5.3 BIOLOGICAL RESOURCES

This section of DEIR evaluates the potential for implementation of the Sierra Madre General Plan Update (General Plan Update) to impact biological resources in the city. The analysis in this section is based in part on the following technical report, which is incorporated by reference in this DEIR:

- City of Sierra Madre General Plan Update Technical Background Report, PlaceWorks, September 2012.

5.3.1 Environmental Setting

5.3.1.1 REGULATORY SETTING

Federal, state, and local laws, regulations, plans, or guidelines that are potentially applicable to the General Plan Update are summarized below.

Federal and State Regulations

Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973, as amended, was promulgated to protect and conserve any species of plant or animal that is endangered or threatened with extinction and the habitats in which these species are found. "Take" of endangered species is prohibited under Section 9 of the FESA. "Take," as defined under the FESA, means to "harass, harm, pursue, hunt, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." Section 7 of the FESA requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) on proposed federal actions, which may affect any endangered, threatened or proposed (for listing) species or critical habitat that may support the species. Section 4(a) of the FESA requires that critical habitat be designated by the USFWS "to the maximum extent prudent and determinable, at the time a species is determined to be endangered or threatened." Critical habitat is formally designated by USFWS to provide guidance for planners/managers and biologists with an indication of where suitable habitat may occur and where high priority of preservation for a particular species should be given. Critical habitat includes areas occupied by the target species, and unoccupied areas. For activities conducted or funded by federal agencies, or requiring a federal permit, federal agencies must ensure that the action will not likely jeopardize the survival of the species, or destroy or adversely modify critical habitat. If the action would likely jeopardize a species, or adversely modify critical habitat, the agency must consult with either the Fish and Wildlife Service (FWS) or National Marine Fisheries Service (CRS 2005). Section 10 of the FESA provides the regulatory mechanism that allows the incidental take of a listed species by private interests and non-federal government agencies during lawful activities. Habitat conservation plans (HCPs) for the impacted species must be developed in support of incidental take permits for nonfederal projects to minimize impacts to the species and develop viable mitigation measures to offset the unavoidable impacts.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (MBTA), is the domestic law that affirms, or implements, the United States' commitment to four international conventions with Canada, Japan, Mexico, and Russia for the

protection of shared migratory bird resources. The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. It prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations. USFWS administers permits to take migratory birds in accordance with the regulations promulgated by the MBTA.

Clean Water Act, Section 404

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into "waters of the U.S."[1] (Including wetlands and non-wetland bodies of water that meet specific criteria) pursuant to Section 404 of the federal Clean Water Act (CWA), a permit is required for any filling or dredging within waters of the U.S. The permit review process entails an assessment of potential adverse impacts to USACE wetlands and jurisdictional waters, wherein the USACE may require mitigation measures. Where a federally listed species may be affected, a Section 7 consultation with USFWS may be required. If there is potential for cultural resources to be present, Section 106 review may be required. Also, where a Section 404 permit is required, a Section 401 Water Quality Certification would also be required from the Regional Water Quality Control Board (RWQCB).

Clean Water Act, Section 401and 402

Section 401(a)(1) of the CWA specifies that any applicant for a federal license or permit to conduct any activity that may result in any discharge into navigable waters shall provide the federal permitting agency a certification, issued by the State in which the discharge originates, that any such discharge will comply with the applicable provisions of the CWA. In California, the applicable RWQCB must certify that the project will comply with water quality standards. Permits requiring Section 401 certification include USACE Section 404 permits and National Pollutant Discharge Elimination System (NPDES) permits issued by the Environmental Protection Agency (EPA) under Section 402 of the CWA. NPDES permits are issued by the applicable RWQCB. The City of Sierra Madre is within the jurisdiction of the Los Angeles RWQCB (Region 4).

California Fish and Game Code, Section 1600

Section 1600 of the California Fish and Game Code requires that a project proponent notify the California Department of Fish and Wildlife (CDFW) of any proposed alteration of streambeds, rivers, and lakes. The intent is to protect habitats that are important to fish and wildlife. CDFW may review a project and place conditions on the project as part of a Streambed Alteration Agreement (SAA). The conditions are intended to address potentially significant adverse impacts within CDFW's jurisdictional limits.

[1] "Waters of the United States," as it applies to the jurisdictional limits of the authority of the Corps of Engineers under the Clean Water Act, includes: 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, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce; water impoundments; tributaries of waters; territorial seas; wetlands adjacent to waters. The terminology used by Section 404 of the Clean Water Act includes "navigable waters", which is defined in Section 502(7) of the Act as "waters of the United States including the territorial seas."

California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA and is administered by CDFW. Its intent is to prohibit take and protect state-listed endangered and threatened species of fish, wildlife, and plants. Unlike its federal counterpart, CESA also applies the take prohibitions to species petitioned for listing (state candidates). Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species. Under certain conditions, CESA has provisions for take through a 2081 permit or Memorandum of Understanding (MOU). In addition, some sensitive mammals and birds are protected by the State as Fully Protected Species. California Species of Special Concern are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for CDFW's California Natural Diversity Data Base (CNDDB) project, which maintains a database of known and recorded occurrences of sensitive species. Informally listed taxa are not protected per se, but warrant consideration in the preparation of biological resources assessments.

Local

City of Sierra Madre Municipal Code

The City's Municipal Code contains existing standards and regulations that help mitigate potential impacts on biological resources. The following is a description of the provisions of the City's Municipal Code that are applicable to the General Plan Update.

- **Chapter 12.20 (Tree Preservation).** This chapter of the City's Municipal Code protects the following categories of trees:
  - Trees on City property.
  - Protected trees (Southern California Black Walnut [*Juglans californica*], Engelmann Oak [*Quercus engelmannii*], Coast Live Oak [*Quercus agrifolia*], or Western Sycamore [*Platanus racemosa*] tree whose trunk [or collective trunks] exceed a diameter of four inches measured four feet above natural ground level):
    - in connection with an application for a subdivision, a parcel map, development project, or proposed development project, to construct any pad, parking lot, grading, or other construction exempt from the city's environmental regulations; or
    - on undeveloped property.

- **Chapter 17.52 (Hillside Management Zone).** Section 17.52.180 (Biotic Resources Management Plan) of this chapter requires the preparation of a Biotic Resources Management Plan for an Application for Land Division in the Hillside Management zone. A Biotic Resources Management Plan is required to contain an assessment of existing flora and fauna on and near the site; an assessment of project impacts to biological resources; mitigation measures including no net loss of wetlands and other sensitive habitats; and identify regulatory permits needed for project approval.

5.3.1.2 EXISTING CONDITIONS

Existing Conservation Plans and Areas

City of Sierra Madre Open Space

Over 400 acres in the northern part of the City is designated Hillside (410 acres) and Open Space (23 acres) in the current Sierra Madre General Plan land use map (see Table 3-2, *Current General Plan Land Use Designations*, and Figure 3-4, *Current Land Use Map*). These areas are in the southern foothills of the San Gabriel Mountains; they consist of steep slopes and canyons and are contiguous with the Angeles National Forest on the north.

Angeles National Forest

The Angeles National Forest, which spans approximately 700,000 acres, extend from the western edge of San Bernardino County in the eastern San Gabriel Mountains in the east to the eastern edge of Ventura County in the northern Transverse Ranges in the west. The Angeles National Forest provides habitat for more than 180 species identified as sensitive, of concern, or at risk (CBD 2010).

Critical Habitat

There is an area of critical habitat for Braunton's milk-vetch (*Astragalus brauntonii*) approximately 0.75 mile east of the City boundary, spanning approximately 285 acres (USFWS 2012b).

Proposed Altadena Significant Ecological Area

The Altadena Significant Ecological Area (SEA) proposed for designation by Los Angeles County would almost reach the city's northwestern corner, and would extend from there northwest through the foothills of the San Gabriel Mountains eight miles to the City of La Canada Flintridge (DRP 2014). SEAs are ecologically important land and water areas that are valuable as plant and/or animal communities. SEAs are not preserves; however, development projects proposed in SEAs are subject to increased environmental and design review with the aim of balancing development with ecological resources.

Plant Communities/Habitat

The hillside portions of the San Gabriel Mountains within the city's northern boundary consist of south-draining canyons, swales, mountainous terrain, ridgelines, knolls, foothills, rock outcroppings, wildlife habitat, and a wide range of native and non-native vegetation. The City has established a Hillside Management Zone (HMZ) in its Municipal Code, which affects approximately 610 acres of the City's hillsides. The stated purpose of the HMZ is to "protect the natural environment of the hillside areas from change by preserving and protecting the views to and from the hillside areas in the city to maintain the identity, image and environmental quality of the city."

Vegetation Types

The HMZ, largely open space, comprises approximately 37 percent of the city's land area. Vegetation types within the HMZ include grassland, coastal sage scrub, chaparral, southern oak woodland, and riparian forest/woodland, which are described below.

Annual Grassland is characterized by a variety of annual grass species, including red brome (*Bromus madriensis*); slender wild oat (*Avena barbata*); foxtail fescue (*Vulpia myuros*); ripgut brome (*Bromus diandrus*); Bermuda grass (*Cynodon dactylon*); schismus (*Schismus barbatus*); and foxtail barley (*Hordeum murinum*). Other common plants include red-stemmed filaree (*Erodium cicutarium*); bur clover (*Medicago polymorpha*); summer mustard (*Hirschfeldia incana*); tocalote (*Centaurea melitensis*); white-stemmed filaree (*Erodium moschatum*); common sow thistle (*Sonchus oleraceus*); miniature lupine (*Lupinus bicolor*); and cheeseweed (*Malva parviflora*) (Bramlet 2004).

Coastal sage scrub is characterized by small aromatic drought-deciduous shrubs; that is, shrubs that either drop their leaves or grow small secondary leaves during the long dry season. Coastal sage scrub occurs on slopes of mountains and hills in coastal southern California, mostly below 3000 feet (RCIP 2002). Common plant species in coastal sage scrub include California sagebrush (*Artemisia californica*); flat-topped buckwheat (*Eriogonum fasciculatum*); black sage (*Salvia mellifera*); chaparral yucca (*Yucca whipplei*); saw-tooth goldenbush (*Hazardia squarrosa*); chaparral bedstraw (*Galium angustifolium*); laurel sumac (*Malosma laurina*); white sage (*Salvia apiana*); deerweed (*Lotus scoparius*); California bush sunflower (*Encelia californica*); and sand wash butterweed (*Senecio flaccidus*) (Bramlet 2004).

Chaparral consists of dense thickets of woody shrubs from four to eight feet or higher, and dominates much of the foothills of mountains in coastal southern California. Common plants in chaparral in the region include chamise (*Adenostoma fasciculatum*); black sage (*Salvia mellifera*); thick-leaved lilac (Ceanothus crassifolius); sugar bush (*Rhus ovata*); California sagebrush, laurel sumac, mountain mahogany (*Cercocarpus betuloides*); Mexican elderberry (*Sambucus mexicana*); laurel sumac (*Malosma laurina*); coast live oak (*Quercus agrifolia*); holly-leaved redberry (*Rhamnus ilicifolia*); toyon (*Heteromeles arbutifolia*); poison oak (*Toxicodendron diversilobum*); chaparral honeysuckle (*Lonicera subspicata*); and bush lantanta (*Lantana camara*) (Bramlet 2004).

Southern Oak Woodland consists of woody vegetation generally over 15 feet tall and typically occupies north-facing slopes, shaded canyon ravines and sheltered interior valleys below approximately 5000 feet. Dominant tree species include coast live oak (*Quercus agrifolia*); valley oak (*Quercus lobata*); Engelmann oak (*Quercus engelmannii*); California sycamore (*Platanus racemosa*); and California black walnut (*Juglans californica*). Other species in southern oak woodland include Mexican elderberry, and toyon, poison oak, and heart-leaved penstemon (*Keckiella cordifolia*); California pellitory (*Parietaria floridana*); smilo grass (*Piptatherum miliaceum*); lantana, common eucrypta (*Eucrypta chrysanthemifolia*); Douglas' nightshade (*Solanum douglasii*); and coastal wood fern (*Dryopteris arguta*) (Bramlet 2004).

Riparian habitats are those along banks of rivers or streams. Riparian forest habitat is mapped within the HMZ on the National Wetlands Mapper in several locations, including Bailey Canyon and Little Santa Anita Canyon; riparian scrub/shrub vegetation is also mapped in a few scattered areas in the HMZ (USFWS

2012a). Two riparian vegetation types known in the region, Southern Coast Live Oak Riparian Forest and Southern Sycamore Alder Riparian Woodland, are described below under the *Sensitive Resources* discussion.

Wetlands are land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. There are many ephemeral streams in canyons and gullies, as well as several intermittent blue-line streams, in the HMZ. Many of the streams and drainages, as well as debris basins, are mapped as Wetlands on the National Wetlands Mapper (USFWS 2012a).

Ornamental trees and shrubs occur throughout the city, and contain a mix of introduced species and native plant species. Development in parts of the city occurred in and around the existing oak trees, and these urban forests still provide habitat for birds and other tree-dwelling animals such as squirrels.

Sensitive Plant Communities

Sensitive plant communities are those that are considered rare in the region by regulatory agencies, which are known to provide habitat for sensitive animal or plant species, or are known to be important wildlife corridors.

There are three sensitive plant communities documented in the city on the California Natural Diversity Database (CDFW 2012), as described below.

Southern Coast Live Oak Riparian Forest consists of open to locally dense riparian woodlands dominated by coast live oak (*Quercus agrifolia*); and occurs in bottomlands and outer floodplains, in canyons and valleys of coastal southern California (CGAP 1986a).

Riversidian Alluvial Fan Sage Scrub is an open to moderately dense, broadleaved evergreen scrub. Typical plants of this vegetation type include scalebroom (*Lepidospartum squamatum*); white sage (*Salvia apiana*); redberry (*Rhamnus crocea*); flat-top buckwheat (*Eriogonum fasciculatum*); our lord's candle (*Yucca whipplei*); California croton (*Croton californicus*); cholla (*Opuntia* spp.); tarragon (*Artemisia dracunculus*); yerba santa (*Eriodictyon* spp.); mule fat (*Baccharis salicifolia*); and mountain-mahogany (*Cercocarpus betuloides*). This vegetation type is mostly restricted to floodplain habitats that flood once or twice per decade, and depends on occasional flooding and resulting sediment reworking (CGAP 1986b).

Coastal sage scrub is described in the preceding section.

Two additional sensitive plant communities are documented as occurring near the city boundaries on the CNDDB; therefore, there is some possibility that these communities also occur in the city.

Southern Sycamore Alder Riparian Woodland is a tall, open, broadleafed, winter-deciduous streamside woodland dominated by California sycamore (*Platanus racemosa*), and often also by white alder (*Alnus rhombifolia*). It occurs in rocky streambeds, subject to flooding, in mountains of southwestern California and northern Baja California (CGAP 1986c).

Open Engelmann Oak Woodland is an evergreen woodland dominated by Engelmann oak (*Quercus engelmannii*) that occurs on relatively moist sites on gentle slopes and valley bottoms, mostly in San Diego and Riverside counties (CGAP 1986d). There are remnants of this woodland in several parts of the City that were earlier developed with residential land uses.

Natural Habitat and Wildlife Species

There are no large areas of natural habitat in the city outside of the foothill areas designated as Hillside and Open Space on the current land use map of the City's General Plan (see Figure 3-4, *Current Land Use Map*), as described above. Bailey Canyon Wilderness Park in the northwestern part of the City is approximately 2.7 acres in area, is partly developed with a parking lot, and is separated from natural habitat to the north by a debris basin abutting the north side of the park.

Most of the wildlife species that occur in the hillside areas of the city were once common but are now increasingly rare to the San Gabriel Mountains and the urban interface. The types of wildlife species include a wide variety of mammals, birds, amphibians and reptiles. Many of these species are present in the scrub and riparian habitats and frequently use the urban interface for foraging.

Sensitive Resources

Special status species include those listed as endangered or threatened under the federal Endangered Species Act or California Endangered Species Act; species otherwise given certain designations by the California Department of Fish and Wildlife; and plant species listed as rare by the California Native Plant Society. Following is discussion of sensitive and special status species within the city.

Sensitive Plant and Animal Species

Special status species with occurrences in the city documented in the CNDDB are listed in Tables 5.3-1 (lists plants species) and 5.3-2 (lists animal species). Also listed in the tables are special status species with documented occurrences immediately north of the city in the Angeles National Forest, or within approximately two miles east or west of the City in open space at the foot of the San Gabriel Mountains at similar elevations and with similar habitat types to those occurring in the City, as there is some potential that those species could occur in the city.[2] Known locations of occurrences of sensitive species in and near the City are shown in Figure 5.3-1, *Sensitive Species Occurrences In and Near Sierra Madre*.

Wildlife Movement Corridors

A wildlife movement corridor is a linear habitat that connects two or more significant wildlife habitat areas. Wildlife corridors allow wide-ranging animals to travel so that populations can move in response to environmental changes and natural disasters, threatened species can be replenished from other areas, and genetic interchange can occur.

The city consists of an urbanized area at lower elevations and the foothills of the San Gabriel Mountains along the northern boundary of the city. Wildlife movement in the city would be greatest in the foothills,

[2] The area searched on the CNDDB is the Mount Wilson Quadrangle, which covers the area described above.

where species such as mule deer, bobcat, and coyote would generally move along ridgelines, drainage bottoms, and unpaved roads. Two important aspects of this movement would be east-west movement that connects habitats along the San Gabriel Mountains on either side of Sierra Madre, and north-to-south movement that brings animals to lower elevations, leading potentially to mortality (e.g., roadkills) and conflicts with people.

Jurisdictional Waters and Wetlands

Riparian habitats and wetlands in the city are described above under the *Plant Communities/Habitat* discussion. One major waterway, Sierra Madre Wash, passes north to south through the developed part of the city, exiting along the eastern City boundary near the intersection of Grandview Avenue and Oak View Lane. The Sierra Madre Wash consists of concrete bed and banks. Engineered waterways in California are jurisdictional to the California Department of Fish and Wildlife, the Corps, and the affected Regional Water Quality Control Board.

Table 5.3-1 Special Status Plant Species Known from the Project Region

Species	Status		Habitat Preference
	Federal/ State	CNPS/Local	
Astragalus brauntonii Braunton's milkvetch	FE	CNPS 1B.1	Found in openings of coastal sage scrub and chaparral, or in grasslands, often on carbonate soils. Recorded from hills above Monrovia, south Clamshell Canyon.
Berberis nevinii Nevin's barberry	FE SE	CNPS 1B.1	Found in alluvial fan sage scrub, coastal sage scrub and chaparral habitats in sandy, gravelly areas. Known to occur in San Francisquito Canyon, was historically recorded for Big Tujunga Canyon and occurs in a canyon above Claremont.
Brickellia nevinii Nevin's brickellbush	—	LC	Found on xeric rock faces in coastal sage scrub or chaparral. Known to occur in upper Little Tujunga Canyon and other localities in the West end of the San Gabriel Mountains.
Brodiaea filifolia Thread-leaved brodiaea	FE SE	CNPS 1B.1	Moist grasslands and the periphery of vernal pools, playas, cismontane woodland, valley and foothill grasslands, and coastal scrub on clay or alkaline, silty-clay soils. Found in annual or perennial grasslands. Recorded from Glendora.
Calochortus catalinae Catalina mariposa lily	—	CNPS 4.2	Perennial & annual grasslands and coastal sage scrub in lower elevational areas of the San Gabriel Mountains
Calochortus clavatus var. gracilis slender mariposa lilyp	—	CNPS 2.2	Found in openings of coastal sage scrub and chaparral. Recorded from San Francisquito, Evey, and Mint Canyons.
Calochortus plummerae Plummer's mariposa lily	—	CNPS 1B.2	Found in coastal sage scrub or chaparral on granitic or alluvial soils, including alluvial fan areas. Recorded from Monrovia, Arroyo Seco, San Gabriel River, Little Tujunga Canyon, and Pacoima Wash.

Table 5.3-1 Special Status Plant Species Known from the Project Region

Species	Status		Habitat Preference
	Federal/ State	CNPS/Local	
Chorizanthe parryi var. fernandina San Fernando Valley spineflower	FC SE		Openings in coastal sage scrub and grasslands; often sandy. Historically recorded from the Tujunga Wash. Occurs on open terraces, or in alluvial fans. Currently only two localities are known: Laskey Mesa, and the Newhall Ranch.
Chorizanthe parryi var. parryi Parry's spineflower	—	CNPS 1B.1	Found in openings of coastal sage scrub or chaparral, including alluvial fan areas. Recorded from Mt. Lowe, Upland, Claremont, San Gabriel wash, Lytle Creek, and Texas Canyon.
Dodecahema leptoceras Slender-horned spineflower	FE SE	CNPS 1B.1	Chaparral, coastal scrub, alluvial fan sage scrub, often on alluvial terraces. Known to occur in the Tujunga Wash. Historically known from the Rubio Wash, Santa Anita Canyon.
Galium grande San Gabriel bedstraw	—	CNPS 1B.2	Found in chaparral, oak woodland, coniferous forest. Recorded from Little Santa Anita Canyon, Sawpit Canyon, Chantry flat, and Mt. Wilson.
Horkelia cuneata sp. puberula Mesa horkelia	—	CNPS 1B.1	Chaparral and coastal sage scrub.
Juglans californica var. californica Southern California walnut	—	CNPS 4.2	Occurs in grasslands, floodplains, oak woodland and sage scrub/chaparral habitats. Known to occur in the lower elevations of the west end of the San Gabriel Mountains and associated floodplains.
Lepechinia fragrans Fragrant pitcher sage	—	CNPS 4	Found in chaparral from the San Gabriel to the Santa Monica Mountains. Recorded from Maple Canyon (Tujunga Canyon Drainage), and many other localities in the San Gabriel Canyon.
Lilium humboldtii ssp. ocellatum Ocellated Humboldt lily	S	CNPS 4	Found in shaded canyons in oak and riparian woodlands Recorded for drainages in the west end of the San Gabriel Mountains.
Linanthus concinnus San Gabriel linanthus	S	CNPS 1B	Found in lower montane coniferous forest. Recorded from Mount Markham, Mt. Lowe.
Linanthus orcuttii Orcutt's linanthus	—	CNPS 1B	Found in gravelly openings in chaparral. Historically recorded from Pasadena.
Malacothamnus davidsonii Davidson's bush mallow	—	CNPS 1B.2	Occurs in coastal sage scrub, chaparral and riparian habitats. Known to occur in the Verdugo Hills, and Little Tujunga Canyon.
Quercus durata ssp. gabrielensis San Gabriel Mountains Leather oak	—	CNPS 4	Occurs in chaparral on the south slope of the San Gabriel Mountains. Known localities include Pacoima Canyon, Eton Canyon, Mt. Lowe trail, Stoddard Canyon and Evey Canyon.

Table 5.3-1 Special Status Plant Species Known from the Project Region

Species	Status		Habitat Preference
	Federal/ State	CNPS/Local	
Quercus engelmannii Engelmann's Oak	—	CNPS 4	Found in savannas, and oak woodlands. In the San Gabriel Mountain. This species has been recorded from Claremont and Pasadena.
Quercus durata ssp. gabrielensis X Q. engelmannii San Gabriel oak	—	LC	Found in mesic canyons in chaparral. Recorded from Monrovia, Glendora, and Sierra Madre.
Thelypteris puberula var. sonoriensis Sonoran maiden fern	—	CNPS 2	Found along streams and seeps. Recorded from Santa Anita Canyon, Monrovia Canyon and Roberts Canyon.

Notes:
Federal Classifications
FE - Listed by the Federal government as an endangered species.
FT - Listed by the Federal government as a threatened species.
S - Forest Service Sensitive Plant Species

State Classifications
CE - Listed as endangered by the State of California
CT - Listed by the State of California as a threatened species
SP - Listed as a Special Plant by the CNDDB (2007)

Other
LC - Local concern

California Native Plant Society (CNPS)
CNPS 1A - Plants presumed extinct in California.
CNPS 1B - Plants considered rare, threatened, or endangered in California and elsewhere.
CNPS 2 - Plants rare, threatened, or endangered in California but more common elsewhere.
CNPS 3 - Plants about which we need more information: A review list.
CNPS 4 - Plants of limited distribution - A watch list.

CNPS Threat Extensions
0.1 - Seriously endangered in California
0.2 - Fairly endangered in California
0.3 - Not very endangered in California

Table 5.3-2 Special Status Animal Species from the Project Region

Species Name	Status	Habitat Preference
Insects		
San Gabriel Mountains Elfin butterfly *Incisalia mossii hidakupa*	SA	Found on steep slopes w/ *Sedum*. Reported from Tujunga Canyon, Stoddard Canyon, and San Antonio wash.
Human folly blue *Philotes sonorensis extinctis*	LC	Found on steep slopes associated with *Dudleya*. Found in Azusa Canyon, currently considered extinct.
San Gabriel Mountains blue butterfly *Plebejus saepiolus aureolus*	SA	Found in wet meadows. Reported from Big Pines.
Amphibians and Reptiles		
Western spadefoot *Spea hammondii*	CSC	Open areas with sandy or gravelly soils, in a variety of habitats including grasslands, chaparral, and sandy washes. Shallow pools in these habitats are necessary for reproduction. Breeds in ponds, streams, and rain pools that do not contain bullfrogs and fish, which prey on tadpoles. Historically recorded from Sierra Madre.
Coast range newt (California newt) *Taricha torosa torosa*	CSC	Found in pools & ponds of perennial streams. Recorded from Little Santa Anita Canyon, (Big) Santa Anita Canyon, Eaton Canyon.
California red-legged frog *Rana draytoni*	ST, CSC	Dense, shrubby riparian vegetation associated with deep, still or slow-moving water.
Sierra Madre yellow-legged frog *Rana mucosa*	FE, CSC	Found in permanent, fast running streams. Historically recorded from Little Santa Anita Canyon, (Big) Santa Anita Canyon, Eaton Canyon.

Table 5.3-2 Special Status Animal Species from the Project Region

Species Name	Status	Habitat Preference
Anniella pulchra pulchra Silvery legless lizard	CSC	Moist loose soils and leaf litter in diverse plant communities, including chaparral, pine-oak and riparian woodlands, desert scrub, and sandy washes.
San Diego horned lizard *Phrynosoma coronatum blainvillei*	CSC	Occurs in variety of habitats including coastal sage, grassland, chaparral, oak woodland, and riparian woodland with loose sandy soils and abundant native ants or other insects.
Southwestern pond turtle *Actinemys marmorata marmorata*	CSC	Slow-water aquatic habitats with available basking sites (e.g., submerged logs, open mud banks).
San Bernardino ringneck snake *Diadophis punctatus modestus*	S	Moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, woodlands. Recorded from Sierra Madre, Santa Anita Canyon.
Coastal Rosy Boa *Lichanura trivergata roseofusca* *Charina*?	S	Rocky areas in coastal sage scrub and chaparral. Recorded from Eaton Canyon, Sierra Madre, Mt. Wilson.
Coast patch-nosed snake *Salvadora hexalepis virgultea*	CSC	Semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. Recorded from Sierra Madre, Santa Anita Canyon.
Birds		
Black swift *Cypseloides niger* (nesting)	CSC	Mountain foothill Canyons. Known to nest in Santa Anita Canyon.
California spotted owl *Strix occidentalis occidentalis*	CSC	Montane hardwood-conifer forests, and oak woodland and valley foothill riparian at lower elevations.
Willow flycatcher *Empidonax traillii*	CE	Riparian woodland and scrub habitats.
Loggerhead shrike *Lanius ludovicianus*	CSC (nesting)	Occurs in grassland, open sage scrub, chaparral, and desert scrub. Species apparently has declined dramatically in coastal southern California in recent years.
Coastal cactus wren *Campylorhynchus brunneicapillus cousei*	CSC	Occurs in coastal sage scrub and chaparral plant communities with substantial cacti (*Opuntia* sp.) stands. Recorded from the S. end of Christy Ave, near the eastern edge of Hansen Dam Park.
Coastal California gnatcatcher *Polioptila californica californica*	FT CSC	Occurs primarily in coastal sage scrub habitat, but also use chaparral, grassland, and riparian habitats where they occur in proximity to sage scrub. Although historically found (Monrovia) within sage scrub in the region of the project, this species has not been observed in the central portion of the lower San Gabriel Mountains in recent years
Yellow-breasted chat *Icteria virens*	CSC	Occurs in dense riparian woodlands, willows thickets, and dense brush along flowing streams.
Mammals		
San Diego black-tailed jackrabbit *Lepus californicus bennetti*	CSC	Occurs in a variety of habitats, including sage scrubs, chaparral, agricultural lands and other disturbed habitats, but prefers open grassland.

Table 5.3-2 Special Status Animal Species from the Project Region

Species Name	Status	Habitat Preference
Pallid bat *Antrozous pallidus*	CSC	Occurs in a variety of habitats, including woodlands, scrub, rocky canyons, farm land, and desert. Roosts in rock crevices, old buildings, bridges, caves, mines, and tree cavities. In the region this species is generally associated with sycamore and oak woodlands.
Western mastiff bat *Eumops perotis californicus*	CSC	Variety of habitats, from desert scrub and chaparral to oak woodland and ponderosa pine, but only where there are significant rock features for roosting. Natural roosts are often found under large exfoliating slabs of granite, sandstone slabs, or in columnar basalt, on cliff faces, or in large boulders. Some roosts have been found in buildings.
Hoary bat *Lasiurus cinereus*	CSC	Occurs in variety of habitats, from lower elevation mixed coniferous/hardwood forest to higher elevation conifers. Known also from orchards. Migratory, spending winters in the northern part of state and summers along the coast. Solitary species that roosts primarily in coniferous and deciduous trees.
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	CSC	Inhabits coastal sage scrub and alluvial fan sage scrub habitats.
San Diego desert woodrat *Neotoma bryanti intermedia*	CSC	Occurs in scrub and desert habitats, usually in association with rock outcroppings, boulders, cacti, or areas of dense undergrowth.

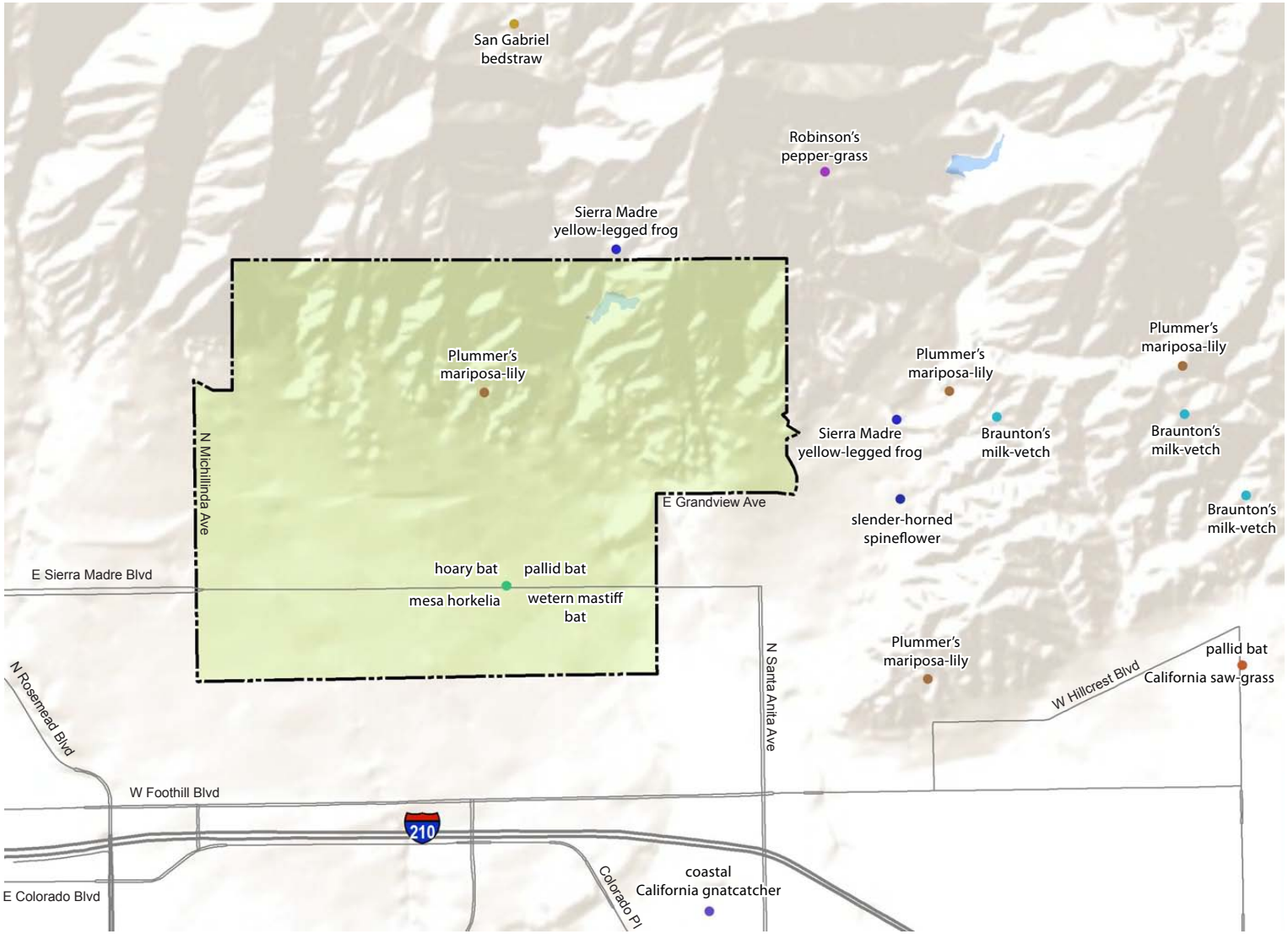
Notes:
Federal
FE - Federally Endangered
FT - Federally Threatened

State
SE - State Endangered
ST - State Threatened

California Department of Fish and Game (CDFW)
CSC - California Species of Concern
CFP - California Fully-Protected Species
SA - Special Animal

Figure 5.3-1 - Sensitive Species Occurrences In and Near Sierra Madre

5. Environmental Analysis



Basemap Source: ESRI, 2011.

5. Environmental Analysis
BIOLOGICAL RESOURCES

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5.3.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

B-1 Have a substantial 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.

B-2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

B-3 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

B-4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

B-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

B-6 Conflict with the provisions of an adopted habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.3.3 Relevant General Plan Policies and Implementation Program Measures

The following are relevant policies and implementation measures of the Sierra Madre General Plan Update and Implementation Program, respectively, which are designed to reduce potential impacts on biological resources from implementation of the General Plan Update.

General Plan Update Policies

Land Use Element

- **Policy L16.1:** Minimize the amount of grading and removal of natural vegetation.
- **Policy L15.5:** Consider the impact of development on wildlife.
- **Policy L15.3:** Require that all access into hillside areas be designed for minimum disturbance to the natural features.

- **Policy L15.2:** Ensure that development in the hillside areas be located in those areas resulting in the least environmental impact.

- **Policy L17.2:** Require that all development be designed to reflect the contours of the existing land form using techniques such as split pads, detached secondary structures (such as garages), and avoiding the use of excessive cantilevers.

- **Policy L17.3:** Require that all development preserves, to the maximum extent possible, significant features of the natural topography, including swales, canyons, knolls, ridge lines, and rock outcrops.

- **Policy L24.5:** Encourage the retention of existing mature, specimen trees.

- **Policy L44.1:** Support the purchase of hillside property by the Sierra Madre Mountains Conservancy and similar organizations.

- **Policy L43.2:** Encourage the use of open space areas for the purposes of educating individuals and groups about the local environment. This may include informational gatherings, information kiosks, and other methods of public outreach.

- **Policy L44.2:** Require stringent environmental analysis following existing conservation easements prior to the installation of any improvements for any purpose on existing unimproved hillside land, in order to preserve existing biology, natural habitat, resources and watershed health.

- **Policy L44.3:** Establish the role of natural open space as an interface to the wilderness area.

Resource Management Element

- **Policy R1.1:** Maintain and enforce the Hillside Management Zone Ordinance and other ordinances that seek to protect hillside areas.

- **Policy R1.2:** Work with other hillside communities in the San Gabriel Valley to establish a protected hillside corridor along the entire length of the San Gabriel Mountains.

- **Policy R2.1:** Assist the Sierra Madre Mountains Conservancy and other non-profit organizations in the application of funds to purchase hillside property, and when feasible, to provide public access to the mountains via parks and trails.

- **Policy R2.2:** Designate properties purchased by the Conservancy and other non-profit organizations as natural open space utilizing conservation easements.

- **Policy R2.3:** Explore the use of bond issues, assessment districts, environmental partnerships and other methods for purchasing and managing hillside areas.

- **Policy R2.4:** Coordinate with other public agencies' plans and pursue partnerships with local and regional environmental and conservation organizations to locate and protect hillside open space areas.

- **Policy R3.2:** Ensure that wildland open space, including the areas of the city designated as High Fire Hazard Severity Zone, is left in its natural state with the exception of brush abatement for public safety in order to aid the City in fighting fires.

- **Policy R3.3:** Ensure that natural open space within the High Fire Hazard Severity Zones remains undeveloped so as to mitigate the flood cycles that follow wild land fires in the natural open space.

- **Policy R3.4:** Ensure the protection of natural open space so as to maintain it as a preventative measure against flooding, and as a means of capturing stormwater runoff for groundwater recharge.

- **Policy R4.1:** Raise awareness of Sierra Madre as an urban/wildlife interface where, as such, it is necessary for the residents to respect the wildlife, share space with wildlife, and to acknowledge the right of wildlife to pass within City limits undisturbed.

- **Policy R4.2:** Encourage grassroots community efforts dedicated to the peaceful co-existence with wildlife.

- **Policy R4.3:** Publicize and post signs that announce Resolution 72-62 which designates Sierra Madre as a Wildlife Sanctuary.

- **Policy R4.4:** Encourage wide availability and dissemination of materials teaching how to coexist with wildlife.

- **Policy R4.5:** Encourage the education of the public on how to "wild proof," and on compliance with State laws prohibiting trapping, killing, or relocating wildlife.

- **Policy R5.2:** Actively enforce regulations prohibiting spiked iron fencing.

- **Policy R5.2:** Encourage residents to modify any existing structures to better accommodate safe passage of wildlife.

- **Policy R5.3:** Continue to include wildlife-resistant garbage containers for the High Activity Wildlife Zone in the waste disposal contract.

- **Policy R5.4:** Create a High Activity Wildlife Zone that mirrors the Fire Hazard Severity Zone.

- **Policy R10.1:** Continue to develop public awareness and support for the City's tree ordinance.

- **Policy R10.2:** Continue to develop tree preservation and protection measures.

- **Policy R10.3:** Carry out the objectives and recommendations of the Community Forest Management Plan.
- **Policy R10.4:** Continue to develop and update a recommended tree palette for parks and parkways.
- **Policy R10.5:** Continue to update and maintain an inventory of trees located on City property including parkways, parks and other City-owned locations.
- **Policy R10.6:** Continue to publish and update basic tree maintenance and care brochures for residents.
- **Policy R10.7:** Continue to provide a tree expert as needed to assist the City regarding tree removal, tree trimming, root pruning, identifying tree diseases, and grading that might affect trees.
- **Policy R10.8:** Continue to monitor construction projects with regard to grading and construction effects on trees, tree removal and replacement.
- **Policy R10.9:** Continue to monitor latest trends and research in the field of arboriculture to better manage the City's urban forest.
- **Policy R10.10:** Promote the voluntary Legacy Tree Program.
- **Policy R11.1:** Locate financial assistance for trimming and care of trees.
- **Policy R11.2:** Solicit community participation in programs which are geared towards planting and maintaining City trees.

Implementation Program Measures

Land Use Implementation Program

- **Measure IM-27:** The City shall continue to enforce the Hillside Management Zone Ordinance, and amend as necessary to address development density, environmental impact of development, access, water conservation and development impacts on wildlife.
- **Measure IM-64:** The City shall amend the Open Space Ordinance to include standards to address preservation of natural open space (i.e. conservation easements), stringent environmental review of property adjacent to conservation easements, and dedication of natural and constructed open space and/or payment of in-lieu fees.

Hillside Preservation Implementation Program

- **Measure IM-1:** The City shall continue to enforce the Hillside Zone Ordinance and other ordinances that seek to protect the hillside areas.

- **Measure IM-5:** The City shall amend the Open Space Ordinance to identify wildland open space as areas to remain in their natural state to mitigate flood cycles and capture stormwater runoff, except where brush abatement is necessary to for fire safety.

- **Measure IM-6:** The City shall designate properties purchased by the Sierra Madre Mountains Conservancy and other non-profit organizations as natural open space utilizing conservation easements.

- **Measure IM-7:** The City shall coordinate with other public agencies' plans and pursue partnerships with local and regional environmental and conservation organizations to locate and protect hillside open space areas.

Co-Existence with Wildlife Implementation Program

- **Measure IM-1:** The City shall provide brochures, and provide information on the City's website and e-blast to raise awareness that Sierra Madre is an urban/wildlife interface.

- **Measure IM-2:** The City shall promote the establishment of a non-Brown Act, grassroots committee dedicated to encouraging the peaceful co-existence with wildlife.

- **Measure IM-3:** The City shall publicize and post signs that announce Resolution 72-62 which designates Sierra Madre as a Wildlife Sanctuary.

- **Measure IM-4:** The City shall provide information to the public regarding "wild proofing" their property and State laws that prohibit trapping, killing and relocating wildlife.

- **Measure IM-5:** The City shall continue to enforce regulations prohibiting spiked iron fencing.

- **Measure IM-6:** The City shall consider providing incentives for property owners to modify existing structures to better accommodate safe passage of wildlife.

- **Measure IM-7:** The City shall continue to make adequate waste removal services available to existing and future residents and businesses through an ongoing exclusive contract with a professional waste removal company, including providing wildlife-resistant trash cans.

- **Measure IM-8:** The City shall disseminate information associated with the High Activity Wildlife Zone.

Tree Preservation Implementation Program

- **Measure IM-1:** The City shall continue to enforce the City's existing Tree Preservation Ordinance

- **Measure IM-2:** The City shall provide educational materials and opportunities regarding tree care and maintenance.

- **Measure IM-3:** The City shall implement the recommendations of the Community Forest Management Plan.

- **Measure IM-4:** The City shall follow developments in tree care and maintenance for inclusion into City operations and tree care educational programs.

- **Measure IM-5:** The City shall develop funding sources for the enhancement of the ongoing tree maintenance and planting program.

5.3.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

For the impact analysis of all thresholds below, it should be noted that the large infill opportunity site shown in Figure 3-5*, Infill Opportunity Sites*, just north of Carter Avenue, which is associated with the residential subdivision known as Stonegate, is an approved development project and was analyzed under separate environmental documentation in accordance with CEQA. The impact on biological resources resulting from Stonegate were addressed and mitigated for in that environmental documentation. Also, all residential lots within Stonegate are subject to the provisions of the City's Municipal Code and the Hillside Management zone regulations (Chapter 17.52) of the City's Municipal Code, which requires that each residential development within Stonegate obtain approval of a hillside development permit.

For the purpose of the following analysis, it is also important to note that, based on the requirements of CEQA, this analysis is based on a comparison to existing land uses and does not address the differences that would result from a comparison with the existing General Plan land use map, from which there is little variation when compared to the proposed General Plan land use map.

Furthermore, it is important to note that while the General Plan Update establishes City-wide policy level guidance, includes a revision to the current land use map (see Figures 3-4, *Current Land Use Map*, and 3-6, *Proposed Land Use Map*), and modifies the development potential of certain parcels in the City (see Figure 3-5, *Infill Opportunity Sites*), it does not contain specific development project proposals. The General Plan Update is a regulatory document that sets forth the framework for future growth and development (e.g., infill development, redevelopment, and revitalization/restoration) in the city and does not directly result in development in and of itself. Before any development can occur in the City, all such development is required to be analyzed for conformance with the City's General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA (e.g., preparation of site-specific environmental documentation in accordance with CEQA); and obtain all necessary approvals, clearances, and permits.

Impact 5.3-1: Implementation of the General Plan Update would not impact sensitive species occurring in certain areas of the city. [Threshold B-1].

Impact Analysis: Implementation of the General Plan Update could impact sensitive species that make their home in the hillside and some of the foothill areas of the City, which consist of mostly natural open space.

However, converting certain areas of the Hillside land use designation (see Figure 3-4) to the Municipal and Constructed Open Space land use designations (see Figure 3-6) would not substantially affect sensitive species or suitable habitats for sensitive species on or in proximity of these areas. Portions of the current Hillside land use designation that would be converted to Municipal are also already developed with debris basins that are part of the Los Angeles County flood control system.

Additionally, converting the land use designation of one parcel, approximately 1.5 acres in area, in the north-central part of the city from Residential Low to Hillside (see Figures 3-4, *Current Land Use Map*, and 3-6, *Proposed Land Use Map*) would not substantially affect sensitive species or suitable habitats for sensitive species on or in proximity of this parcel. Development is already permitted on this parcel and would remain permitted, but at less than the current permitted density. The General Plan Update also includes changing the current Open Space and Hillside land use designations (see Figure 3-4) to Natural Open Space (see Figure 3-6); this change in land use designations would ensure that the city's hillside and some of the foothill areas would remain natural open space and thereby, continue to provide suitable habitat for bats and other species.

Additionally, only two species listed in Tables 5.3-2, *Special Status Animal Species From the Project Region*, have habitat preferences that include buildings or developed areas: pallid bat (*Antrozous pallidus*) and western mastiff bat (*Eumops perotis californicus*). As shown in Table 5.3-2, both species are listed as California Species of Special Concern (SSC) by CDFW. No sensitive plant species listed in Table 5.3-1, *Special Status Plant Species Known From the Project Region*, have listed habitat preferences that include developed urban land uses. An SSC is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role;
- is listed as federally- but not state-threatened or endangered; meets the state definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status;
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.

Pallid bat is a locally common species of low elevations in California, ranging throughout the state except for high-elevation sections of the Sierra Nevada and White Mountains. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Night roosts may be in more open sites, such as porches and

open buildings. This species is very sensitive to disturbance of roosting sites (CDFW 2008a; CDFW 2008b). While pallid bat could use buildings in Sierra Madre for night roosts, it would be very unlikely to use buildings occupied in the evenings, such as commercial uses open during the evening and residences, due to its sensitivity to disturbance of roosting sites.

Western mastiff bat is an uncommon resident in southeastern San Joaquin Valley and Coastal Ranges from Monterey County southward through southern California, from the coast eastward to the Colorado Desert (CDFW 2008c). Suitable habitat includes tall buildings; the bat needs height to drop off to take flight (CDFW 2008d). Buildings in the Sierra Madre are low-rise, and therefore this species is unlikely to use buildings in the City for roosting.

Additionally, as stated in Chapter 3, *Project Description*, one of the key vision and guiding principles of General Plan Update is to protect and be responsible stewards of the neighboring San Gabriel Mountain foothill's wildlife, forest, open space, watershed and all other natural resources. Furthermore, the General Plan Update and Implementation Program contain policies and implementation measures, respectively, designed to minimize impacts on sensitive species. Following are some of these policies and implementation measures:

- **Land Use Element Policy L15.5:** Consider the impact of development on wildlife.
- **Land Use Element Policy L15.2:** Ensure that development in the hillside areas be located in those areas resulting in the least environmental impact.
- **Land Use Element Policy L17.3:** Require that all development preserves, to the maximum extent possible, significant features of the natural topography, including swales, canyons, knolls, ridge lines, and rock outcrops.
- **Land Use Element Policy L44.2:** Require stringent environmental analysis following existing conservation easements prior to the installation of any improvements for any purpose on existing unimproved hillside land, in order to preserve existing biology, natural habitat, resources and watershed health.
- **Resource Management Element Policy R4.1:** Raise awareness of Sierra Madre as an urban/wildlife interface where, as such, it is necessary for the residents to respect the wildlife, share space with wildlife, and to acknowledge the right of wildlife to pass within City limits undisturbed.
- **Resource Management Element Policy R4.3:** Publicize and post signs that announce Resolution 72-62 which designates Sierra Madre as a Wildlife Sanctuary.
- **Resource Management Element Policy R4.5:** Encourage the education of the public on how to "wild proof," and on compliance with State laws prohibiting trapping, killing, or relocating wildlife.
- **Resource Management Element Policy R5.2:** Encourage residents to modify any existing structures to better accommodate safe passage of wildlife.

- **Resource Management Element Policy R5.4:** Create a High Activity Wildlife Zone that mirrors the Fire Hazard Severity Zone.

- **Land Use Implementation Measure IM-27:** The City shall continue to enforce the Hillside Management Zone Ordinance, and amend as necessary to address development density, environmental impact of development, access, water conservation and development impacts on wildlife.

- **Co-Existence with Wildlife Implementation Measure IM-2:** The City shall promote the establishment of a non-Brown Act, grassroots committee dedicated to encouraging the peaceful co-existence with wildlife.

- **Co-Existence with Wildlife Implementation Measure IM-3:** The City shall publicize and post signs that announce Resolution 72-62 which designates Sierra Madre as a Wildlife Sanctuary.

- **Co-Existence with Wildlife Implementation Measure IM-4:** The City shall provide information to the public regarding "wild proofing" their property and State laws that prohibit trapping, killing and relocating wildlife.

- **Co-Existence with Wildlife Implementation Measure IM-8:** The City shall disseminate information associated with the High Activity Wildlife Zone.

Implementation of these policies and implementation measures would have both direct and indirect beneficial effects for protecting sensitive species by avoiding the most biologically sensitive areas of the city.

For these reasons, future development that would be accommodated by the General Plan Update, any land use changes proposed under the General Plan Update, and any new or updated policies of the General Plan Update are not anticipated to create a significant impact.

Impact 5.3-2: Implementation of the General Plan Update would not cause the loss of sensitive natural communities in certain areas of the city. [Threshold B-2]

Impact Analysis: Remnants of one sensitive natural community, Open Engelmann Oak Woodland, occurs in several areas of the city; however, these remnants occur in areas that have been developed with residential uses. The General Plan Update would lead to a change of land use designations for some of these areas; however, the change would be from one type of developed land use to another. These areas are also urbanized and not in their natural condition.

Additionally, implementation of the General Plan Update would allow redevelopment of some currently developed areas of the city, but would not include development of areas of natural habitat and open space, which occur mostly in the hillside areas of the City, and also along the foothills. As shown in Figures 3-4, *Proposed Land Use Map*, and 3-6, *Proposed Land Use Map*, the current Open Space and Hillside land use designations (which include the hillside and some of the foothill areas of the City) would be changed to Natural Open Space. These land use designation changes would ensure that the city's hillside areas and some

of the foothill areas would remain natural open space, and thereby, continue to provide areas within these areas for sensitive habitats. Impacts to suitable habitat for sensitive species that could occur in the city are addressed above under Impact 5.3-1.

The General Plan Update also includes changing certain areas of the Hillside land use designation (see Figure 3-4) to Municipal and Constructed Open Space (see Figure 3-6). However, portions of the current Hillside land use designation that would be converted to Municipal are already developed with debris basins that are part of the Los Angeles County flood control system.

Additionally, as stated in Chapter 3, *Project Description*, one of the key vision and guiding principles of General Plan Update is to protect and be responsible stewards of the neighboring San Gabriel Mountain foothill's wildlife, forest, open space, watershed and all other natural resources. Furthermore, the General Plan Update and Implementation Program contain policies and implementation measures, respectively, designed to minimize impacts on sensitive natural communities. Following are some of these policies and implementation measures:

- **Land Use Element Policy L15.5:** Consider the impact of development on wildlife.
- **Land Use Element Policy L15.2:** Ensure that development in the hillside areas be located in those areas resulting in the least environmental impact.
- **Land Use Element Policy L17.3:** Require that all development preserves, to the maximum extent possible, significant features of the natural topography, including swales, canyons, knolls, ridge lines, and rock outcrops.
- **Land Use Element Policy L44.2:** Require stringent environmental analysis following existing conservation easements prior to the installation of any improvements for any purpose on existing unimproved hillside land, in order to preserve existing biology, natural habitat, resources and watershed health.
- **Resource Management Policy R4.3:** Publicize and post signs that announce Resolution 72-62 which designates Sierra Madre as a Wildlife Sanctuary.
- **Land Use Implementation Measure IM-27:** The City shall continue to enforce the Hillside Management Zone Ordinance, and amend as necessary to address development density, environmental impact of development, access, water conservation and development impacts on wildlife.
- **Co-Existence with Wildlife Implementation Measure IM-3:** The City shall publicize and post signs that announce Resolution 72-62 which designates Sierra Madre as a Wildlife Sanctuary.
- **Co-Existence with Wildlife Implementation Measure IM-8:** The City shall disseminate information associated with the High Activity Wildlife Zone.

Implementation of all of these policies and implementation measures would have both direct and indirect beneficial effects for protecting sensitive natural communities by avoiding the most biologically sensitive areas of the city.

For these reasons, future development that would be accommodated by the General Plan Update, any land use changes proposed under the General Plan Update, and any new or updated policies of the General Plan Update are not anticipated to create a significant impact.

Impact 5.3-3: Implementation of the General Plan Update would not have a substantial adverse effect on federally protected wetlands in certain areas of the city. [Threshold B-3]

Impact Analysis: The analysis in this section addresses waterways and riparian habitats identified in published sources such as USGS blue-line streams; and waters, wetlands, and riparian habitats mapped on the National Wetlands Mapper. Most natural waterways in the City are in the foothill area that would be designated Natural Open Space (see Figure 3-6) and would not be designated for development. Therefore, most such waterways would not be disturbed by future development that would be accommodated by the General Plan Update. Also, any future development that would be accommodated by the General Plan Update that would disturb or impact waters, wetlands, and/or riparian habitats would be required to prepare site-specific environmental documentation (e.g., jurisdictional delineation) in accordance with CEQA and the requirements of the applicable regulatory agency (e.g., CDFW, USFWS, Corps) to ensure that no impacts would occur or that impacts would be mitigated accordingly.

Additionally, as shown in Figures 3-4 and 3-6, the current Open Space and Hillside land use designations (which include the hillside and some of the foothill areas of the City) would be changed to Natural Open Space. These land use designation changes would ensure that the city's hillside and some of the foothill areas would remain natural open space, and thereby, continue to provide areas within these areas for waters, wetlands, and/or riparian habitats.

Biotic Resources Management Plans would also be required for all land divisions in the Hillside Management zone, pursuant to Section 17.52.180 (Biotic Resources Management Plan) of the City's Municipal Code. As outlined in Section 17.52.180, a Biotic Resources Management Plan is required to contain an assessment of existing flora and fauna on and near the site; an assessment of project impacts to biological resources; mitigation measures including no net loss of wetlands and other sensitive habitats; and identify regulatory permits needed for project approval. Adherence to the provisions of the City's Municipal Code would be ensured through the city's development review and building plan check process.

Furthermore, as stated in Chapter 3, *Project Description*, one of the key vision and guiding principles of General Plan Update is to protect and be responsible stewards of the neighboring San Gabriel Mountain foothill's wildlife, forest, open space, watershed and all other natural resources. The General Plan Update also contains policies designed to minimize impacts on wetlands. Following are some of these policies:

- **Land Use Element Policy L15.5:** Consider the impact of development on wildlife.

- **Land Use Element Policy L17.3:** Require that all development preserves, to the maximum extent possible, significant features of the natural topography, including swales, canyons, knolls, ridge lines, and rock outcrops.

- **Land Use Element Policy L44.2:** Require stringent environmental analysis following existing conservation easements prior to the installation of any improvements for any purpose on existing unimproved hillside land, in order to preserve existing biology, natural habitat, resources and watershed health.

Implementation of these policies would have both direct and indirect beneficial effects for protecting wetlands by avoiding the most biologically sensitive areas of the city.

For these reasons, future development that would be accommodated by the General Plan Update, any land use changes proposed under the General Plan Update, and any new or updated policies of the General Plan Update are not anticipated to create a significant impact.

Impact 5.3-4: Implementation of the General Plan Update would not have a significant impact on wildlife movement corridors. [Threshold B-4]

Impact Analysis:

Overland Wildlife Movement

The parts of the city that form part of a regional wildlife movement corridor are the hillside and a portion of the foothill areas of the City. As shown in Figures 3-4, *Current Land Use Map*, and 3-6, *Proposed Land Use Map*, the current Open Space and Hillside land use designations (which include the hillside and some of the foothill areas of the city) would be changed to Natural Open Space. These land use designation changes would ensure that the city's hillside and some of the foothill areas would remain natural open space, and thereby, continue to provide areas wildlife movement.

Additionally, Biotic Resources Management Plans would be required for all land divisions in the Hillside Management zone, pursuant to Section 17.52.180 (Biotic Resources Management Plan) of the City's Municipal Code. As outlined in Section 17.52.180, a Biotic Resources Management Plan is required to contain an assessment of existing flora and fauna on and near the site; an assessment of project impacts to biological resources; mitigation measures including no net loss of wetlands and other sensitive habitats; and identify regulatory permits needed for project approval. Adherence to the provisions of the City's Municipal Code would be ensured through the city's development review and building plan check process.

Furthermore, as stated in of Chapter 3, *Project Description*, one of the key vision and guiding principles of General Plan Update is to protect and be responsible stewards of the neighboring San Gabriel Mountain foothill's wildlife, forest, open space, watershed and all other natural resources. The General Plan Update and Implementation Program also contain policies and implementation measures, respectively, designed to

minimize impacts on wildlife movement corridors. Following are some of these policies and implementation measures:

- **Land Use Element Policy L15.5:** Consider the impact of development on wildlife.
- **Land Use Element Policy L15.2:** Ensure that development in the hillside areas be located in those areas resulting in the least environmental impact.
- **Land Use Element Policy L17.3:** Require that all development preserves, to the maximum extent possible, significant features of the natural topography, including swales, canyons, knolls, ridge lines, and rock outcrops.
- **Land Use Element Policy L44.2:** Require stringent environmental analysis following existing conservation easements prior to the installation of any improvements for any purpose on existing unimproved hillside land, in order to preserve existing biology, natural habitat, resources and watershed health.
- **Resource Management Element Policy R4.1:** Raise awareness of Sierra Madre as an urban/wildlife interface where, as such, it is necessary for the residents to respect the wildlife, share space with wildlife, and to acknowledge the right of wildlife to pass within City limits undisturbed.
- **Resource Management Element Policy R4.3:** Publicize and post signs that announce Resolution 72-62 which designates Sierra Madre as a Wildlife Sanctuary.
- **Resource Management Element Policy R5.2:** Encourage residents to modify any existing structures to better accommodate safe passage of wildlife.
- **Resource Management Element Policy R5.4:** Create a High Activity Wildlife Zone that mirrors the Fire Hazard Severity Zone.
- **Land Use Implementation Measure IM-27:** The City shall continue to enforce the Hillside Management Zone Ordinance, and amend as necessary to address development density, environmental impact of development, access, water conservation and development impacts on wildlife.
- **Co-Existence with Wildlife Implementation Measure IM-2:** The City shall promote the establishment of a non-Brown Act, grassroots committee dedicated to encouraging the peaceful co-existence with wildlife.
- **Co-Existence with Wildlife Implementation Measure IM-6:** The City shall consider providing incentives for property owners to modify existing structures to better accommodate safe passage of wildlife.

- **Co-Existence with Wildlife Implementation Measure IM-8:** The City shall disseminate information associated with the High Activity Wildlife Zone.

Implementation of all of these policies would have both direct and indirect beneficial effects for protecting wildlife linkages and facilitating wildlife movement by avoiding the most biologically sensitive areas of the City.

For these reasons, future development that would be accommodated by the General Plan Update, any land use changes proposed under the General Plan Update, and any new or updated policies of the General Plan Update are not anticipated to create a significant impact.

Impacts to Migratory Birds

Future development that would be accommodated by the General Plan Update would involve the removal of some trees and other vegetation in currently developed parts of the city. The removal of such trees and vegetation may provide suitable habitat, including nesting habitat, for migratory birds[3] under the federal Migratory Bird Treaty Act (MBTA) and under Section 3513 et seq of the CDFW Code. CDFW Code 3513 provides protection to the birds listed under the MBTA, essentially all native birds. Additionally, Section 3503 of the CDFW Code makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. The MBTA implements the United States' commitment to four treaties with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources. The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. Under the provisions of the MBTA, it is unlawful "by any means or manner to pursue, hunt, take, capture (or) kill" any migratory birds except as permitted by regulations issued by USFWS. The term "take" is defined by USFWS regulation to mean to "pursue, hunt, shoot, wound, kill, trap, capture or collect" any migratory bird or any part, nest or egg of any migratory bird covered by the conventions, or to attempt those activities. USFWS administers permits to take migratory birds in accordance with the MBTA.

Future development that would be accommodated by the General Plan update would be required to comply with the MBTA by either avoiding site clearing, demolition or grading activities during the breeding/nesting season (February 1 to September 1, as defined by CDFW) or conducting a site survey for nesting birds prior to commencing such activities during the nesting season. Adherence to the MBTA regulations would ensure that if construction occurs during the breeding/nesting season, appropriate measures would be taken to avoid impacts to nesting birds, if any are found. Additionally, adherence to the MTBA regulations would be ensured through the city's development review and building plan check process.

For these reasons, future development that would be accommodated by the General Plan Update, any land use changes proposed under the General Plan Update, and any new or updated policies of the General Plan Update are not anticipated to create a significant impact.

[3] Migratory birds include all native birds in the United States, as listed in 50 CFR (Code of Federal Regulations) 10.13 (List of Migratory Birds).

Impact 5.3-5: Implementation of the General Plan Update would not result in a conflict with Sierra Madre's tree preservation ordinance. [Threshold B-5]

Impact Analysis: The majority of the development and redevelopment potential that would be accommodated by the General Plan Update would occur in areas of the city that are already developed or designated for development, with most of the land use changes and development potential proposed under the General Plan Update occurring on the infill opportunity sites shown in Figure 3-5, *Infill Opportunity Sites*. Additionally, the proposed land use changes (discussed above under Section 5.3.3, Environmental Impacts, and shown in Figures 3-4, *Current Land Use Map*, and 3-6, *Proposed Land Use Map*) that would occur under the General Plan Update are not anticipated to result in a substantial impact on trees. However, future development activities on the opportunity sites and others throughout the city could result in the removal of existing trees.

Future development and/or redevelopment activities under the General Plan Update would be required to comply with Chapter 12.20 (Tree Preservation) of the City's Municipal Code. This chapter protects the following categories of trees:

- Trees on City property.
- Protected trees (Southern California Black Walnut [*Juglans californica*], Engelmann Oak [*Quercus engelmannii*], Coast Live Oak [*Quercus agrifolia*], or Western Sycamore [*Platanus racemosa*] tree whose trunk [or collective trunks] exceed a diameter of four inches measured four feet above natural ground level):

Additionally, Biotic Resources Management Plans would be required for all land divisions in the Hillside Management zone, pursuant to Section 17.52.180 (Biotic Resources Management Plan) of the City's Municipal Code. As outlined in Section 17.52.180, a Biotic Resources Management Plan is required to contain an assessment of existing flora and fauna on and near the site; an assessment of project impacts to biological resources; mitigation measures including no net loss of wetlands and other sensitive habitats; and identify regulatory permits needed for project approval. Adherence to the provisions of the City's Municipal Code would be ensured through the City's development review and building plan check process.

Furthermore, the majority of the city's hillside area (designated as Open Space and Hillside on the current land use map; see Figure 3-4) would be designated Natural Open Space on the proposed land use map (see Figure 3-6) and, therefore, would not be subject to land divisions or development. This change in land use designations would also ensure that the city's hillside areas would remain natural open space.

The General Plan Update and Implementation Program also contain policies and implementation measures, respectively, designed to minimize impacts on trees and the City's tree preservation ordinance. Following are some of these policies and implementation measures:

- **Land Use Element Policy L24.5:** Encourage the retention of existing mature, specimen trees.
- **Resource Management Element Policy R10.1:** Continue to develop public awareness and support for the City's tree ordinance.
- **Resource Management Element Policy R10.2:** Continue to develop tree preservation and protection measures.
- **Resource Management Element Policy R10.3:** Carry out the objectives and recommendations of the Community Forest Management Plan.
- **Resource Management Element Policy R10.7:** Continue to provide a tree expert as needed to assist the City regarding tree removal, tree trimming, root pruning, identifying tree diseases, and grading that might affect trees.
- **Resource Management Element Policy R10.8:** Continue to monitor construction projects with regard to grading and construction effects on trees, tree removal and replacement.
- **Resource Management Element Policy R10.9:** Continue to monitor latest trends and research in the field of arboriculture to better manage the City's urban forest.
- **Resource Management Element Policy R10.10:** Promote the voluntary Legacy Tree Program.
- **Resource Management Element Policy R11.2:** Solicit community participation in programs which are geared towards planting and maintaining City trees.
- **Tree Preservation Implementation Measure IM-1:** The City shall continue to enforce the City's existing Tree Preservation Ordinance.
- **Tree Preservation Implementation IM-3:** The City shall implement the recommendations of the Community Forest Management Plan.
- **Tree Preservation Implementation IM-5:** The City shall develop funding sources for the enhancement of the ongoing tree maintenance and planting program.

Implementation of these policies and implementation measures would have both direct and indirect beneficial effects for protecting trees within the city.

For these reasons, future development that would be accommodated by the General Plan Update, any land use changes proposed under the General Plan Update, and any new or updated policies of the General Plan Update are not anticipated to create a significant impact.

Impact 5.3-6: Implementation of the General Plan Update would not conflict with an adopted conservation plan protecting biological resources. [Threshold B-6]

Impact Analysis: The city is not in the plan area of any habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, implementation of the General Plan Update would not conflict with any such plan.

5.3.5 Existing Regulations

Federal

- Endangered Species Act: United States Code, Title 16, Sections 1531 et seq.
- Migratory Bird Treaty Act: United States Code, Title 16, Sections 703-712.
- Clean Water Act: United States Code, Title 33, Sections 1251 et seq.:

State

- California Fish and Game Code, Section 2080: Endangered Species Act
- California Fish and Game Code, Section 1600: Lakes and Streambeds

Local

- City of Sierra Madre Municipal Code, Chapter 12.20 (Tree Preservation)
- City of Sierra Madre Municipal Code, Chapter 17.52 (Hillside Management Zone), Section 17.52.180 (Biotic Resources Management Plan)

5.3.6 Level of Significance Before Mitigation

Upon compliance with the regulatory requirements and implementation of the General Plan Update policies and Implementation Program measures, the following impacts would be less than significant: 5.3-1 through 5.3-6.

5.3.7 Mitigation Measures

No significant adverse impacts were identified and no mitigation measures are necessary.

5.3.8 Level of Significance After Mitigation

No significant adverse impacts were identified relating to biological resources.

5.3.9 References

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5. Environmental Analysis
BIOLOGICAL RESOURCES

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