# 4.5 BIOLOGICAL RESOURCES

## 4.5.1 *INTRODUCTION*

*This section focuses on common and special-status biological resources either occurring or potentially occurring within the project area, the potential significant adverse impacts on these resources as a result of the proposed project, and measures to mitigate these impacts. It is based on a review of pertinent literature and natural resource databases as well as on field surveys conducted by Impact Sciences biologists.*

*Several state and federal regulatory agencies have potential jurisdiction over some of the biological resources present within the proposed project area. These agencies include the California Department of Fish and Game (CDFG), U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (ACOE), and Regional Water Quality Control Board (RWQCB). Potential impacts on biological resources that are governed by certain laws and regulations of these agencies will also be addressed in this section.*

## 4.5.2 METHODS

### a. Literature Review

In order to identify special-status plant and animal species (those species considered rare, threatened, endangered, or otherwise sensitive by various state and federal resource agencies) known to occur in the vicinity of the site, the September 2001 update of the California Natural Diversity Data Base (CNDDB) and the 2001 California Native Plant Society (CNPS) electronic data base, for the San Dimas, and surrounding Baldwin Park, Ontario, Glendora, Azusa, Mount Baldy, Prado Dam, Yorba Linda, and La Habra, California USGS 7.5-minute quadrangle maps were reviewed.

Sources used to determine the sensitivity status of biological resources include: **Plants** – CNPS (2000), CDFG (2000), CNDDB (2000), and CNPS (Skinner and Pavlik 1994-1999); **Wildlife** – CDFG (2000), CNDDB (2000); **Habitats** – CNDDB (2000). Names used to describe plant communities are based on the nomenclature of R.F. Holland (1986) where applicable. Common plant names are taken from the following sources: J.C. Hickman, (1993), McAuley (1996). References used for the nomenclature of wildlife include the following: M.R. Jennings (1983); the American Ornithologists' Union (1983 and supplemental) for birds; and J.K. Jones *et al.* (1982) for mammals.

### b. Field Surveys

A general field survey of the TTM 52717 site was conducted by Impact Sciences biologists, a botanist and a wildlife specialist, on October 8 and 15, 2001 for the purpose of characterizing on-site habitats and evaluating their potential to support special-status species. This visit was also used to assess the need to conduct focused surveys for potentially occurring threatened and endangered animal and plant species and for the purpose of mapping vegetation communities. Focused surveys for special-status plant and wildlife species were not conducted at that time because the time of the year the survey was conducted was outside the blooming period (plants) and breeding season (wildlife) for most special-status plant and wildlife species that could potentially occur on the site. Subsequently, Impact Sciences conducted a focused plant survey for Tentative Tract Map 52717 on May 28, 2002.

During the site visit, direct observations of reptiles, birds, and mammal species were recorded, as were wildlife signs such as scat and tracks. In addition to species actually detected, expected use of the site by other wildlife was evaluated from habitat analysis, combined with known habitat preferences of locally occurring wildlife species. Plants and wildlife observed or expected to occur on the site are discussed further below.

Analysis of potential wildlife movement corridors associated with the project area was based on information compiled from a review of pertinent literature, results of field surveys, and analysis of aerial photographs and topographic maps of the area.

## 4.5.3 EXISTING BIOLOGICAL ENVIRONMENT

### a. General Site Description

Topography on the site is steep to gently sloping. Elevation within the site ranges from approximately 640 feet to about 730 feet above sea level. The majority of the northern portion of the site is a steep dropoff from the adjacent road that then flattens into a gentle slope, sloping off again adjacent the creek. Details of development plans are provided in **Section 3.0, Project Description,** of this EIR.

Vegetation within the project area is limited to coast live oak woodland, southern coast live oak riparian forest, tree windrows, non-native weedy species in disturbed (ruderal) areas, and landscaping associated with existing residential development. Though not included within the site boundaries, the predominant biological feature associated with the project area is Walnut Creek, which borders the southern edge of

the site. The plant community associated with the creek is southern coast live oak riparian forest, which is fenced off from the site by a six foot chain link fence.

The majority of the site is highly impacted by several dirt roads that appear to be used by off-road vehicles, and parts of the southeastern portion of the site have been impacted due to the site being used as a dumping area for refuse. The western portion of the site includes residential development, and the areas surrounding the development have been disked, presumably for annual fuel load reduction.

## b. Plant Communities

Four plant communities were identified and characterized on the project site (**Figure 4.5-1**). As shown, the majority of the property contains a ruderal community. The other vegetation communities are coast live oak woodland, southern coast live oak riparian forest, and tree windrows. The remainder of the site consists of landscape ornamentals associated with existing development.

A list of vascular plant species observed on the project site during the field survey is provided below in **Table 4.5-1**. The following discussion briefly describes the characteristics of each of the plant communities on the site.

### *1. Ruderal*

The ruderal community, totaling approximately 11.7 acres, includes areas that have been previously impacted and now support weedy forbs and grasses, or is barren. Scattered non-native eucalyptus trees are also included in this vegetation type. There are several dirt roads on the eastern portion of the site. The western portion of the site is partially developed. There is a house and dilapidated barn (totaling approximately 3 acres) that is surrounded by non-native grasses, particularly bromes (*Bromus* spp.) and wild oats (*Avena* sp.), which have been recently disked.

### *2. Coast Live Oak Woodland*

Approximately 1 acre of land on the subject property consists of coast live oak woodland dominated by coast live oak that is scattered about the site. This evergreen woodland has a poorly developed shrub layer consisting mostly of poison oak, a few willows (*Salix* sp.) and elderberry (*Sambucus mexicana*). The understory is dominated by bromes (*Bromus diandrus*), wild oat, short-pod mustard (*Hirschfeldia incana*), and several other introduced species.

**Table 4.5-1**
**Plant Species Observed on the San Dimas Site Organized by Plant Family**

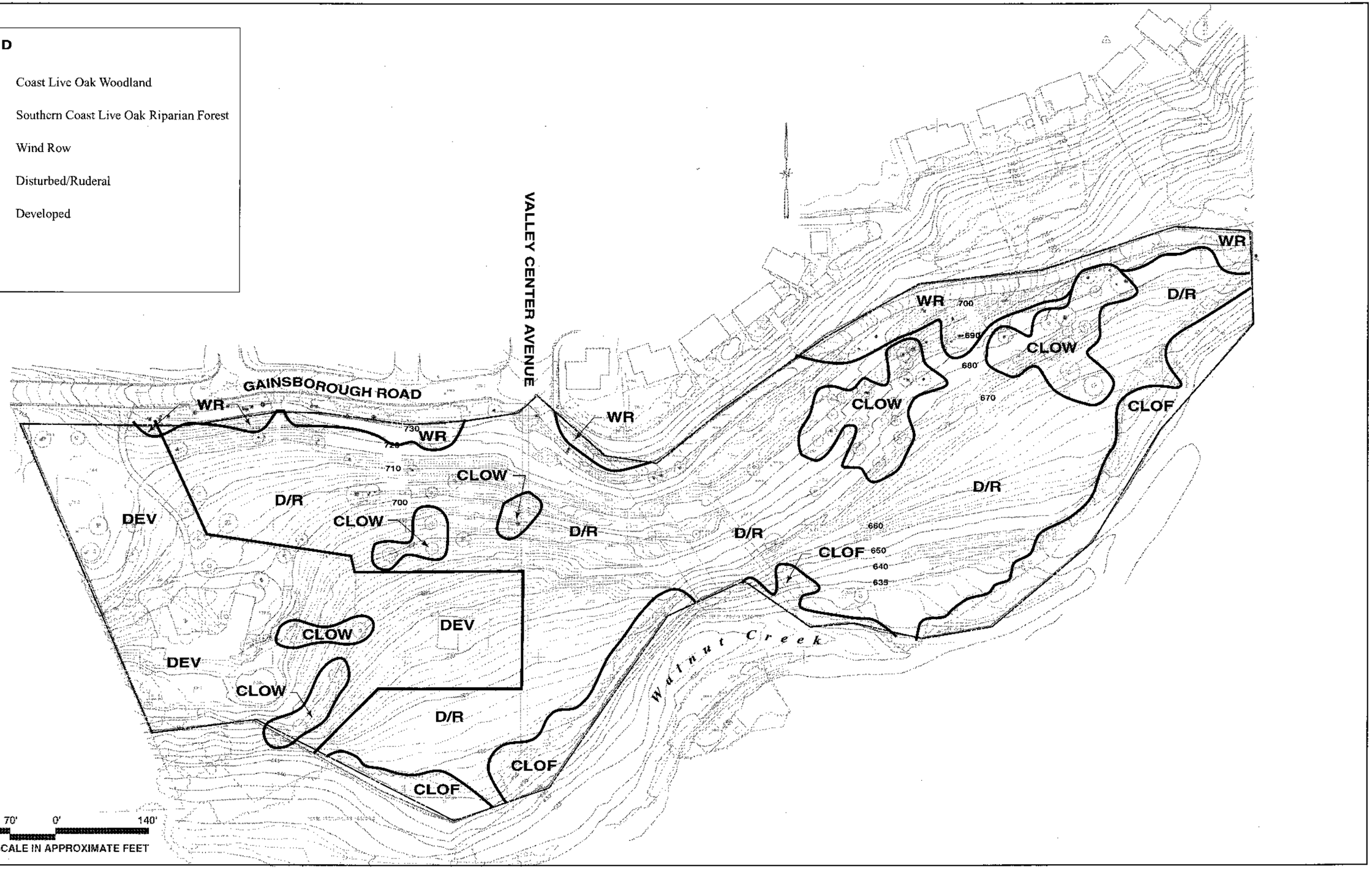
| FAMILY | Scientific Name | Common Name |
|---|---|---|
| AMARANTHACEAE | *Amaranth albus* | Tumbleweed |
| ANACARDIACEAE | *Toxicodendron diversilobum* | Poison Oak |
| APIACEAE | *Foeniculum vulgare* | Fennel |
| ASTERACEAE | *Carduus pycnocephalus* | Italian Thistle |
| | *Conyza canadensis* | Horseweed |
| | *Lactuca serriola* | Prickly lettuce |
| BRASSICACEAE | *Hirschfeldia incana* | Mediterranean Mustard |
| CAPRIFOLIACEAE | *Sambucus mexicana* | Elderberry |
| CUCURBITACEAE | *Marah macrocarpus* | Wild Cucumber |
| FAGACEAE | *Quercus agrifolia* | Coast Live Oak |
| | *Juglans californica* | California Black Walnut |
| LAMIACEAE | *Marrubium vulgare* | Horehound |
| MALVACEAE | *Malva neglecta* | Common Mallow |
| POACEAE | *Bromus diandrus* | Brome |
| | *Avena* sp. | Wild Oat |
| POLYGONACEAE | *Eriogonum fasciculatum* | Buckwheat |
| | *Rumex crispus* | Curly Dock |
| ROSACEAE | *Heteromeles arbutifolia* | Toyon |
| | *Rubus ursinus* | California Blackberry |
| SALICACEAE | *Salix lasiolepis* | Arroyo Willow |

### 3. *Southern Coast Live Oak Riparian Forest*

Along the southern portion of the site, approximately 1.5 acres of land contains southern coast live oak riparian forest dominated by coast live oak (*Quercus agrifolia*). This open to locally dense evergreen woodland is richer in herbs and poorer in understory shrubs than other riparian communities. A few sycamores (*Platanus racemosa*) and California black walnuts (*Juglans californica*) are part of the overstory. The midstory is composed of young walnut trees and toyon (*Heteromeles arbutifolia*). The understory includes poison oak, buckwheat (*Eriogonum fasciculatum*) and non-native grasses. This vegetation community is considered rare by the California Department of Fish and Game and will be addressed later in this section.

**LEGEND**

| | |
|---|---|
| **CLOW** | Coast Live Oak Woodland |
| **CLOF** | Southern Coast Live Oak Riparian Forest |
| **WR** | Wind Row |
| **D/R** | Disturbed/Ruderal |
| **DEV** | Developed |




**SOURCE:** Impact Sciences, January 02.

FIGURE **4.5-1**

Vegetation Communities

### 4. *Tree Windrows*

Tree windrows occur in two areas on the north side of the site along the road and total approximately 0.8 acre. The windrows consist of non-native eucalyptus (*Eucalyptus sp.*), and the understory consists of non-natives.

## c. Wildlife

Although the plant communities present on the project site are limited in area and subject to regular human disturbance, they provide some habitat for locally occurring wildlife species. While a few species of wildlife are entirely dependent on a single plant community, most species require a mosaic of plant communities to provide the necessary shelter, water, food, and other life cycle resources. Though a plant community mosaic is not necessarily present on the site, Walnut Creek adds to the community diversity and provides for the use by local wildlife species.

An accurate assessment of wildlife populations on the project site would be difficult to obtain without long-term investigations because some species only occur in a particular area for a short period of time (such as during migration), some are inactive during one or more seasons, and some are nocturnal or reclusive in nature. Therefore, populations of species are discussed in qualitative terms based on information derived from site specific surveys, the quality and extent of available wildlife habitat on the site, and on the known habitat requirements and home ranges of species occurring in the region.

Common wildlife species observed, detected, or having a high potential to occur within the project boundary and its vicinity are discussed in the following text. Special-status wildlife species known to occur, or having a high potential for occurrence within the project boundary, are discussed later in this section.

### 1. *Amphibians and Reptiles*

Several common amphibian and reptile species are known to occur in the vicinity and have a potential to utilize on-site resources. Amphibian species potentially occurring on the site include black-bellied slender salamander (*Batrychoseps nigriventris*), Pacific salamander (*Batryshoseps pacificus*), Pacific chorus frog (*Hyla regilla*), and western toad (*Bufo boreas*).

Several reptile species also have the potential to occur on the site. They include the Western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), coast horned lizard (*Phrynosoma coronatum*), western whiptail (*Cnemidophorus tigris multiscutatus*), western skink (*Eumeces skiltonianus*), southern alligator lizard (*Elgaria multicarinatus*), gopher snake (*Pituophis melanoleucus*), yellow-bellied racer (*Coluber constrictor*), and common kingsnake (*Lampropeltis getulus*).

### 2. *Birds*

A variety of bird species are expected to occur on the project site due to its proximity to Walnut Creek. Direct observations of upland avifauna during site surveys are listed in **Table 4.5-2.** A great blue heron (*Ardea herodias*) was observed flying over the site from one area of the stream to another. The great blue heron is considered to be of special-status by California Department of Fish and Game (CDFG). As such, it is discussed in more detail in the Special-Status Biological Resources portion of this section. Several additional common species are expected to occur within the area seasonally.

Raptors (birds of prey) are another group of bird species expected to periodically utilize the site. The open areas where birds, small mammals, and reptiles occur on the project site, provide a forage base for many species occurring in the region. A red-tailed hawk (*Buteo jamaicensis*) and a pair of American kestrels (*Falco sparverius*) were observed soaring and/or foraging over and near the site during the field surveys. Evidence (a large pellet containing a squirrel skull) of a great horned owl (*Bubo virginianus*), was located adjacent to the barn.

Nesting is expected to occur in the oak woodlands and eucalyptus trees during the appropriate season. Tree windrows typically provide nesting opportunities for a few locally occurring bird species, including raptors. However, the total nesting habitat area is relatively small and provides little protection from wind and weather. Further, due to the relatively small area in which these windrows occur, it is expected that if one pair of raptors were to nest in one of these trees, they would exclude any others from nesting on site due to their territorial nature. However, very little nesting would be expected in the disturbed area due to the nature of the disturbance and limited nesting resources.

Table 4.5-2
**Birds Sighted On or Adjacent to the San Dimas Site**

| *Scientific Name*<br>**Common Name** | *Scientific Name*<br>**Common Name** |
|---|---|
| *Aphelocoma californica*<br>Western Scrub Jay | *Falco sparverius*<br>American Kestrel |
| *Ardea herodias*<br>Great Blue Heron | *Mimus polyglottos*<br>Northern Mockingbird |
| *Buteo jamaicensi*<br>Red-tailed Hawk | *Picoides nutallii*<br>Nutall's Woodpecker |
| *Corvus brachyrhychos*<br>American Crow | *Pipilo crissalis*<br>California Towhee |
| *Colaptes auratus*<br>Northern Flicker | *Psaltriparus minimus*<br>Bushtit |
| *Corous corax*<br>Common Raven | *Bubo virginianus*<br>Great Horned Owl |
| *Dendroica coronata*<br>Yellow-rumped Warbler | |

## 3. *Mammals*

A variety of mammal species occur in the general site vicinity. Several larger species including mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), and bobcat (*Lynx rufus*) are expected to occur within the Walnut Creek corridor adjacent to the site. This is also the case with several small to medium-sized mammal species including Virginia opossum (*Didelphis virginiana*), common raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*). Though most of the site is fenced where it borders the stream corridor, each of these species has a potential to periodically forage on the site. It is also a possibility that some of these animals permanently reside within the bounds of the area. Common mammals either directly observed or for which diagnostic sign was detected during surveys of the site include California ground squirrel (*Spermophilus beecheyi*), desert cottontail (*Sylvilagus audubonii*), coyote (*Canis latrans*), and common raccoon (*Procyon lotor*). The California ground squirrel and desert cottontail were directly observed, whereas scat and tracks were left by coyote and raccoon. Additional small mammals that potentially occur on site include broad-footed mole (*Scapanus latimanus*), western harvest mouse (*Reithrodontomys megalotis*), deer mouse (*Peromyscus maniculatus*), California mouse (*Peromyscus californicus*), brush mouse (*Peromyscus boylii*), and California vole (*Microtus californicus*). Non-native mammal species including house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), and black rat (*R. rattus*) also commonly occur near agricultural and other areas subject to regular human disturbance and may, therefore, occur on site.

Another group of mammals having a potential to occur on the site is the bats. Common bat species with a potential to forage and temporarily roost on site include western pipistrelle (*Pipistrellus hesperus*), big brown bat (*Eptesicus fuscus*), hoary bat (*Lasiurus cinereus*), Mexican freetail bat (*Tadarida brasiliensis*), and California myotis (*Myotis californicus*). Bat species considered special-status also potentially occur in the vicinity and are discussed later in this section.

## d. Special-Status Biological Resources

The following discussion describes plant and wildlife species present or potentially occurring within and immediately adjacent to the site that have been afforded special recognition by federal, state, and/or local resource agencies or jurisdictions, or recognized resource conservation organizations. Special-status habitats (habitats or plant communities considered rare or unique or that support special-status species) and wildlife movement corridors are also discussed.

### *1. Special-Status Plant Species*

Plant species that are classified as state or federally endangered or threatened, proposed for listing as endangered or threatened, are candidate species for listing, or are considered federal species of concern are considered to be of special status. Plants included on Lists 1 and 2 of the California Native Plant Society (CNPS) inventory are also considered to be of special status.

All special-status plant species potentially occurring in the vicinity are listed in **Table 4.5-3**, Special-Status Plant Species Potentially Occurring on the Site. None of the species discussed in the table have a high potential of occurring on site due to lack of suitable habitat. One species, thread-leaved brodiaea (*Brodiaea filifolia*), has a low to moderate potential of occurring on the site. Thread-leaved brodiaea, a perennial herb with fibrous-coated corms (similar to bulbs), with tall stalks, narrow leaves and violet flowers typically occurs on gentle hillsides, valleys, and floodplains in mesic, southern needlegrass grassland and alkali grassland plant communities in association with clay, loamy sand, or alkaline silty clay soils. Thread leaved brodiaea is frequently intermixed with, or near a vernal pool (Federal Register, 1998). These conditions are not present on the subject property.

Following completion of general field surveys and a literature review, Impact Sciences conducted a focused plant survey on May 28, 2002 to determine the presence or absence of those sensitive species that have the potential to occur on-site. Special attention was given to detecting habitat suitable for thread-leaved brodiaea. The entire site was traversed on foot during the potential blooming season, and no

special-status plant species were identified on the site during the focused plant survey. Refer to **Appendix 4.5** of this Draft EIR for a copy of the focused survey letter report.

**Table 4.5-3**
**Special-Status Plant Species Potentially Occurring in the Vicinity**

| Scientific and Common Names | Status | | | Habitat | Growth Form (Blooming) | Occurrence Potential |
|---|---|---|---|---|---|---|
| | Federal | State | CNPS | | | |
| *Abronia villosa* var. *aurita*<br>Chaparral sand verbena | -- | -- | 1B | Chaparral, coastal sage scrub | AH<br>(January – August) | *Not expected;* Suitable habitat not present on site |
| *Aster greatae*<br>Greata's aster | -- | -- | 1B | Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland; mesic | PH<br>(June – October) | *Not expected;* Suitable habitat not present on site |
| *Astragalus brauntonii*<br>Braunton's milk-vetch | FE | -- | 1B | Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland | PH<br>(March – July) | *Not expected;* Suitable soils not present on site |
| *Atriplex coulteri*<br>Coulter's saltbush | -- | -- | 1B | Coastal bluff scrub, coastal scrub, valley and foothill grassland | PH<br>(March – October) | *Not expected;* Suitable soils not present on site |
| *Atriplex serenana* var. *davidsonii*<br>Davidson's saltscale | -- | -- | 1B | Coastal bluff scrub, coastal scrub; alkaline | AH<br>(April – October) | *Not expected;* Suitable soils not present on site |
| *Berberis nevinii*<br>Nevin's barberry | FE | SE | 1B | Chaparral, cismontane woodland, coastal scrub, riparian scrub | S (Evergreen)<br>(March – April) | *Not expected;* Suitable soils not present on site |
| *Brodiaea filifolia*<br>Thread-leaved brodiaea | FT | SE | 1B | Cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland, vernal pools and clay soils. | PH<br>(March – June) | *Low to Moderate Potential*: Recent sightings in nearby locations |
| *Calochortus clavatus* var. *gracilis*<br>Slender mariposa lily | -- | -- | 1B | Chaparral, coastal sage scrub, endemic to LA county. Shaded foothill canyons; often on grassy slopes | PH<br>(March – May) | *Not expected;* Suitable soils not present on site |

| Scientific and Common Names | Status | | | Habitat | Growth Form (Blooming) | Occurrence Potential |
|---|---|---|---|---|---|---|
| | Federal | State | CNPS | | | |
| *Calochortus plummerae*<br>Plummer's mariposa lily | SOC | None | 1B | Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland; granitic rocky soil | PH<br>(May – July) | *Not expected;* Last sighted in nearby location in 1949 |
| *Calochortus weedii* var. *intermedius*<br>Intermediate mariposa lily | -- | -- | 1B | Chaparral, coastal sage scrub, valley and foothill grassland; rocky | PH<br>(May – July) | *Not expected;* Not known to occur in area |
| *Centromadia pungens* ssp. *laevis* | [SOC] | -- | 1B | Chenopod scrub, meadows, playas, riparian woodland, valley and foothill grassland; alkaline | AH<br>(April – September) | *Not expected;* Suitable habitat not present on site |
| *Chorizanthe parryi* var. *parryi*<br>Parry's spineflower | -- | -- | 3 | Chaparral, coastal sage scrub; dry slopes and flats; sandy soils. | AH<br>(April – June) | *Not expected;* Suitable habitat not present on site |
| *Dodecahema leptoceras*<br>Slender-horned spineflower | FE | SE | 1B | Chaparral, coastal scrub (alluvial fan sage scrub), flood deposited terraces and washes | AH<br>(April – June) | *Not expected;* Suitable habitat not present on site |
| *Dudleya cymosa* ssp. *crebrifloia*<br>San Gabriel River dudleya | -- | -- | 1B | Chaparral, coastal scrub on granite cliffs and outcrops | PH<br>(April – July) | *Not expected;* Suitable habitat not present on site |
| *Dudleya densiflora*<br>San Gabriel Mountains dudleya | -- | -- | 1B | Chaparral, coastal scrub, lower montane coniferous forest; in crevices and on decomposed granite on cliffs and canyon walls. | PH<br>(March – July) | *Not expected;* Suitable habitat not present on site |
| *Dudleya multicaulis*<br>Many-stemmed dudleya | -- | -- | 1B | Chaparral, coastal sage scrub, valley and foothill grassland; in heavy, often clay soils or grassy slopes | PH<br>(April – July) | *Not expected;* Suitable habitat not present on site |
| *Eriastrum densifloium* ssp. *sanctorum*<br>Santa Ana River woollystar | FE | SE | 1B | Chaparral, coastal scrub (alluvial fan); sandy or gravelly | PH<br>(June – September) | *Not expected;* Suitable habitat not present on site |

| Scientific and Common Names | Status | | | Habitat | Growth Form (Blooming) | Occurrence Potential |
|---|---|---|---|---|---|---|
| | Federal | State | CNPS | | | |
| *Galium grande*<br>San Gabriel bedstraw | -- | -- | 1B | Cismontane woodland, chaparral, broadleafed upland forest, lower ontane coniferous forest; open chaparral and low, open oak forest; rocky slopes | S<br>(Deciduous)<br>(January – July) | *Not expected;* Suitable habitat not present on site |
| *Horkelia cuneata* ssp. *puberula*<br>Mesa horkelia | -- | -- | 1B | Chaparral, cismontane woodland, coastal scrub; sandy or gravelly | PH<br>(February – September) | *Not expected;* Suitable habitat not present on site |
| *Lasthenia glabrata* ssp. *coulteri*<br>Coulter's goldfields | [FSC] | None | 1B | Coastal salt marshes and swamps; playas; vernal pools | AH<br>(February-June) | *Not expected;* Suitable habitat not present on site |
| *Lepidium virginicum* var. *robinsonii*<br>Robinson's pepper-grass | -- | -- | 1B | Chaparral, coastal scrub; dry soils, shrubland. | AH<br>(January – July) | *Not expected;* Suitable habitat not present on site |
| *Lilium parryi*<br>Lemon lily | -- | -- | 1B | Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest | PH<br>(July – August) | *Not expected;* Suitable habitat not present on site |
| *Linanthus concinnus*<br>San Gabriel linanthus | [SOC] | -- | 1B | Lower montane coniferous forest, upper montane coniferous forest; dry rocky slopes often in jeffrey pine/canyon oak forest | AH<br>(April – July) | *Not expected;* Suitable habitat not present on site |
| *Monardella macrantha* ssp. *hallii*<br>Hall's monardella | -- | -- | 1B | Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland | PH<br>(June – August) | *Not expected;* Suitable habitat not present on site |
| *Navarretia prostrata*<br>Prostrate navarretia | -- | -- | 1B | Coastal scrub, valley and foothill grassland, (alkaline), vernal pools; mesic | AH<br>(April – July) | *Not expected;* Suitable habitat not present on site |
| *Oreonana vestita*<br>Woolly mountain-parsley | -- | -- | 1B | Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest; gravel or talus | PH<br>(May – September) | *Not expected;* Suitable habitat not present on site |

| Scientific and Common Names | Status | | | Habitat | Growth Form (Blooming) | Occurrence Potential |
|---|---|---|---|---|---|---|
| | Federal | State | CNPS | | | |
| *Orobanche valida* ssp. *valida*<br>Rock creek broomrape | -- | -- | 1B | Chaparral, pinyon juniper woodland; on slopes of loose decomposed granite | PH<br>(May – July) | *Not expected;* Suitable habitat not present on site |
| *Parnassia cirrata*<br>Fringed grass-of-parnassus | -- | -- | 1B | Lower montane coniferous forest, upper montane coniferous forest; mesic | PH<br>(August – September) | *Not expected;* Suitable habitat not present on site |
| *Phacelia stellaris*<br>Brand's Phacelia | -- | -- | 1B | Coastal dunes, coastal scrub | AH<br>(March – June) | *Not expected;* Suitable habitat not present on site |
| *Senecio aphanactis*<br>Rayless ragwort | -- | -- | 2 | Chaparral, cismontane woodland, coastal scrub; alkaline | AH<br>(January – April) | *Not expected;* Suitable habitat not present on site |
| *Sidalcea neomexicana*<br>Salt spring checkerbloom | -- | -- | 2 | Alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, mojavean desert scrub | PH<br>(March – June) | *Not expected;* Suitable habitat not present on site |
| *Thelypteris puberula* var. *sonorensis*<br>Sonoran maiden fern | -- | -- | 2 | Meadows and seeps along streams and seepage areas | PH<br>(January – September) | *Not expected;* Suitable habitat not present on site |

***Key:***

***Status:***
*Federal: FE = Federal Endangered Species; FPE = Federally Proposed Endangered; [FSC] = Federal Species of Concern* (a "term of art" not meant to imply *protection under the Endangered Species Act); SOC = Species of Concern*
*State: CE = State Endangered Species; CR = California Rare*
*CNPS: 1B = Plants rare and endangered in California and elsewhere*

***Growth Form:***
*AH = Annual Herb* *h = hemi-parasitic*
*PH = Perennial Herb;* *S = Shrub*

## 2. *Special-Status Plant Communities*

Plant communities that are considered special-status include habitats that support rare, threatened, or endangered plant or wildlife species or are locally diminishing (of special concern). In particular, the California Department of Fish and Game (CDFG) has ranked a number of natural communities of California according to priority for preservation. Those communities that have limited relict distribution are of highest priority. Communities, which the California Natural Diversity Database (CNDDB) has assigned the "very threatened and threatened" designation, are also considered special-status habitats.

Typically, formal procedures or requirements for preservation of these communities have not been implemented. Following is a description of the special-status plant community on or adjacent to the site.

**(a) Southern Coast Live Oak Riparian Forest-CDFG Threatened (S4)**

The riparian vegetation canopy that extends onto the site, bordering the majority of the southern portion is part of a southern coast live oak riparian forest, which borders Walnut Creek. It is regarded as an important component to riparian ecosystems due to the number of functions that it performs; nutrient removal, sediment stabilization, groundwater recharge, and its value as wildlife habitat for breeding, cover, foraging, and wildlife movement.

## e. Special-Status Wildlife Species

Special-status wildlife includes those species that are state- or federally-listed as Threatened or Endangered, have been proposed or are Candidates species for listing as Threatened or Endangered, or are considered state Species of Special Concern, or CDFG Special Animals. Species once considered sensitive under a classification system since discarded by USFWS have become known as federal species of concern. Though this is not a legal status and is not meant to imply protection under the Endangered Species Act, potential impacts to these species are still evaluated for the purposes of this report.

The potential for special-status wildlife species to occur on the project site is based on documented geographic distribution, suitability of on-site habitats, and occurrence records of species in the project vicinity. All species occurring or potentially occurring is listed below in **Table 4.5-4**. Those species observed or with a high potential of occurring are discussed in more detail below.

**Table 4.5-4**
**Special-Status Wildlife Species Potentially Occurring on the Project Site[1]**

| Scientific Name[2] | Common Name[2] | Status State/Fed | Occurrence Potential |
|---|---|---|---|
| **AMPHIBIANS** | | | |
| *Rana mucosa* | Mountain yellow-legged frog | ---/[FPE] | ***Not expected;*** suitable habitat not present on site |
| *Scaphiopus hammondii* | Western spadefoot | —/— | ***Not expected;*** extinct in Los Angeles county |
| *Taricha torosa torosa* | Coast range newt | CSC/--- | ***Not expected;*** no suitable habitat present on site |
| **REPTILES** | | | |
| *Clemmys marmorata pallida* | Southwestern pond turtle | CSC/[FSC] | ***Not expected;*** no suitable habitat present on site |
| *Phrynosoma coronatum blainvillei* | San Diego horned lizard | CSC/[FSC] | ***Not expected;*** no suitable habitat present on site |
| *Cnemidophorus tigris multiscutatus* | Coastal western whiptail | –/[FSC] | ***Not expected;*** no suitable habitat present on site |
| *Cnemidophorus hyperthrus* | Orange-throated whiptail | —/[FSC] | ***Not expected;*** no recent sightings in nearby locations |
| *Salvadora hexalepis virgultea* | Coast patch-nosed snake | CSC/[FSC] | ***Not expected;*** no suitable habitat present on site |
| *Thamnophis hammondii* | Two-striped garter snake | CSC/[FSC] | ***Moderate potential;*** suitable habitat present on site |
| *Crotalus ruber ruber* | Northern red-diamond rattlesnake | —/— | ***Not expected;*** no suitable habitat present on site |
| **BIRDS** | | | |
| *Aquila chrysaetos* | Golden eagle | —/— | ***Not expected;*** no suitable nesting or foraging habitat present on site |
| *Ardea herodias* | Great Blue Heron | —/— | ***Present:*** individual observed flying over site, no evidence of nesting on or adjacent to site |
| *Asio otus* | Long-eared owl | —/— | ***Low potential;*** limited habitat present; no recent records in area |
| *Athene cunicularia* | Burrowing owl | CSC/[FSC] | ***Low potential;*** limited habitat present; no recent records in area |
| *Campylorhynchus brunneicapillus couesi* | Coastal cactus wren | —/— | ***Not expected;*** no suitable nesting or foraging habitat present on site |
| *Coccyzus americanus occidentalis* | Western yellow-billed cuckoo | CE/-- | ***Not expected;*** no suitable nesting or foraging habitat present on site |
| *Cypseloides niger* | Black swift | —/— | ***Not expected;*** no suitable nesting or foraging habitat present on site |
| *Empidonax traillii* | Willow flycatcher | CE/— | ***Not expected;*** no suitable nesting or foraging habitat present on site |
| *Icteria virens* | Yellow-breasted chat | —/— | ***Not expected;*** no suitable nesting or foraging habitat present on site |

| Scientific Name[2] | Common Name[2] | Status Federal/State | Occurrence Potential |
|---|---|---|---|
| **BIRDS (continued)** | | | |
| *Vireo bellii pusillus* | Least Bell's vireo | CE/FE | ***Not expected;*** no suitable nesting or foraging habitat present on site |
| *Polioptila californica californica* | Coastal California gnatcatcher | ---/FT | ***Not expected;*** no suitable nesting or foraging habitat present on site |
| **MAMMALS** | | | |
| *Ovis canadensis nelsoni* | Nelson's bighorn sheep | ---/--- | ***Not expected;*** no suitable habitat present on site |
| *Myotis evotis* | Long-eared myotis | ---/[FSC] | ***Moderate potential;*** marginal foraging habitat, marginal roosting habitat |
| *Myotis ciliolabrum* | Small-footed myotis | ---/[FSC] | ***Moderate potential;*** marginal foraging habitat, marginal roosting habitat |
| *Myotis thysanodes* | Fringed myotis | ---/[FSC] | ***Moderate potential;*** marginal foraging habitat, marginal roosting habitat |
| *Myotis volans* | Long-legged myotis | [FSC] | ***Moderate potential;*** marginal foraging habitat, marginal roosting habitat |
| *Myotis yumanensis* | Yuma myotis | CSC /[FSC] | ***Moderate potential;*** marginal foraging habitat, marginal roosting habitat |
| *Euderma maculata* | Spotted bat | CSC /[FSC] | ***Low potential;*** marginal foraging habitat, no suitable roosting habitat |
| *Corynorhinus townsendii pallescens* | Pale big-eared bat | CSC /[FSC] | ***Moderate potential;*** suitable foraging habitat, marginal roosting habitat |
| *Antrozous pallidus* | Pallid bat | CSC /[FSC] | ***Low potential;*** marginal foraging habitat, no suitable roosting habitat |
| *Eumops perotis* | Western mastiff bat | CSC/[FSC] (ssp. *californicus)* | ***Not expected;*** no suitable habitat present on site |

*KEY:*

*[1] Field surveys conducted by Impact Sciences in October 2001 at the San Dimas site.*

*[2] Scientific and common names are American Fisheries Society (Jennings (1983) for amphibians and reptiles, American Ornithologist's Union (1983, plus supplements in 1985, 1987, 1989, and 1993) for birds, and Jones et al. (1992) for mammals.*

***Federal***
*FE: Federally-listed endangered species.*
*FT: Federally-listed threatened species*
*[FSC]: Federal Species of Concern*

*State*
*CE: State-listed endangered species*
*CT: State-listed threatened species*
*CSC: CDFG Species of Special Concern*

As shown, one great blue heron (*Ardea herodias*) was sighted flying over the site from one area of the stream to another. There are no records indicating that herons have nested within site boundaries. Great blue herons are colonial nesting species in areas away from human disturbance. They can travel considerable distances while foraging, especially outside of the nesting season. Although the great blue heron may periodically forage for small rodents and reptiles within the site boundaries, at the time of this survey, there was no evidence of nesting on or near the site. There are no other special-status species with a high potential to occur on site.

## f. General Description – Off Site, Adjacent River Habitat

In the vicinity of the site, the creek is a riverine, impounding, perennial stream bordered by southern coast live oak riparian forest whose canopy extends onto the southern portion of the site. At the eastern end, located off-site, there is a day use park where an equestrian trailhead begins and runs along the north side of the stream. This area is heavily used and vandalized. There is graffiti on two oak trees. The understory is heavily trampled due to off-trail use and consists mostly of non-native grasses and bare ground. Coast live oak (*Quercus agrifolia*) and some walnut (*Juglans californica*) and sycamore (*Platanus racemosa*) trees form the overstory, while the understory is composed of non-native grasses and forbs. The sparse midstory is composed of poison oak (*Toxicodendron diversilobum*), and a few willows (*Salix* sp.).

## g. Jurisdictional Resources

### *1. Federal Regulatory Framework*

Direct and indirect impacts on wetland and riparian areas may be subject to the jurisdiction of several state and federal agencies, including the U.S. Army Corps of Engineers (ACOE), the California Department of Fish and Game (CDFG), and the Los Angeles Regional Water Quality Control Board (RWQCB). Areas within or directly adjacent to the project site potentially under the jurisdiction of these agencies are briefly discussed below.

#### (a) Regulatory Framework/Regulatory Agencies

U.S. Army Corps of Engineers (ACOE)

Federal regulations of "Waters of the United States" stem from Section 10 of the Federal Rivers and Harbors Act of 1899, enacted to regulate activities within navigable waters. In 1972, the federal Clean

Water Act was passed. This Act regulates discharges into "Waters of the United States." Section 404 of this act regulates activities including fills placed into wetlands that are adjacent to navigable waters.

*Waters of the United States are defined in 33 CFR 328.3:*

*(a) Waters of the United States means*

- *All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
- *All interstate waters including interstate wetlands;*
- *All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:*
- *Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*
- *From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or*
- *Which are used or could be used for industrial purpose by industries in interstate commerce;*
- *All impoundments of waters otherwise defined as waters of the United Sates under the definition;*
- *Tributaries of waters identified in paragraphs (a) (1) through (4) of this section;*
- *The territorial seas;*
- *Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.*

ACOE jurisdiction in non-tidal waters typically extends to the ordinary high water mark (OHWM). The OHWM for intermittent streams, for example, can be determined by "the fluctuations of water as indicated by physical characteristics such as clear, natural lines impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR 328.3(e)). In arid areas of the southwest, the OHWM may occur at a lower level than where the typical physical indicators are present, due to unusually high flows, not occurring on a typical annual cycle. (Allen, et. al., 2001)

In 1976, the United States Army Corps of Engineers (ACOE) and the Environmental Protection Agency (EPA) adopted a regulatory definition, which states that wetlands are:

> *Those area that are inundated or saturated by surface or ground water 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. Wetlands generally include swamps, marshes, bogs, and similar areas." (33 Code of Federal Regulations 328.3)*

In 1987 the ACOE published the "Corps of Engineers Wetland Delineation Manual," which is used to determine the extent of their jurisdiction in wetlands. Subsequently, additional guidance documents have been issued by the ACOE, which further clarify the use of the 1987 Manual.

The U.S. Supreme Court, in a 2001 opinion, found that wetlands and waters that are isolated from navigable waters, but regulated through an administrative determination that they had involvement with interstate commerce on the basis of use of the "waters" by migratory birds, should not be considered jurisdictional "waters of the U.S." The Court held that the use by migratory birds did not constitute sufficient reason to regulate these wetlands. However, if waters can be shown to have other uses that constitute sufficient interstate commerce use, then the water might constitute a "water of the United States." This determination shall be made independently of procedures described in the Corps' manual. The Supreme Court decision was made based on the jurisdiction of the waters and not on the methods used to delineate waters. A site-specific evaluation of the ACOE's jurisdiction is generally required.

Most impacts to area delineated as waters of the U.S. including wetlands, if determined to be jurisdictional by the ACOE requires approval under the authority of the Clean Water Act and its implementing regulations.

**(b) Section 404 Permits**

The deposition of fill to an area delineated as "waters of the U.S." including wetlands, and determined to be under the ACOE jurisdiction require a permit or other approval by ACOE Regulatory Branch. Fill is broadly defined to include most materials (rock, soil, pilings, concrete, wood, incidental fallback of soil from earth-moving equipment, and in some cases additional water) that can be discharged into a water or wetland.

Permitting requirements for a project vary depending on the nature and extent of project-related impacts to jurisdictional resources. The Corps issues Individual and General Permits depending on the activity.

General Permits may be "Nationwide," "State-wide" or "Regional" in scope. Both Individual and General Permits require extensive review, as outlined in the 404(b)(1) guidelines. Both must go through an alternatives analysis, are subject to a public notice (and possibly public hearing), generally require mitigation, and may be conditioned by both the Corps' district and by the state, under their Section 401 certification process. General Permits are issued for categories of activities, that are considered to have *de minimus* impacts on the environment. General Permits are typically issued to the ACOE, with the provision that applicants with projects that meet the permit conditions, may be authorized to use the Corps' General Permit. According to the ACOE's March 2000 Nationwide Permits (NWPs), if project impacts are greater than 1/2 acre or impact 300 linear feet of a stream, the project will not qualify for coverage under the NWPs. All of the Nationwide Permits are due for reauthorization or revision in the year 2002.

Both Individual and General Permits require mitigation to minimize overall impacts to the environment. Similar mitigation ratios can be expected for both types of permits.

### 2. *California Department of Fish and Game (CDFG)*

The State of California regulates water resources under Sections 1600 to 1603 of the Fish and Game Code of California. Section 1603 mandates that:

> *" It is unlawful for any person to divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of that activity." CDFG will evaluate if such activity will substantially adversely affect fish or wildlife resources.*

CDFG considers most natural drainages to be streambeds unless it can be demonstrated otherwise. Streambeds are defined in the California State Register (Vol. 87, No. 9, Section 1.72) as follows:

> *"A stream is a body of water that follows at least periodically or intermittently through a bed or channel having banks and that support fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation."*

CDFG jurisdiction includes ephemeral, intermittent, and perennial watercourses, and is often extended to the limit of riparian habitats that are located contiguous to the water resource and that function as

part of the watercourse system. According to the Fish and Game Code of California Section 2785(c) of the Fish and Game Code of California states:

> *"Riparian habitat means lands which contain habitat which grows close to and which depends on soil moisture from a nearby freshwater source."*

**(a) Streambed Alteration Agreements**

Any project that impacts CDFG jurisdictional areas, including fills, vegetation removal, or bridging require a Section 1600 Streambed Alteration Agreement from CDFG, which typically requires about 30 to 60 days for processing. Much of the same information (project description, potential impacts, mitigation measures) necessary to apply for ACOE Section 404 permits is required for the Streambed Alteration Agreement application.

### *3. Regional Water Quality Control Board (RWQCB)*

Section 401 of the federal Clean Water Act authorizes the State of California to certify federal permits and licenses. The State's implementing regulations to conduct certifications are codified under the California Code of Regulations Title 23 Waters, Sections 3830 – 3869. Projects qualifying for an ACOE Section 404 permit must submit materials for review to the appropriate RWQCB and request a Section 401 certification. Much of the same information (project description, potential impacts, mitigation measures) necessary to apply for ACOE Section 404 and CDFG Section 1603 permits is required for the Section 401 Certification.

## h. Wildlife Movement Corridors

Wildlife movement corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation by human disturbance, or in the case of this site, by the encroachment of urban development. Movement corridors are important as the combination of topography and other natural factors, and urbanization fragments or separates large open space areas. This fragmentation of natural habitat creates isolated 'islands' of vegetation that may not provide sufficient area to accommodate sustainable populations and can adversely impact genetic and species diversity. Corridors may mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished by promoting genetic exchange with separate populations; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fire, flood, or disease) will result in

population or species extinction; and (3) serving as travel paths for individual animals as disperse from their home ranges in search of food, water, mates, and other needs.

Wildlife movement corridors are generally defined at the regional level as habitat linkages that connect otherwise large disjunct open space areas such as local, state, and national parks, forests, preserves, and wilderness areas. Within these habitat linkages, riparian strips, canyon bottoms, drainages, and even dirt roads and trails are often used to facilitate movement. However, within a large natural habitat block or patch, these features are generally not referred to as movement corridors but, rather, travel paths to facilitate movement within the habitat patch.

The project site is situated to the north of the riparian habitat associated with Walnut Creek, and is bordered by residential development to the north and west. Open space areas are located east and south of the project site. Walnut Creek does not connect to habitat to the west, thus a peninsula of open space exists rather than an east-west corridor. Walnut Creek becomes a trapezoidal concrete channel to the west less than a mile from the site. To the east, Highways 210 and 57, serve as formidable barriers for movement of most species, and may potentially block access to Bonelli Regional County Park, a large open space area. Primary wildlife movement opportunities in the vicinity of the project site appear to be located due south of the site along Walnut Creek. However, the open space area to the south is also limited by development, but may act as a link in a series of open space parks, riparian habitats, and undeveloped portions of campus settings for birds and possibly bats that are using the open space for resting, feeding, and breeding sites.

## i. Consistency with Significant Ecological Areas

The County of Los Angeles General Plan initially established 62 Significant Ecological Areas (SEAs) to delineate and preserve areas with sensitive environmental conditions and/or resources within the County. The original 62 SEAs recognized were identified and surveyed in 1976. Each SEA was originally delineated on a USGS topographic map using aerial photographs, topographic features (i.e., top of slope, ridgeline, etc.), field studies, and historic records. The resultant SEA boundary maps were general in nature and broadly outlined the biotic resources to be included in each area. However, more detailed written descriptions were provided that defined reasons why areas were defined as SEAs. In general, SEAs under County jurisdiction have been reduced in number through annexation of unincorporated County areas to individual cities. The County currently regulates 29 SEAs which are part of the Special Management Areas Policy Map of the County. Two of which are located in the City of San Dimas (SEA 25 & 26). The Los Angeles County General Plan allows development within SEAs as long as the development is "highly compatible" with the natural resource being protected.

Comments have asserted that the Draft EIR should evaluate consistency with Los Angeles County's draft *General Plan* Update, including proposed changes to SEA policies and boundaries. The County's draft *General Plan* Update will likely include proposed changes to SEA policies and boundaries that could incorporate the Walnut Creek, which is not currently part of an SEA, into a new proposed SEA.

The County's draft *General Plan* Update process began in July 1999, and is expected to be completed when the Board of Supervisors adopts an Updated General Plan, including updates to the Conservation/Open Space Element relating to SEAs and SEA boundaries. The County's Department of Regional Planning staff is currently compiling and summarizing public comments received on the draft *General Plan* Update. These comments will be used by staff to recommend various modifications to existing *General Plan* policies governing development, and to modify the proposed SEA policies and boundaries recommended by the County's consultants. These staff recommendations are not yet complete, and will be the subject of comment in future public workshops and subsequent public hearings before the Regional Planning Commission and the Board of Supervisors. Additional public workshops and hearings are anticipated in the spring of calendar year 2002. Revisions to the draft *General Plan* Update, including SEA policies and boundaries, are contemplated at all stages of the review process. Revisions to the staff's draft recommendations will be made, where appropriate, and a new draft of staff recommendations would be publicly circulated prior to public hearings. Both SEA boundary changes and regulation revisions are envisioned by staff at this time.

At this time, the Board of Supervisors may take final action on the proposed *General Plan* Update in calendar year 2003. However, there is no timeline or deadline associated with the completion of the proposed SEA updates because final action is dependent upon public hearings before the Commission and Board of Supervisors in conjunction with the draft *General Plan* Update.

At this stage, there is a draft Biological Resources Assessment for proposed changes to the existing SEA Nos. 22, 45 and 62 to form the San Gabriel Canyon SEA. This draft assessment was prepared by the County's consultants based on their experience, review of previously biological studies and field investigations. It is anticipated that County staff will use the draft assessment as baseline background information. The draft assessment has not been approved or adopted by the County, and it is not intended to be treated as an approved/adopted document. Instead, the data contained in the draft assessment will be maintained by the County staff and revised as new data is acquired during the development application process.

Under CEQA, an EIR is required to discuss "any inconsistencies between the proposed project and applicable general plans and regional plans." CEQA *Guidelines* §15125(d). When a proposed project is

compared with an adopted plan, the comparison must be based on "the existing physical conditions at the time the notice of preparation is published[.]" CEQA *Guidelines* §15125(e). It is well-settled that CEQA does not require a comparison, or consistency analysis, with draft general plans or regional plans.

The issue of consistency with draft or proposed regional plans was addressed in *Chaparral Greens v. City of Chula Vista* (1996) 50 Cal.App.4th 1134. Relying on CEQA *Guidelines* §15125, opponents of a residential housing development challenged the adequacy of the EIR for the project on the grounds that it failed to analyze the project's impact on "the regional goals for preservation of multiple species" set forth in two draft regional multiple species conservation plans. *Id.* at 1144. The project opponents also asserted that the EIR improperly failed to discuss or analyze the project's impact on the regional multiple species planning efforts in violation of CEQA. *Id.*

In rejecting these claims, the court first noted that the relevant issue was whether CEQA required the EIR to consider the draft regional plans, not whether the court believed it would have been advisable for the EIR to do so. *Id.* at 1145. The court also stated: "Agencies are not required to engage in 'sheer speculation' as to future environmental consequences of the project." *Id.*, citing *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 738. Applying these precepts to the case before it, the court concluded: "[T]here is no express legislative or regulatory requirement under CEQA that a public agency speculate as to or rely on proposed or draft regional plans in evaluating a project." *Id.*

The conclusions set forth in the *Chaparral Greens* decision apply to the County's Draft *General Plan* SEA Update. Until the draft SEA Update is approved and adopted, there is no basis for determining what the document's final objectives, policies and guidelines will be. The completion date for the SEA Update is uncertain and, until the document is final, it will continue to undergo review and revision. Consequently, a comparison of the project against the Draft SEA Update would involve precisely the speculation criticized by the court in the *Chaparral Greens* decision. Because the results of such a comparison would be uncertain and unreliable, such a process would likely be significant and costly. For these reasons, the City of San Dimas concludes that a comparison or consistency analysis between the project and the Draft SEA Update is neither legally defensible at this time nor required under CEQA.

## 4.5.4 PROJECT IMPACTS

### a. Significance Threshold Criteria

Significant impacts of proposed development on the project site were determined from criteria included in the CEQA *Guidelines*. As stated in Appendix G (Environmental Checklist) of the CEQA *Guidelines* (as revised January 1, 2001), a project could have a significant impact on the environment 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 Game 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 Game 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; or
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Section 15065(a) of the CEQA *Guidelines* also states that a project may have a significant effect on the environment when the project has the potential to:

- substantially degrade the quality of the environment;
- substantially reduce the habitat of a fish or wildlife species;
- cause a fish or wildlife population to drop below self-sustaining levels;
- threaten to eliminate a plant or animal community; or
- reduce the number or restrict the range of an endangered, rare, or threatened species.

An evaluation of whether an impact on biological resources would be substantial must consider both the resources itself and how that resource fits into a regional or local context. Impacts are sometimes locally important but not significant according to CEQA, because although they would result in an adverse

alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide, or region-wide, basis.

For the purposes of this impact analysis, the terms "sensitive" and "special-status species" refer to the following: any plant or animal species listed by CDFG or USFWS as a threatened or endangered species, proposed for listing as threatened or endangered, or considered as a candidate for listing as threatened or endangered; those species listed by the USFWS as a federal Species of Concern; those species considered by CDFG as a state Species of Special Concern or as a Fully Protected species; and any plants listed by the CNPS as a List 1 and List 2 species, or to any species otherwise considered rare, threatened, or endangered as defined by Section 15380 of the CEQA *Guidelines*. CNPS List 1 and List 2 species are included in this impact analysis because the CNPS is a recognized authority by CDFG on the status of rare plant populations in California and because the criteria for plant species to be placed on List 1 and List 2 are similar to criteria that CDFG and USFWS use for species considered as candidates for listing or that are already listed as Threatened or Endangered.

## b. Impact Methodology

Direct impacts of a proposed project on biological resources can take several forms (such as the direct loss or mortality of individual plants and animals as a result of grading and construction activities), but typically involve the loss or modification of natural habitat (i.e., plant communities or other naturally occurring areas) which in turn, directly affect plant and wildlife species dependent upon that habitat.

The level of significance of potential direct and indirect impacts on biological resources is determined by an evaluation of the overall biological value of a habitat area and/or a specific resource (described below) with respect to significance threshold criteria (described above under Significance Threshold Criteria). The relative value of on-site habitats is measured by such factors as overall parcel size; disturbance history; the surrounding environment; biological diversity and abundance; importance to particular plant and wildlife species; the presence of special-status species; and sensitivity status with local, state, and/or federal agencies. The value of an area in terms of its use as a wildlife movement corridor is determined by such factors as habitat quality, linkage to open space areas, potential or known use by wildlife species, corridor size and width, and relative importance.

## c. Direct Impacts

**Table 4.5-5** provides a summary these of impacts with regard to acreage. As shown, the project would result in the direct loss of 8.8 acres of plant communities consisting primarily of common species typically

associated with ruderal areas. Approximately 0.2 acres of Coast Live Oak Woodland would be impacted, along with a similar amount of southern Coast Live Oak Riparian Forest. Each is discussed more fully below.

**Table 4.5-5**
**Proposed Project Impacts to Vegetation Communities on the Project Site**

| Vegetation Type | Total Acres Present | Acres Directly Impacted |
|---|---|---|
| Ruderal | 11.7 | 8 |
| Coast Live Oak Woodland | 1 | 0.2 |
| Southern Coast Live Oak Riparian Forest | 1.5 | 0.2 |
| Tree Windrows | 0.8 | 0.4 |
| **TOTALS** | **15.0*** | **8.8** |

** Remaining 3 acres of the site are developed.*

## 1. *Common Plant Communities*

The following text discusses project impacts to common vegetation communities on the site. Impacts to communities considered sensitive by resource agencies are discussed later in this section.

### (a) Ruderal

Approximately 11.7 acres of ruderal areas on site will be directly impacted by implementation of the project. Although no surveys have been conducted during the appropriate blooming period, the literature search and field surveys suggested no suitable habitat or occurrences exist in the area, therefore, no special-status plant species are expected to be lost with project development. Although open disturbed areas do provide a seed base for small rodents and birds, and ultimately foraging area for raptors, this habitat is generally considered to be of low biological value as it provides little to no cover or nesting habitat. The loss of 8 acres of disturbed non-native vegetation would not substantially reduce the populations of native wildlife or their habitats, and therefore, would not be considered a significant impact.

**(b) Coast Live Oak Woodland**

Approximately 0.2 acre of coast live oak woodland will be directly impacted by implementation of the project. The City of San Dimas has an ordinance that protects oak trees with a minimum trunk diameter of 8 inches at 36 inches above grade. Scattered oaks throughout the site will also be impacted. Because these trees are under the jurisdiction of the City's tree ordinance, they require permits before they can be impacted. Any impact to these trees will be considered significant prior to implementation of mitigation conditioned as part of the permit.

**(c) Southern Coast Live Oak Riparian Forest**

Approximately 0.2 acre of southern coast live oak riparian woodland will be directly impacted by implementation of the project. This plant community is considered rare by CDFG, and impacts are regulated by section 1603 of the Fish and Game code of California. Any impact to the area within the canopy of these trees will be considered significant. This impact will be discussed in more detail, under the heading of Jurisdictional Resources in the Special-Status Resources portion of this impact section (4.5.4(d)).

**(d) Tree Windrows**

Approximately 0.8 acre of tree windrows will be impacted by implementation of the project. The city of San Dimas has an ordinance that protects trees, other than oaks, with a minimum trunk diameter of 10 inches at 36 inches above grade. Because several of these trees are under the jurisdiction of the City's tree ordinance, impacts to the trees will be considered a significant impact prior to implementation of mitigation conditioned as part of the tree permit.

**(e) Development**

The remaining area of the site is considered existing development. These areas include existing structures, areas associated with those existing structures, paved roads, parking areas, and any other paved or 'hardscape' areas that have been dramatically altered from their natural condition. This area includes landscaped ornamentals, which may provide limited habitat for some bird species. The existing development on site, approximately 3 acres, is of low to no value as biological habitat. Impacts to this area will not be considered a biological impact.

### 2. *Common Wildlife Resources*

The loss of habitat, and construction and grading activities associated with the proposed project would directly disturb wildlife on the project site. Most species are expected to be displaced to adjacent areas, provided suitable habitat is available at the onset of construction activity. However, wildlife that emigrates from the site is vulnerable to mortality by predation and unsuccessful competition for food and territory. Species of low mobility (particularly burrowing mammals, amphibians, and reptiles) could be eliminated during site preparation and construction. Home ranges of locally occurring larger mammals, such as coyote and bobcat, will be reduced and can result in competition with conspecific animals which will result in territory shifts and potential loss of a relatively few individual animals in the immediate vicinity of the project site.

Because of the disturbed nature of habitat within the boundaries, wildlife species diversity is expected to be relatively low. Total numbers of animal populations are expected to be low, as on-site habitats do not provide sufficient resources to support large populations. As such, project implementation would not reduce local or regional populations to below self-sustaining levels or otherwise substantially affect common wildlife species populations on or adjacent to the project site. Consequently, no significant impacts to common wildlife species are expected to occur.

However, some bird species, including woodpeckers noted in the NOP comments but particularly raptors, could be adversely affected as a result of the loss of nesting habitat (trees and shrubs) or as a result of construction or other site-preparation activities. Such activities could result in the direct loss of active nests or the abandonment of active nests by adult birds. Depending on the number and extent of bird nests on the site that may be disturbed or removed, the loss of active bird nests would be a potentially significant impact. Bird nests with eggs or young are protected under the Migratory Bird Treaty Act and the California Fish and Game Code. The loss of active nests as a result of construction or other site-preparation activities may be considered a potentially significant impact. As such, further surveys should be conducted during the appropriate time period for active nests.

## d. Impacts to Sensitive Biological Resources

### 1. *Special-Status Plants*

No special-status plants were detected on site during initial site survey or during the focused plant survey that followed. The majority of the site is highly impacted by several dirt roads that appear to be used by off-road vehicles, and parts of the southeastern portion of the site have been impacted due to the

site being used as a dumping area for refuse. The western portion of the site includes residential development, and the areas surrounding the development have been disked, presumably for annual fuel load reduction.

As indicated earlier on **Table 4.5.3**, the property is not considered suitable habitat for the vast majority of special status plant species that potentially occur in the project area. The only special status plant that has a low to moderate potential to occur on-site is the thread-leaved brodiaea. This plant is typically found in Cismontane woodland, coastal scrub, and foothill grasslands with vernal pools in clay soils. Such conditions are not found on the site, which is underlain by Sedimentary bedrock of the Puente Formation. These rocks consist of well bedded, diatomaceous siltstone. The siltstone is overlain in some areas by recent alluvium, older alluvium and/or terrace deposits. Hence, it is not expected that soils present on site could support thread-leaved brodiaea nor was any such plant species detected during focused surveys conducted during the blooming period for this plant. Mesic conditions required by thread-leaved brodiaea and evidence of vernal pools were not present on site. Given the above, project related impacts would not be expected to substantially reduce any local or regional populations of special-status plant species to below sustainable levels.

### 2. *Special-Status Wildlife*

One great blue heron was sighted within the boundaries of the site. The special status afforded this species focuses on their nesting habitat. Herons require clusters of tall trees for colonial nesting. Undisturbed rookery habitat for this species is in significant decline in California. As such, CDFG has been tasked with ensuring the preservation of suitable nesting habitat for this species wherever possible. There are no records indicating that herons have nested within the site boundaries, there is no evidence of nesting on or near the site. Therefore, development of this site will not substantially affect populations of this species.

There are no special-status wildlife species with a high potential of occurring on the site. Therefore, impacts to special-status wildlife are not considered significant.

### 3. *Jurisdictional Resources*

The California Department of Fish and Game has regulatory authority over a variety of water bodies, pursuant to Section 1600 – 1603 of the Fish and Game Code of California. Jurisdictional waterbodies include rivers, streams, or lakes, designated by the department "in which there is at any time an existing fish or wildlife resource, or from which these resources derive benefit." CDFG does not take jurisdiction

over all water bodies, but has some discretion on the extent of their jurisdiction. The riparian vegetation that occurs along Walnut Creek extends onto the southern part of the site. While open space is designated along most of the southern part of the project site, the project footprint extends into approximately a 0.2 acre part of the riparian corridor. Five lots and a portion of the cul-de-sac extend into the riparian canopy.

A Jurisdictional Determination (JD) has not been made for the extent of either US Army Corp of Engineers (ACOE), or California Department of Fish and Game (CDFG) jurisdictional area on the site at this time. While the ACOE jurisdiction does not extend onto the project site, a JD for CDFG will be required. A Streambed Alternation Agreement will be required for impacts occurring to the CDFG jurisdictional area.

## e. Wildlife Movement Corridors

Because the project site is not part of a regional habitat linkage that connects large open space areas in the region, and is likely not used by local wildlife for more than local movement, potential adverse impacts on wildlife movement corridors are not significant.

## f. Indirect Impacts

Indirect impacts on biological resources would occur to those habitat areas surrounding the development envelope, as well as to remaining habitat areas within the proposed development area, both during and after the completion of the proposed project. Construction and grading activities associated with project implementation that are proposed adjacent to the stream corridor could indirectly impact vegetation and wildlife within portions of the site. These activities can result in displacement and disturbance of certain species of wildlife from noise and human activity that could result in possible nest or den abandonment during the breeding season of common or special-status species. Excessive dust accumulation on vegetation from construction vehicles could result in the degradation or loss of some plant species. Though most of the area that will be directly impacted is currently in a degraded condition, the adjacent creek habitat is less so. Therefore, construction and grading activities could degrade biological resources within the adjacent creek habitat and possibly reduce the number of locally occurring wildlife species. These impacts, while temporary, are considered potentially significant.

On a more permanent basis, indirect impacts on biological resources as a result of project development on the site can include the following: (1) increased lighting and glare-effects on wildlife species in remaining and adjacent open space areas; (2) potential increase in pesticides, herbicides, and pollutants into Walnut

Creek and into groundwater as a result of stormwater runoff; (3) an increase in non-native plant species that are adapted to more urban environments that can out compete native species for available resources, thus reducing the distribution and population of native species; and (4) increases in human activity and domestic animal presence that can disturb natural habitat areas and displace wildlife populations.

The increased elevations (i.e., the bank) at the southern boundary serve as a natural barrier to effects from increased lighting along Walnut Creek. Nighttime illumination is known to impact some species of animals in natural areas. Nighttime light can disturb resting and foraging behavior and can potentially alter breeding cycles and nesting behavior. Project implementation would increase the number of elevated nighttime light sources on the site that illuminate the creek corridor. However, the project is subject to development regulations contained in Specific Plan No. 4 that prohibits spot, flood, or decorative lighting from intruding into the Walnut Creek Area. Compliance with this standard will ensure that no significant light impact occurs.

Changing upland areas, even ruderal fields, from porous substrates to urban "hardscape" may alter water table recharge values, cause greater amounts of direct runoff to enter the channels on site, convey chemical pollutants directly into the aquatic habitat, and lower natural nutrient inflows. Impacts resulting from these changes are not considered significant in this case because water levels in Walnut Creek are influenced primarily by release of water at Puddingstone Reservoir and the loss of 18 acres of undeveloped land within the seven square mile watershed of Walnut Creek would not alter the water table by influencing the rate of groundwater recharge.

After project completion, a number of non-native plant species that are more adapted to urban environments are expected to increase in population and potentially displace native species because of their ability to compete more effectively for resources. It is unknown to what degree non-native plant species will displace native species remaining on the project site or in adjacent habitat areas. Plants typical of an urban environment already occur to some degree, due to the presence of development in the immediate vicinity.

However, because non-native and exotic plants are commonly included in landscaping plans of both common areas and on private lots of new development projects, it can be reasonably concluded that project development could result in identifiable increases in non-native and/or exotic plant populations. In particular, these plant species are often more adapted to a wider variety of growing conditions and can out-compete native plant populations for available nutrients, prime growing locations, and other resources. Because these plants reproduce so quickly and in such large amounts, these species can quickly replace many native plant populations, resulting in lower species diversity, loss of suitable

breeding and/or nesting habitat for common and special-status wildlife species, changes to the adjacent riparian ecosystem, and overall reductions in habitat values. Therefore, the impact on native biological resources of the adjacent riparian corridors a result of increased non-native plant species is considered a potentially significant impact.

Increased use of the site by domestic animals can disturb nesting or roosting sites and disrupt the normal foraging activities of wildlife in adjacent habitat areas. Should this activity occur frequently, and over a long time period, these disturbances may have a long-term effect on the behavior of both common and special-status animals and can result in their extirpation from the area. Feral cats, as well as house cats, can cause substantial damage to the species composition of natural areas through predation.

## 4.5.5 MITIGATION MEASURES

### a. Legal/Regulatory Requirements

4.5-1 Prior to the issuance of a grading permit for the project, the applicant shall obtain a Tree Removal Permit as required by SDMC Section 18.162.San Dimas Municipal Code (SDMC) Section 18.162.060 requires approval to remove or relocate mature significant trees. Approval is subject to conditions as deemed necessary to implement the provisions of Chapter 18.162 Tree Preservation.

4.5-2 Prior to initiating clearing or disturbance to the Walnut Creek Riparian Corridor, the CDFG shall be contacted to determine if they will require a Streambed Alteration Agreement. If required, a Streambed Alteration Agreement shall be obtained from the CDFG prior to the commencement of clearing or grading work on the site.

### b. Mitigation Measures Recommended by this EIR

#### *Tree Removal*

4.5-3 The applicant shall obtain the services of a professional arborist experienced in the removal and transplant of mature significant trees. Any trees slated for removal shall be appropriately boxed and moved in areas on site that support similar conditions (i.e., soil type and aspect) where they will be replanted.

4.5-4 All saved trees within the proposed grading limits shall be temporarily fenced at their driplines prior to commencement of grading activities. No equipment storage, debris drop, parking, etc., shall occur within the oak tree driplines during construction. Fencing shall remain during all phases of construction and shall not be moved or removed without knowledge of the consulting qualified arborist and approved by the City Planning Department.

4.5-5 Any brush clearance within the oak tree driplines shall be completed by hand-work only.

4.5-6 All dead wood removal and/or pruning shall be accomplished by a qualified arborist and only after approval by the City's Planning Department. Pruning wounds shall not be sealed unless required by the City. Climbing "gaffs" shall not be used by any tree climber (except to reach an injured climber or when removing a tree).

4.5-7 Watering and fertilization requirements shall be determined by the consulting qualified arborist. Native oaks are in a dormant state during the summer months and do not require regular or constant watering or fertilization. Some irrigation is expected to be necessary to initiate growth of container stock. Irrigation of a design acceptable by a qualified arborist and approved by the City Planning Department, shall be established and maintained until such a time that the arborist has determined that it is no longer necessary for the survival of the tree.

4.5-8 Specific monitoring requirements and success criteria shall be developed by a qualified arborist and approved by the City Planning Department. However, at a minimum, criteria shall require 80 percent survival of mature trees and 80 percent survival of supplemental plantings at the conclusion of the monitoring period. Contingency actions shall include supplemental plantings until 80 percent survival is achieved.

### *Common and Special-Status Bird Nests*

4.5-9 Prior to issuance of a grading permit, and within 15 days prior to construction activities that would occur during the nesting/breeding season of native bird species potentially nesting on-site (February through July), the applicant shall retain the services of a qualified biologist to conduct field surveys. The biologist must, at a minimum, have a degree in biology or related field, and five years field experience in identification of flora and fauna in the southern California region, and be recognized as qualified by appropriate regulatory agencies. The biologist shall conduct on-site surveys to determine if active nests of special-status and common bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code, are present within 50 feet of the construction zone. If active nests are found on or immediately adjacent to the site, a

minimum 50-foot buffer area (150 feet for raptors) shall be temporarily fenced around the nest site. No construction activities shall be permitted within this nest zone until the young birds have fledged, as determined by the biologist.

### *Construction and Grading Activities*

4.5-10 The applicant will obtain a City-approved biological monitor to coordinate and periodically monitor construction activity to ensure that incidental construction impacts on biological resources are avoided or minimized. The monitor will be given authorization to stop specific construction activities if violations of mitigation measures or any local, state, or federal laws are suspected. Responsibilities of the monitor include:

- Review/stake the construction limits in the field with the contractor and the City inspector in accordance with the final approved grading plan. The limits shall clearly delineate the location of oak trees, jurisdictional drainages, and the preserved natural open space areas on-site.
- The biological inspector shall conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to within the grading limit and outside of the preserved areas. The inspector should also discuss staging/storage areas for construction equipment and materials. The biological inspector shall investigate all on-site storage areas to minimize impacts to biological resources. Construction access, parking, storage of equipment and materials shall not occur within 25 feet of the dripline of oak trees.

4.5-11 The construction contractor will ensure that temporary chain-link fencing is installed at the limit of grading near sensitive resources identified by the biological monitor. The fencing will remain in place until grading and excavation work is complete, and will be removed under the direction of the biological inspector. Prior to fence installation, the fencing contractor will be instructed to avoid driving on or immediately adjacent to sensitive biological resources, including remaining trees, remaining jurisdictional resources, and remaining natural habitats.

4.5-12 Where necessary, erosion control measures shall be constructed on the slopes below grading areas to prevent erosion and deposition of materials into areas with remaining oak trees during grading and construction activities. These erosion control measures will also prevent silts from entering drainages. These measures shall include the use of temporary soil covers, such as hydro-seeding with native plants, mulch/binder and erosion control blankets to protect exposed soil from wind and rain; and/or the installation of silt fencing, sandbags, hay/straw bales (excluding rice straw), berms, and dikes to protect storm drain inlets and drainages. The biological inspector shall periodically examine the erosion control devices to ensure that they are

working correctly. The construction contractor shall be responsible for repairing any erosion control devices should they fail to work correctly.

4.5-13 No refueling, changing of oil or other fluids shall occur on the project site. Vehicles carrying supplies, such as concrete, shall not be allowed to empty, clean out, or otherwise place materials into the on-site open space areas or natural areas located immediately adjacent to the site. If oil or other fluids are accidentally spilled within the open space areas of the site, the contaminated soil will be immediately removed from the area and disposed of in a legally acceptable manner.

4.5-14 Any brush clearance within the dripline of trees shall be completed by hand-tools.

4.5-15 Where possible, irrigation devices shall be planned to be installed outside of the dripline of oaks. Irrigation shall be designed to avoid wetting areas within the dripline of oaks during operation of the system.

4.5-16 Unavoidable surface runoff shall be directed away from remaining trees or will be gathered outside the dripline by a swale or other means. No water shall be allowed to pond or collect within the dripline of any oak.

### *Post-Construction Conditions*

4.5-17 Upon completion of construction, the contractor shall restore any haul roads, access roads, staging areas, or graded areas that are outside of approved grading limits. Restoration shall be done in consultation with the restoration biologist.

4.5-18 Following construction activities, the construction contractor shall collect all trash and debris from within the open space areas of the site and dispose of this trash and debris off site in a legal manner.

4.5-19 The construction contractor shall remove the temporary chain-link fencing following grading and construction activities.

4.5-20 Erosion control devices, such as silt fencing, sandbags, and hay/straw bales, that were installed to protect the open space areas during construction, shall be removed at the direction of the biological monitor.

### *Human and Non-Native Animal Presence*

4.5-21 Fencing of sufficient height and design shall be constructed between the edge of the fuel modification zone and the natural areas to restrict humans and domestic animals from entering open space habitat areas. Final fence design shall be approved by CDFG and the City Planning Department. Fencing will not be placed within the jurisdictional areas of the site.

4.5-22 Human access into the open space areas shall only occur in designated locations (i.e., existing and future trails). All motorized vehicles are prohibited from entering the preserved natural open space areas. Prohibitions against human, domestic animal, and motorized vehicle use in preserved natural open space areas shall be established by ordinance and/or the covenants conditions and restrictions (CC&R's) recorded with the City Planning Department. The CC&R's shall also state that tree houses shall not be constructed in remaining trees within the natural open space areas of the site.

### *Non-Native Plant Species*

4.5-23 The plants listed in **Table 4.5-6** shall not be planted within the common landscaped areas of the proposed site plan. This list shall also be distributed to new homeowners and included within the CC&Rs. The landscaping plans within common areas of the project shall be reviewed by a qualified botanist who shall recommend appropriate provisions to prevent other invasive plant species from colonizing remaining natural areas. These provisions may include the following: (a) review and screening of proposed plant palette and planting plans to identify and avoid the use of invasive species; (b) weed removal during the initial planting of landscaped areas; and (c) the monitoring for and removal of weeds and other invasive plant species as part of ongoing landscape maintenance activities. The frequency and method of monitoring for invasive species shall be determined by a qualified botanist.

**Table 4.5-6**
**Ornamentals to be Prohibited from the Project Site**

| Scientific Name | Common Name |
|---|---|
| *Acacia* spp. | Acacia |
| *Ailanthus altissima* | Tree of Heaven |
| *Arundo donax* | Giant cane, giant reeds |
| *Bromus tectorum* | Cheat grass |
| *Carpobrotus* sp. | Ice plant |
| *Chrysanthemum coronarium* | Annual chrysanthemum |
| *Cortaderia* sp. | Pampas grass |
| *Cytisus* sp. | Scotch, Spanish, and Portuguese Broom |
| *Eucalyptus* sp. | Eucalyptus, Gum trees |
| *Foeniculum vulgare* | Fennel |
| *Genista monspessulana* | French broom |
| *Hedera helix* | English ivy |
| *Lepidium latifolium* | Perennial pepperweed |
| *Lobularia maritima* | Sweet alyssum |
| *Myoporum laetum* | Myoporum |
| *Tropaeolum majus* | Nasturtium |
| *Pennisetum clandestinum* | Kikuyu grass |
| *Pennisetum setaceum* | Fountain grass |
| *Phalaris aquatica* | Harding grass |
| *Rhus lancea* | African sumac |
| *Ricinus communis* | Castor bean |
| *Rubus discolor* | Himalayan blackberry |
| *Schinus* sp. | Pepper tree |
| *Senecio mikanioides* | German-ivy |
| *Taeniatherum caput-medusae* | Medusa-head |
| *Tamarix* sp. | Tamarisk |
| *Vinca minor* | Periwinkle |

## 4.5.6 CUMULATIVE IMPACTS

A number of development projects were identified within the general area. Each individual project is subject to its own environmental review and would be conditioned to mitigate impacts. However, implementation of cumulative development would result in the incremental conversion of open space areas to "built environment." Those projects that occur within developed areas would not affect local or regional biological resources; however, projects located in natural areas would result in the removal of native vegetation and displacement/destruction of resident wildlife. The cumulative effects would

include both direct and indirect biological impacts as discussed above, and would result in a general loss of biological diversity in the region.

As previously discussed, each of the vegetation communities on the project site provides habitat for a variety of common wildlife species although no special-status species are known to occur on the property. When viewed individually, the loss of each of the vegetation communities in and of themselves on the project site may not represent a substantial loss of wildlife habitat. However, most wildlife species depend on a variety of habitat types to meet various ecological and life history requirements (i.e., food, shelter, nesting). Given that much of the site has been previously disturbed or dominated by non-native grasses, and the project site plan retains the majority of the site in permanent open space, the project does not considerably contribute to a cumulative net loss of open area so the project would not represents a significant loss of habitat.

## 4.5.7 UNAVOIDABLE SIGNIFICANT IMPACTS

No unavoidable significant impacts are expected to occur on this site to the natural resources with the implementation of the mitigation measures.