Conservation and Recreation Elements:

Open Space and Conservation Element

Goal 4: Develop a program that sustains the quality of Glendale's natural communities.

- Objective 1: Develop a program for the on-going monitoring of those natural resources identified by the California Department of Fish and Game Natural Diversity Data Base and those sensitive habitats identified in the Element's biological assessment report.
- Objective 2: Prevent development that jeopardizes or diminishes the integrity and value of native plant and animal communities.

Goal 7: Continue programs which enhance community design and protect environmental resources quality.

- Objective 3: Continue to implement Glendale's comprehensive streetscape program.
- Objective 6: Foster design objectives which ensure development that respects the character of the existing neighborhoods and the natural setting.

Recreation Element

Policy 10-1: The City shall continue to provide for enhancement, maintenance, and replacement of street trees and parkway improvements as needed.

Policy 10-2: The City shall require the incorporation of new street trees and parkway improvements as requirements in the development approval process.

City of Glendale Municipal Code

Chapter 12.44 of the City's Municipal Code states that the removal of indigenous oak (*Quercus* spp.) and sycamore (*Platanus* sp.) trees is prohibited (Ordinance No. 5719, dated 12-7-2010). The term "remove" includes any act which will cause an indigenous tree to die, including but not limited to acts which inflict damage upon root systems, bark or other parts of the tree by fire, application of toxic substances, operation of equipment or machinery, or by changing the natural grade of land by excavation or filling the drip line area around the trunk. If site development would include the removal of an indigenous oak and/or sycamore tree protected under GMC 12.44, then compliance must be demonstrated.

"Protected indigenous tree" or "tree" means:

- (a) any tree with a trunk which is six (6) inches or more in diameter as measured at a height of fifty-four (54) inches above the lowest point where the trunk meets the soil; or in case of a tree with more than one (1) trunk, whose combined diameter of any two (2) trunks is at least eight (8) inches in diameter as measured at a height of fifty-four (54) inches above the lowest point where each trunk meets the soil.
- (b) which is one (1) of the following Southern California native tree species: California Live Oak (*Quercus agrifolia*), Scrub Oak (*Quercus berberidifolia*), Valley Oak (*Quercus lobata*), Mesa Oak (*Quercus engelmannii*), California Bay (*Umbellularia californica*), and the California Sycamore (*Platanus racemosa*).

If it is determined that the removal of a local tree is necessary, and it is then discovered that that tree is classified as indigenous, the applicant shall file for a permit to remove said tree, pursuant to GMC 12.44.040.

An application to remove an indigenous tree does not necessarily mean the destruction of that tree, but could also mean the transplantation of that tree to another location on the property, or elsewhere in the City of Glendale (as deemed appropriate by the Director of Public Works). It is up to applicants to work with the Director to come up with a feasible plan to satisfy all parties, as Public Works has the authority to approve, conditionally approve, or deny the application to cut down, remove, or move any indigenous tree or trees, and may impose conditions deemed necessary to implement the provisions of GMC 12.44.

6.3.1.2 Regional Setting

The San Rafael Hills are comprised of three parallel ridges oriented north to south (This discussion of the San Rafael Hills is adapted from the Open Space Element, City of Glendale 1993). Between these ridges are drainages which are now urban areas; however, remnants of the original canyon vegetation remain as sycamore trees (*Platanus racemosa*) and coast live oaks (*Quercus agrifolia*). In Southern California, southern oak woodland communities usually border canyon bottoms, and in the San Rafael Hills this typical arrangement of plant assemblages remains in areas that have not been built out, such as the west facing slopes of the easternmost ridges bordering Glenoaks Boulevard and Chevy Chase Drive.

In drainage bottoms with moderately high water tables, sycamore trees and mulefat (*Baccharis salicifolia*) co-occur with the coast live oaks. In drainages with higher water tables, mugwort (*Artemisia douglassiana*), California rose (*Rosa californica*), and willows (*Salix* spp.) occur along with the sycamores. Remnants of these communities persist in Sycamore Canyon which runs parallel to Chevy Chase Drive, and in side canyons that drain the ridges and are oriented east to west.

Species composition of all communities within the San Rafael Hills was similar to that of the Verdugos; however, the total diversity of each community type is lower (City of Glendale 1993). The extensive fragmentation resulting from conversion of open space to housing in the San Rafael Hills has resulted in disturbance within the assemblages present. For example, much of the chaparral assemblage on southern or eastern exposures is a matrix of introduced grasses and chaparral shrubs. In addition, many of the southern oak riparian patches within the canyon bottoms support an understory of introduced grasses.

Like the Verdugo Mountains, a series of fire roadways were developed in the early 1930's to provide for fire access. Unlike the Verdugo Mountains, however, the San Rafael Hills have undergone a greater amount of development (City of Glendale 1993). As a result, many of these fire roads have been bisected

and do not serve as major hiking trails in this area. Furthermore, due to the recent development of the San Rafael Hills Estates project, a paved roadway (Camino San Rafael) has been developed from the Glendale freeway to Emerald Isle Drive. Access to the open space areas in the San Rafael Hills is still available along this roadway to the ridge motor way which provides access to the Cerro Negro lookout tower and along the La Canada-Flintridge border to Cherry Canyon north of Descanso Gardens. Several laterals from this ridge route are available with access under the 2 Freeway at Fern Lane. The trail system in the San Rafael Hills is much smaller in scale and not as well utilized as the system in the Verdugo Mountains. The Cherry Canyon Trail, for example, connects to the equestrian trails of La Canada Flintridge and ultimately to the San Gabriel Mountains.

6.3.1.3 Plants and Vegetation Communities On Site

A total of 50 plant species were observed during the site visit in November 2010. These plant species are included in Appendix G (Attachment A) of the DEIR. As noted in Section 6.3, the area within the existing limit of operations is disturbed. The west facing final slopes of the landfill are largely landscaped with ornamental species. On the remaining slopes, weeds are allowed to grow for erosion control and these areas are supplemented with hand broadcast winter rye grass as needed to minimize erosion. Flatter areas are largely ruderal. Some volunteer species grow along drainage flowlines and, more notably, at Debris Basin #1 where a seep from golf course irrigation fosters growth between maintenance clearings of the basin.

Within the area of new disturbance, there is one mapping unit: 6.7 acres of chaparral (refer to Table 6.3-1, Crosswalk to Selected Vegetation Classifications Represented within Study Area).

TABLE 6.3-1. CROSSWALK TO SELECTED VEGETATION CLASSIFICATIONS REPRESENTED WITHIN STUDY AREA

| Vegetation Community or Mapping Unit | Holland (1986) Code | CDFW (2003) | Sawyer et al. (2009) Associations |
|--------------------------------------|---|----------------------------|-----------------------------------|
| Chaparral | 37200 – (Chamise + Other Co-Dominants) | 37.800.00 – Sumac Scrub | <i>Malosma laurina</i> |

Source: AECOM.

The California Terrestrial Natural Communities Recognized by the California Natural Diversity Database [CNDDDB] (CDFW 2003), A Manual of California Vegetation (Sawyer and Keeler-Wolf 1995; Sawyer et al. 2009), and Holland 1986 were used to classify vegetation communities observed within the study area. The extent and location of these communities is shown in Figure 6.3-2.

Chaparral

This community is characterized by shrubs which typically have small thick leaves and deep roots. A number of these shrub species have evolved under a selection process that includes periodic fires. As a result, a number of species are dependent on fire for regeneration by seed (City of Glendale 1993). The remaining chaparral species regenerate by one of two means. The first is a combination of seedlings and resprouting, an example of which is observed in chamise (*Adenostoma fasciculatum*). The second regeneration strategy relies solely on resprouting. Species such as toyon (*Heteromeles arbutifolia*) and holly-leaved cherry (*Prunus ilicifolia*) use the second method and are usually restricted to northern or western exposures where water availability is increased relative to eastern or southern exposures. These species also occur in oak woodland understory.

Within the study area, the particular areas mapped as chaparral (Figure 6.3-2) are dominated by laurel sumac (*Malosma laurina*) rather than chamise. Areas mapped as chaparral (disturbed) have been disturbed by past mechanical disturbance and support a dominance of non-native plants (e.g., non-native grasses).

6.3.1.4 Wildlife

Wildlife that is typically found within the study area are those species which are common to chaparral communities located in this region of Los Angeles County.

Bird species commonly found within chaparral and other inland scrub habitats include:

- Year-Round: California Quail (*Callipepla californica*); Turkey Vulture (*Cathartes aura*); Red-tailed Hawk (*Buteo jamaicensis*); American Kestrel (*Falco sparverius*); Mourning Dove (*Zenaida macroura*); Greater Roadrunner (*Geococcyx californianus*); Anna's Hummingbird (*Calypte anna*); Nuttall's Woodpecker (*Picoides nuttallii*); Black Phoebe (*Sayornis nigricans*); Say's Phoebe (*Sayornis saya*); Western Scrub-Jay (*Aphelocoma californica*); Common Raven (*Corvus corax*); American Crow (*Corvus brachyrhynchos*); Bushtit (*Psaltriparus minimus*); Bewick's Wren (*Thryomanes bewickii*); House Wren (*Troglodytes aedon*); Wrentit (*Chamaea fasciata*); California Thrasher (*Toxostoma redivivum*); Northern Mockingbird (*Mimus polyglottos*); Common Yellowthroat (*Geothlypis trichas*); Spotted Towhee (*Pipilo maculatus*); California Towhee (*Melospiza crissalis*); Rufous-crowned Sparrow (*Aimophila ruficeps*) (CDFW "Watch List"); Song Sparrow (*Melospiza melodia*); House Finch (*Carpodacus mexicanus*); Lesser Goldfinch (*Spinus psaltria*).
- Winter: Ruby-crowned Kinglet (*Regulus calendula*)(winter); Hermit Thrush (*Catharus guttatus*)(winter); Yellow-rumped Warbler (*Dendroica coronata*)(winter); Fox Sparrow (*Passerella iliaca*)(winter); White-crowned Sparrow (*Zonotrichia leucophrys*)(winter); Golden-crowned Sparrow (*Zonotrichia atricapilla*)(winter).
- Spring/Summer: Costa's Hummingbird (*Calypte costae*)(spring/summer); Lazuli Bunting (*Passerina amoena*)(spring/summer); Hooded Oriole (*Icterus cucullatus*)(spring/summer).

Wildlife species common to chaparral, other scrub habitats, and riparian areas include the following reptiles, amphibians and mammals:

- Western fence lizard (*Sceloporus occidentalis*); Coastal western whiptail (*Aspidoscelis tigris*); gopher snake (*Pituophis catenifer*); western rattlesnake (*Crotalus oreganus*).
- Pacific treefrog (*Pseudacris regilla*); garden slender salamander (*Batrachoseps major*); western toad (*Bufo boreas*).
- Dusky-footed woodrat (*Neotoma fuscipes*); Audubon's cottontail (*Sylvilagus audubonii*); California mouse (*Peromyscus californicus*); deer mouse (*Peromyscus maniculatus*); gray fox (*Urocyon cinereoargenteus*); coyote (*Canis latrans*); raccoon (*Procyon lotor*); long-tailed weasel

(*Mustela frenata*); striped skunk (*Mephitis mephitis*); bobcat (*Lynx rufus*); and mule deer (*Odocoileus hemionus*).

6.3.1.5 Sensitive Biological Resources

Special-Status Plants

A total of 16 special-status plant species have been reported to the California Natural Diversity Database (CNDDB) and/or CNPS from within the regional area. These special-status plant species are included in Appendix G (Attachment B) of the DEIR. In general, none of these special-status plant species are expected to occur within the project site. None of these species were observed during the site visits in November 2010 and June 2011. Appendix G (Attachment B) of the DEIR lists these species as having a medium (one species) to low probability (16 species) of occurrence (for definitions, refer to Section 6.3.3 Methodology).

The following is a list of species (with scientific, common names) along with the names of United States Geological Society (USGS) Quadrangle(s) where the species has been found. As the SCLF is within the Pasadena Quad, species have a potential to occur if the species has been found in the Pasadena Quadrangle and suitable habitat is within or adjacent to the SCLF. The following are species that were the focus of the 2011 rare plant survey effort:

- Berberidaceae
 - *Berberis nevinii*, Nevin's barberry; Pasadena, Burbank
- Liliaceae
 - *Calochortus clavatus* var. *gracilis*, slender mariposa lily; Burbank
 - *Calochortus plummerae*, Plummer's mariposa lily; Pasadena, Burbank, Los Angeles
- Asteraceae
 - *Centromadia parryi* ssp. *australis*, southern tarplant; Mt. Wilson, Pasadena
 - *Symphyotrichum greatae*, Greata's aster; Pasadena, Los Angeles, Condor Peak
 - *Pseudognaphalium leucocephalum*, white rabbit-tobacco; Pasadena, Burbank
- Polygonaceae
 - *Chorizanthe parryi* var. *parryi*, Parry's spineflower; Pasadena
- Rosaceae
 - *Horkelia cuneata* ssp. *puberula*, mesa horkelia; Burbank, Pasadena, Mt. Wilson

Other sensitive plant species, as shown in Appendix G (Attachment B) of the DEIR, are not expected to occur because suitable habitat is not present at the SCLF, and/or the species' geographic distributions do not overlap with the SCLF. Species with a low or moderate potential for occurrence, and are found within the Pasadena Quadrangle, are discussed further in this section.

Sensitive Vegetation Communities

Special status, or sensitive, biological resources include declining habitats as well as species that have been afforded special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, rare, or otherwise of concern, principally due to the species' declining or limited

population size, usually resulting from habitat loss. Watch lists of such resources are maintained by the CDFW, the USFWS, and groups such as the CNPS.

Four sensitive vegetation communities are included in the CNDDDB report as having documented occurrences within the regional area (Appendix G (Attachment B) of the DEIR). These four communities include Southern coast live oak riparian forest, California walnut woodland, Southern cottonwood willow riparian forest, and Southern sycamore alder riparian woodland. None of these communities were observed within the boundaries of the study area.

Special-Status Wildlife

A total of 16 special-status wildlife species were determined by the literature review to potentially occur within the project site. Three of these species are listed as federal or state Endangered Species Act protected species. The potential occurrence or evidence for determining these species' potential for occurrence within the project site is presented in Appendix G (Attachment C) of the DEIR. None of the species are expected to occur within the study area. The majority of these listed wildlife species were determined to be absent, have a low, moderate or high potential for occurrence because of specific habitat requirements that are absent or negligible within the project site. Only the species present, or with a moderate or high potential for occurrence are discussed further in this section.

6.3.1.6 Wildlife Movement Corridors

Wildlife corridors are pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or human-induced factors, such as urbanization. Wildlife corridors are essential to maintain populations of healthy and genetically diverse wildlife species (Penrod 2000). The fragmentation of natural habitat creates isolated "islands" of vegetation that does not provide sufficient area or resources to accommodate sustainable populations for a number of species and, thus, adversely affects both genetic and species diversity.

The SCLF is located within the San Rafael Hills, within the City of Glendale, Los Angeles County. Two other open space areas within the City of Glendale are the Verdugo Mountains (west and central portion of the city), and Deukmejian Wilderness Park in the San Gabriel Mountains (northern-most section of the city). Urban development has served to isolate vegetation communities within the San Rafael Hills from other open space and park areas located to the west (Verdugo Mountains Open Space Preserve), south (Griffith Park), north (Cherry Canyon Park), northeast (San Gabriel Mountains), and east (Brookside Park, Lower Arroyo Recreation Area). The Santa Monica Mountains Conservancy works to purchase and manage open space within the Santa Monica Mountains Zone, which includes the Santa Monica Mountains (located to the west of SCLF) and the Rim of the Valley Trail Corridor (City of Glendale 1993). The mountainous areas of the City of Glendale fall within the Rim of the Valley Corridor, and thus are of interest for open space preservation purposes.

Within the existing landfill limit of operations, conditions are largely unsuitable for wildlife movement due to the lack of vegetative cover. Mammalian carnivores are not typically deterred by the open conditions within the landfill areas because they are less dependent on cover. Movements by species such as mule deer would likely be more constrained due to the lack of escape cover from predators. Although some species may use the SCLF for movement, the majority of species would tend to avoid the area and to use the more natural adjacent canyons and watersheds. In addition, it is likely that the ridgelines on and off the SCLF property would serve as the principal wildlife movement and dispersal corridors for most species found on or in the immediate vicinity of the survey area.

6.3.1.7 Drainage Features

Watershed Context

Drainage from Scholl Canyon flows to Verdugo Wash, a major tributary to the Los Angeles River. Although the Los Angeles River is not navigable at the confluence with Verdugo Wash, it is navigable downstream within the City of Long Beach. A perennial stream connection exists within the Los Angeles River between Verdugo Wash and the Pacific Ocean. Verdugo Wash flows between the Verdugo Mountains and San Rafael Hills, and two tributaries to Verdugo Wash, within Sycamore Canyon and Scholl Canyon, are located northeast and east of the confluence of Verdugo Wash and the Los Angeles River. These two canyons are located within the San Rafael Hills.

Stormwater Management Facilities and Ongoing Maintenance Activities

All drainage features and basins on site are man-made features that are periodically cleared to maintain their proper function. On the north side of the landfill is a drainage flow line that drains almost half of the site. To reduce peak flow and retain debris and sediment, a debris basin (Debris Basin #1) has been constructed on this northern flow line. The debris basin drains to an earthen trapezoidal channel that drains to a second drainage basin. These facilities are critical in the safe drainage of the site's stormwater. To ensure proper function, these facilities are periodically inspected and typically cleared of vegetation and debris once or twice a year, depending on the amount of rainfall. Between these maintenance clearings, volunteer species grow with the aid of a seep from the nearby cut slopes that are fed by golf course irrigation. This process of periodic clearing with growth between clearings is an existing condition that must continue in both proposed Variations.

6.3.2 THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the CEQA Guidelines, implementation of the proposed project would result in a significant adverse impact on the environment related to biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- 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 Wildlife or U.S. Fish and Wildlife Service.
- 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.
- 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.
- Conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance.

For the first-bulleted CEQA threshold above, a significant short-term effect may be determined if there is a high potential for loss of individuals of a sensitive species. A significant long-term effect may be determined if there is a substantial decrease in the long-term viability of an existing population of sensitive species on the project site. For the second-bulleted CEQA threshold above, significant effect may include any short- or long-term reduction in the quantity and quality of vegetation.

6.3.3 METHODOLOGY

6.3.3.1 Literature Review

To ascertain which special-status plant or animal species were previously documented as occurring within the project site and in the project vicinity, a query was conducted of the California Natural Diversity Database ([CNDDDB] 2003) and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (2010). The CNDDDB and CNPS databases were both queried for the Pasadena (within which SCLF is located), California U.S. Geological Society (USGS) 7.5-minute series topographic quadrangle where the proposed project is located and the following surrounding eight quadrangles: Burbank, Chilao Flat, Condor Peak, El Monte, Hollywood, Los Angeles, Mt. Wilson, and Sunland.

The CNDDDB is the primary reference in California for occurrence records of listed and non-listed sensitive species. The CNDDDB includes Geographic Information Systems (GIS) data files to map occurrence records and a database that provides details for these occurrences. Prior to conducting the site visit, resource databases, local resource management plans, aerial photographs, topographic maps, and other similar resources were reviewed to determine watershed characteristics and the locations/types of aquatic resources that may be present within the project site.

6.3.3.2 Vegetation Mapping

The vegetation mapping effort used for this analysis was conducted by AECOM during and after the November 2010 site visit. The study area for this mapping effort is shown in Figure 6.3-2. Vegetation communities were based on observed dominant vegetation composition and density. Vegetation classifications were derived from the criteria and definitions of Holland (1986), Sawyer and Keeler-Wolf (1995), and CDFW (2003). Vegetation communities were mapped in the field using aerial photographs, engineering drawings, and topographic maps showing elevation contours. All polygons were mapped in the field, geo-referenced with a hand-held geographic positioning systems (GPS) unit, and were then digitized in Geographic Information Systems (GIS; ESRI 2010). Regrowth in previously disturbed areas was not classified or mapped as a vegetation community because the area had been previously disturbed and is likely to have been disturbed after the November 2010 site visit.

6.3.3.3 Wildlife Movement Corridors

Information on existing wildlife corridors was derived from available literature and agency websites. In addition, the biological resource reconnaissance survey assessed the connection and/or isolation of the site from other regional open space areas.

6.3.3.4 Field Surveys

The biological resource reconnaissance survey was conducted on the project site in November 2010. Potentially jurisdictional waters and riparian areas were assessed within the study area in November 2010 by AECOM. Standard methods with regards to delineating indicators of hydrologic, hydric soil, and hydrophytic vegetation were not formally utilized as the project site visit only included a reconnaissance-

level survey. A survey for sensitive plant species was conducted within the study area in June 2011 by AECOM. Both surveys included all areas within the active landfill footprint and proposed expansion area.

AECOM staff examined those portions of the project site potentially supporting biological resources pursuant to standard methods. Observations were made to determine the presence of any definable channels, hydrophytic vegetation, riparian habitat, hydrologic regime, and potential hydric soils (Cowardin et al. 1979; Reed 1988; USDA-NRCS 2010b,c). The applicable wetland determination data forms (Arid West Region, Version 2.0) were not completed in the field. Figures were developed consistent with Corps Los Angeles District (LAD) (2010). Plants were identified to the lowest taxonomic level sufficient to determine whether observed species were native, non-native, and/or wetland indicator species. Scientific and common species names and other botanical information were recorded according to Hickman (1993), Holland (1986), DiTomaso and Healy (2003), Clarke et al. (2007), Cal-IPC (2006, 2007), Calflora (2010), and CNPS (2010). Figures were developed with the use of Geographic Information Systems (GIS) software and aerial imagery (ESRI 2010).

Special-Status Plant and Wildlife Potential for Occurrence

After conducting the California Natural Diversity Database (CNDDDB) (CDFW 2003) and the California Native Plant Society (CNPS) (2010) database searches, a list of applicable plant and wildlife species were organized into tables for plants and wildlife, respectively (refer to Appendix G (Attachment B and C) of the DEIR).

The potential for occurrence ranking criteria utilized in this section and the tables in Appendices F (Attachment B and C) of the DEIR are as follows:

- **No Potential:** Habitat within the project site is clearly unsuitable for the species requirements (foraging, breeding, substrate, elevation, hydrology, vegetation community, prior documented history, disturbance regime), and/or the project site is clearly out of the known range for the species.
- **Not Expected (Species):** Project site lacks habitat/vegetation community preferred by this species; thus, species not expected to occur on site. Project site is within the known range of the species.
- **Not Present (Vegetation Community):** Particular vegetation community not observed during reconnaissance-level site visit.
- **Low Potential/Unlikely:** Project site contains limited suitable habitat for this species, and thus there is low potential for occurrence. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat within the project site is unsuitable or of very poor quality, and/or the project site is somewhat outside the known range of the species. The species is not likely to be found within the project site, and was not observed during the reconnaissance site visit.
- **Moderate Potential:** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat within the project site is unsuitable, and the project site is within the known range for the species. The species has a moderate probability of being found within the project site, and species was not observed during site visit.

- **High Potential:** All of the habitat components meeting the species requirements are present and/or most of the habitat within the project site is highly suitable. The project site is within the known range of the species. The species has a high probability of being found within the project site, although the species was not observed during the site visit.
- **Present:** Species observed within the study area, or has been recently documented from the literature search as having been observed on site.

6.3.4 IMPACTS

This section discusses potential impacts to sensitive plant communities, plants, and wildlife species that have either been observed or have the potential to occur within the project site.

Implementation of the proposed project would result in both temporary or short-term effects and permanent long-term effects on biological resources. For the purposes of this discussion, these terms are defined as follows:

- **Short-term effects** are temporary and would occur during project implementation. Short-term effects include effects resulting from vegetation removal, project grading, and project construction.
- **Long-term effects** would occur during and after completion of the project, when the project is completed.

Biological resources may be either directly or indirectly impacted by a project. Direct and indirect impacts may furthermore be either permanent or temporary in nature. These impacts are defined below.

- **Direct Impacts:** Any alteration, disturbance, or destruction of biological resources that would result from project related activities is considered a direct impact. Examples include clearing vegetation, encroaching into wetlands, diverting surface water flows, and the loss of individual species and/or their associated plant communities.
- **Indirect Impacts:** As a result of project related activities, biological resources may also be affected in an indirect manner. Examples include elevated noise and dust levels, soil compaction, increased human activity, decreased water quality, and the introduction of invasive wildlife (i.e., domestic cats and dogs) and plants.
- **Permanent Impacts:** All impacts that result in the irreversible removal of biological resources are considered permanent. Examples include constructing a building or permanent road on an area containing biological resources.
- **Temporary Impacts:** Any impacts considered to have reversible effects on biological resources can be viewed as temporary. Examples include the generation of fugitive dust during construction or the removal of vegetation for construction activities and subsequently allowing the natural vegetation to recolonize the impact area (or conduct active re-seeding and/or planting in the area).

6.3.4.1 Variation 1

Relative to baseline conditions of disturbance, Variation 1 would result in no disturbance of previously undisturbed vegetation.

Impacts to disturbed biological resources would occur as a result of construction and ongoing operations. Indirect impacts would occur as a result of erosion, siltation, and drainage runoff; invasion by non-native plants; and noise, motion, startle and fugitive dust. Relative to baseline conditions of disturbance, Variation 1 would result in no new impacts.

Special-Status Plants and Vegetation Communities

Significant adverse impacts to special-status plants would not be anticipated as none were observed during the site visit and none are expected to occur within the construction/operation footprint of Variation 1.

Special-Status Wildlife Species

Special-status wildlife species are not expected to occur within the spatial extent of Variation 1 because these areas are dominated by landfill activities, as well as disturbed and ruderal mapping units. Any special-status wildlife would be encountered within adjacent open space areas. Because Variation 1 would not impact previously undisturbed areas, no adverse impacts are expected to occur.

Other Wildlife Species

Construction/operation activities associated with Variation 1 are not expected to have any potentially adverse effect on other, non-special-status wildlife species. These species are not expected to occur within the spatial extent of Variation 1 because these areas are dominated by disturbed and ruderal mapping units. Therefore, implementation of Variation 1 would not result in significant adverse impacts to non-special-status species.

Wildlife Movement Corridors

Variation 1 would not result in disturbance of any previously undisturbed vegetation. Thus, Variation 1 would have no adverse impact on wildlife movement corridors.

Tree Protection Ordinance

Variation 1 would not result in disturbance of any previously undisturbed vegetation. Thus, Variation 1 would have no impact on native trees.

6.3.4.2 Variation 2

Relative to baseline conditions of disturbance, Variation 2 would result in loss of 6.7 acres of previously undisturbed chaparral vegetation during the excavation of the hillside north of the proposed horizontal expansion.

Direct impacts to disturbed biological resources and 6.7 acres of previously undisturbed chaparral habitat would occur as a result of the construction and operation of Variation 2. Indirect impacts would occur as a result of potential erosion and siltation and invasion by non-native, invasive plant species. Relative to

baseline conditions of disturbance, Variation 2 would result in a less than significant increase in such impacts due to impacts in the newly disturbed 6.7 acres.

Special-Status Plants and Vegetation Communities

Implementation of Variation 2 would result in the removal of 6.7 acres of chaparral, a native plant community that supports indigenous wildlife (Table 6.3-1; Figure 6.3-2). However, chaparral is not considered a sensitive plant community per CDFW. Variation 2 would result in an impact to this native community, and present an incremental loss of habitat. The mapped chaparral area represents a fragmented patch of habitat located on steep slopes. The chaparral is dominated by laurel sumac, a common shrub within the San Rafael Hills. The habitat is not directly connected to open space areas to the north because of a paved access road, several dirt roads, and a disturbed area upon which a large water tank is located. Because chaparral is not considered a sensitive plant community, the area is fragmented, and the acreage of potential impact is relatively small, this impact is considered less than significant.

Due to the disturbed nature of vegetation communities on site, no special-status plant species are expected to occur within the already disturbed portion of Variation 2. Because of the time of year of the first site visit (November 2010) and the nature of the survey (general reconnaissance), an additional rare plant survey (June 2011) was conducted for Nevin's barberry, as well as several sensitive plant species (slender mariposa lily, Plummer's mariposa lily, southern tarplant, Greata's aster, white rabbit-tobacco, Parry's spineflower, and mesa horkelia). These plants were not found within the study area. Therefore, implementation of Variation 2 would not result in significant adverse impacts to special-status plants.

Special-Status Wildlife Species

Construction/operation activities associated with Variation 2 are not expected to have any potentially adverse, direct effects on special-status wildlife species. These species are not expected to occur within the spatial extent of Variation 2 because these areas are dominated by disturbed, active landfill activities. In addition, special-status wildlife species are not expected to occur in the 6.7-acre area of new disturbance, currently dominated by chaparral. Specifically, the CNDDDB search discussed previously in this section showed no previously-reported sightings within the immediate vicinity of the study area. The chaparral area, while undisturbed, is isolated (i.e., not contiguous) from habitat to the north and northeast due to a road and cut hillside. Chaparral is not the preferred habitat for sensitive species found in the area. The potential occurrence or evidence for determining these species' potential for occurrence within the project site is presented in Appendix G (Attachment C) of the DEIR. None of the species are expected to occur within the study area. The majority of these listed wildlife species were determined to be absent or not expected to be found because of specific habitat requirements that are absent or negligible within the project site. As no special-status wildlife species were observed on site, nor expected to occur within the area of new disturbance, no significant adverse impacts are expected to occur.

Other Wildlife Species

In general, construction/operation activities associated with Variation 2 are not expected to have any potentially adverse effect on other, non-special-status wildlife species. The 6.7-acre area of new disturbance, though, has the potential to provide suitable nesting habitat for some bird species protected by the Migratory Bird Treaty Act. Loss of chaparral within this area would constitute a loss of potential nesting habitat, and could disrupt nesting activities, if work was completed during the breeding season. However, the acreage lost is small relative to the amount of similar acreage nearby making habitat loss a less than significant impact. The removal of this potential habitat without any protective steps for birds could result in bird mortality (or nest failure) which is a potentially significant, adverse impact.

Wildlife Movement Corridors

Variation 2 would result in loss of 6.7 acres of previously undisturbed chaparral habitat. This habitat is located on steep slopes and is fragmented from nearby open spaces by a paved access road, several dirt roads, and a disturbed area upon which a large water tank is located. Relative to the existing disturbed area of the landfill and the large remaining areas of open space surrounding the landfill, this loss of acreage would result in a less than significant impact on wildlife movement corridors.

Protected Trees

In the survey of the 6.7 acres of chaparral habitat that would be removed by Variation 2 no protected oaks species were observed. However, this area provides suitable habitat and protected oaks may be found at the time of construction. Glendale Municipal Code Section 12.44 protects oak trees and requires mitigation satisfactory to the Glendale Public Works Director prior to impacting protected oaks. Prior to disturbance of a previously undisturbed area, a qualified biologist (or other qualified staff) would conduct a pre-construction survey for potentially occurring trees protected by the Glendale Municipal Code. If protected trees are found, the Sanitation Districts would prepare a mitigation plan likely involving transplantation or replacement at a ratio greater than one (i.e., greater than one new tree for every removed tree). Because the acreage lost is small compared to the similar undisturbed habitat in the adjacent area, this loss of habitat is not considered significant. In complying with the Glendale Municipal Code and replacing removed trees in some fashion, the impact to protected trees would be less than significant.

6.3.5 MITIGATION MEASURES

6.3.5.1 Variation 1

Variation 1 would not result in significant adverse impacts related to biological resources. Therefore, no mitigation measures are required.

6.3.5.2 Variation 2

The following mitigation measure was developed to avoid and/or minimize potential significant adverse impacts related to biological resources.

BR-1 If disturbance of previously undisturbed vegetation in the horizontal expansion cut area cannot be avoided during the breeding bird season (generally March 1 through August 1), the Sanitation Districts will conduct pre-construction breeding-bird surveys of the area to be disturbed including a 300-foot buffer around the area to be disturbed. The surveys shall be completed by a qualified biologist. For disturbance outside of nesting season, such surveys are not required. If no nesting birds are observed, the land disturbance may commence. If an active nest is located, the nest shall be marked a minimum of 100 feet (for non-raptors, 300 feet for raptors) in all directions and this area shall not be disturbed until after July 31 or until the nest becomes inactive. Buffers less than those proposed here are subject to CDFW approval in consultation with the project biologist. If a threatened or endangered species is located within the survey area, the Sanitation Districts will consult with USFWS and/or CDFW on appropriate actions.

6.3.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

6.3.6.1 Variation 1

Implementation of Variation 1 would not result in significant adverse impacts related to biological resources.

6.3.6.2 Variation 2

Implementation of mitigation measure BR-1 described above will reduce significant adverse impacts related to biological resources to below a level of significance.