4.4 BIOLOGICAL RESOURCES

4.4.1 METHODOLOGY

This section analyzes potential biological resource impacts associated with implementation of the proposed 2010 General Plan Update. Information and analyses in this section are based on literature reviews, regulations, and current aerial photographs of the City. The specific sources of the information provided are listed within each topical section below.

4.4.2 RELEVANT PROGRAMS AND REGULATIONS

Federal

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) protects plants and animals that the government has listed as "Endangered" or "Threatened". A federally listed species is protected from unauthorized "take", which is defined in the FESA as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or attempt to engage in any such conduct". All persons are presently prohibited from taking a federally listed species unless and until (1) the appropriate Section 10(a) permit has been issued by the U.S. Fish and Wildlife Service (USFWS) or (2) an Incidental Take Statement is obtained as a result of formal consultation between a federal agency and the USFWS pursuant to Section 7 of the FESA and the implementing regulations that pertain to it (50 *Code of Federal Regulations* [CFR] 402). "Person" is defined in the FESA as an individual, corporation, partnership, trust, association, or any private entity; any officer, employee, agent, department or instrument of the Federal government; any State, Municipality, or political subdivision of the State; or any other entity subject to the jurisdiction of the United States.

Clean Water Act/River and Harbors Act

The U.S. Army Corps of Engineers (USACE) Regulatory Branch regulates activities that discharge dredged or fill materials into "Waters of the U.S."[1] under Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. This permitting authority applies to all "Waters of the U.S." where the material has the effect of (1) replacing any portion of "Waters of the U.S." with dry land or (2) changing the bottom elevation of any portion of "Waters of the U.S.".

Section 401 of the CWA provides the Regional Water Quality Control Board (RWQCB) with the authority to regulate, through a Water Quality Certification, any proposed federally permitted activity that may affect water quality. Among such activities are discharges of dredged or fill material permitted by the USACE pursuant to Section 404 of the CWA. Section 401 requires the RWQCB to provide "certification that there is reasonable assurance that an activity which may result in the discharge to 'Waters of the U.S.' will not violate water quality standards". Water Quality Certification must be based on a finding that the proposed discharge would comply with water quality standards, which contain numeric and narrative objectives that can be found in each of the nine RWQCBs' Basin Plans.

[1] "Waters of the U.S." include navigable coastal and inland waters, lakes, rivers, and streams and their tributaries; interstate waters and their tributaries; wetlands adjacent to such waters; intermittent streams; and other waters that could affect interstate commerce.

Development allowed within any identified jurisdictional areas in the proposed General Plan Update Study Area (which includes the City of Arcadia and its related Sphere of Influence [SOI]) may be subject to requirements under Sections 401 and 404 of the CWA. Under Section 401 of the CWA, an activity requiring a USACE Section 404 permit must obtain a State Water Quality Certification (or waiver thereof) to ensure that the activity will not violate established State water quality standards. This includes filling, stockpiling, converting to a storm drain, modifying an existing storm drain or channel, creating a channel, stabilizing a bank, modifying road or utility transmission line crossings, or completing other modifications of an existing drainage, stream, or wetland. The State Water Resources Control Board (SWRCB), in conjunction with the nine RWQCBs, is responsible for administering the Section 401 water quality certification program. Both permanent and temporary impacts to jurisdictional resources are regulated activities that require permit authorization from these agencies.

Executive Order 11990

Executive Order 11990 directs federal agencies (1) to minimize the destruction, loss, or degradation of wetlands and (2) to preserve and enhance the natural and beneficial values of wetlands in carrying out the agencies' responsibilities. Each agency shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds that (1) there is no practicable alternative to such construction and (2) the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use. In making this finding, the head of the agency may take into account economic, environmental, and other pertinent factors.

Migratory Bird Treaty Act

Pursuant to the Migratory Bird Treaty Act (MBTA) of 1918, federal law prohibits the taking of migratory birds, their nests, or their eggs (16 *United States Code* [USC] Section 703), except as allowed by permit pursuant to 50 CFR 21. The statute states:

> Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill...any migratory bird, any part, nest, or egg of any such bird...included in the terms of the [Migratory Bird] conventions.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors).

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds. The 1972 amendments increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorized the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations.

State

California Endangered Species Act

Pursuant to the California Endangered Species Act (CESA) and Section 2081 of the *California Fish and Game Code,* an Incidental Take Permit from the California Department of Fish and Game (CDFG) is required for projects that could result in the take of a State-listed Threatened or Endangered species. Under the CESA, "take" is defined as an activity that would directly or indirectly kill an individual of a species. If a species is listed by the federal and State governments as Threatened or Endangered, a consistency finding in accordance with Section 2080.1 of the CESA is issued when a project is deemed consistent with an existing USFWS Biological Opinion (BO), pursuant to Section 7 of the FESA.

Porter-Cologne Act

The Porter-Cologne Act provides the State with very broad authority to regulate "Waters of the State".[2] Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a "Report of Waste Discharge" when there is no federal nexus, such as under Section 404(b)(1) of the Clean Water Act. Although "waste" is partially defined as any waste substance associated with human habitation, the RWQCB interprets this to include fill discharge into water bodies.

California Fish and Game Code

"Waters of the State"

Sections 1600–1616 of the *California Fish and Game Code* protect "Waters of the State". Activities of State and local agencies, as well as public utilities that are project proponents, are regulated by the CDFG under Section 1602 of the code; this section regulates any work that would (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. For project activities that may affect stream channels and/or riparian vegetation regulated under Sections 1600 through 1603, CDFG authorization is required in the form of a Streambed Alteration Agreement.

Birds of Prey and Migratory Birds

Sections 3503 and 3503.5 of the *California Fish and Game Code* makes it unlawful to take, possess, or destroy the nests and eggs of birds of prey.

Section 3513 of the *California Fish and Game Code* duplicates the federal protection of migratory birds and prohibits the taking and possession of any migratory nongame bird, as designated in the MBTA.

CDFG Review

As a trustee agency, the CDFG has jurisdiction over certain resources held in trust for the people of California. Trustee agencies are generally required to be notified of CEQA documents

[2] The Porter-Cologne Act defines "Waters of the State" as "any surface water or groundwater, including saline waters, within the boundaries of the state" (this includes the rivers, streams, or lakes protected by Sections 1600–1616 of the *California Fish and Game Code*).

relevant to their jurisdiction, whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project (14 *California Code of Regulations* [CCR] Section 15386). The CDFG, as a trustee agency, must be notified of CEQA documents regarding projects involving wildlife of the State as well as Rare and Endangered native plants,[3] wildlife areas, and ecological reserves. As a trustee agency the CDFG cannot approve or disapprove a project; however, lead and responsible agencies are required to consult with them. The CDFG, as the trustee agency for wildlife resources, shall provide the requisite biological expertise to review and comment upon environmental documents and impacts arising from buildout of the proposed General Plan Update Study Area and shall make recommendations regarding those resources held in trust for the people of California (*California Fish and Game Code*, Section 1802).

Local

City of Arcadia Oak Tree Regulations

The City of Arcadia adopted Ordinance No. 1962 in 1992, recognizing oak trees as significant aesthetic and ecological resources and establishing preservation criteria for oak trees in the City. Article IX, Chapter 7 of the Arcadia Municipal Code contains regulations that protect certain oak trees from removal, relocation, damage, or encroachment without an approved Oak Tree Permit. Protected trees include Engelmann oaks (*Quercus engelmannii*) and coast live oaks (*Quercus agrifolia*) that are four inches or more in diameter as measured 4.5 feet above the crown root. With respect to oak trees with more than one trunk, the ordinance protects trees with two or more trunks that are each three inches or more in diameter as measured 4.5 feet above the crown root. The regulations also protect any oak tree (*Quercus* sp.) that is twelve (12) inches or more in diameter as measured 4.5 feet above the crown root and those with more than one trunk that are each ten inches or more in diameter as measured 4.5 feet above the crown root.

The Oak Tree Permit may include conditions for the relocation of oak trees on-site, the planting of new oak trees and/or the planting of additional trees, other than oak, which may be more appropriate to a site. Exemptions to this ordinance include tree removal and/or encroachment that has been specifically approved as part of a development permit; that poses an imminent threat to the public safety, or general welfare; that creates visual barriers to adequate line-of-sight distances; that are needed to protect existing electrical power or communication lines or other public utility line; that will cause damage to existing public improvements; or would preclude development of a site owned by the Redevelopment Agency.

Arcadia Street Tree Master Plan

The City's Street Tree Master Plan identifies the tree species allowed on parkways along public streets. The Arcadia Tree Commission acts as an advisory body to the City Council and reviews the annual City-owned tree inventory and master plan and provides a recommendation to the City Council for approval and implementation of the master plan.

[3] Section 15380 of CEQA indicates that a lead agency can consider a non-listed species (e.g., California Native Plant Society [CNPS] List 1B and 2 plants) to be Endangered, Rare, or Threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of "Rare" or "Endangered". A "Rare" species is one which (1) although not presently threatened with extinction, is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens or (2) is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" by the FESA. An "Endangered" species is one whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors.

Comprehensive Tree Management Program

The City's Comprehensive Tree Management Program is contained in Article IX, Chapter 8 of the *Arcadia Municipal Code*, which regulates the planting, maintenance, removal and replacement of City-owned trees on public property (in City parks, within street medians and along parkways, and on other public properties). A City permit is required to plant, remove, cut, or damage a City-owned tree or shrub on any public property. In accordance with the City's Street Tree Master Plan, the Public Works Department also reviews plans for new development for compliance with the number of street trees or the species to be planted as part of the development.

4.4.3 EXISTING CONDITIONS

Environmental Setting

The City of Arcadia is located in the San Gabriel Valley of Los Angeles County, south of the foothills of the San Gabriel Mountains and Angeles National Forest. Santa Anita Wash (including a short portion of Sierra Madre Wash) and Arcadia Wash run generally from north to south through the City. Elevations within the City range from about 320 to 1,800 feet above mean sea level (msl).

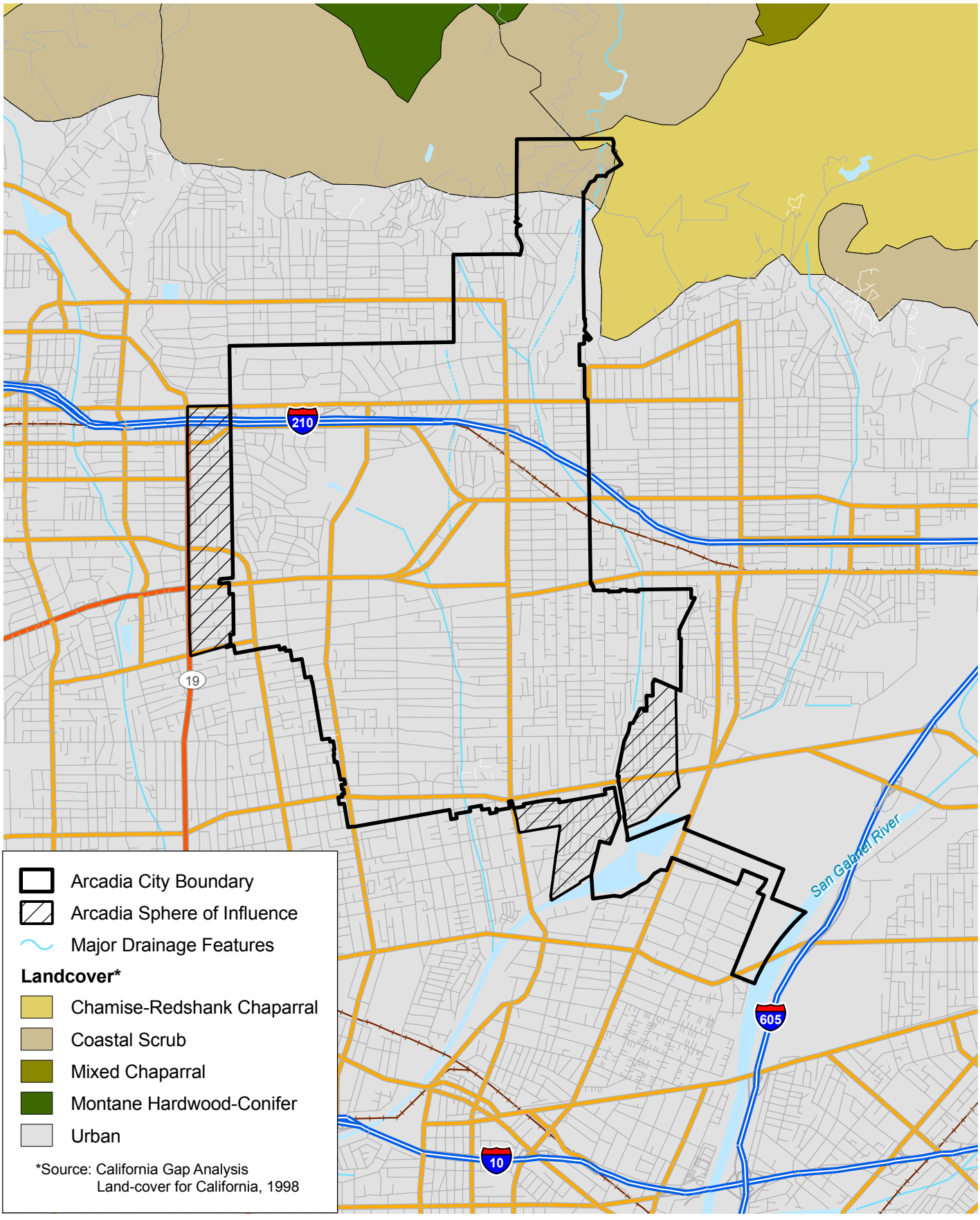
The City of Arcadia is nearly built out, with 91.4 acres (approximately one percent) of the total land area in the City and its SOI remaining as vacant and undeveloped land. Thus, the majority of plant and animal habitats are located in urban environments with non-native and ornamental landscaping. Other open areas include undeveloped land along natural creeks, dams, spreading basins, and hillside areas.

Exhibit 4.4-1, Regional Vegetation Map, depicts the extent of vegetation types within the City and surrounding areas based on 1998 California Gap Analysis (Land-cover for California) data published by the Biogeography Lab at the University of California, Santa Barbara. This general vegetation data presented is intended to provide a regional understanding of general vegetation types and groups that may occur within a particular study area. As shown on Exhibit 4.4-1, the vast majority of the City is urban and does not contain notable areas of native vegetation, with the exception of the northernmost portion of the City. This area is known to generally contain coastal scrub and chamise-redshank chaparral vegetation types. Because these vegetation types and groups are subject to change over time, the extent and precise location of these resources should be determined at the time of potential site development.

Open Space Areas

Although field surveys were not conducted specifically for this project, BonTerra Consulting biologists are familiar with the biological resources present in the study area based on past survey efforts and personal observations. Outdoor recreation areas in the City include the Arboretum of Los Angeles County, Arcadia County Park, Santa Anita County Golf Course, Wilderness Park (which includes high quality alder [*Alnus rhombifolia*] riparian forest), and a few other smaller parks and a private golf course. Although the vegetation consists mainly of non-native ornamental landscaping in these areas, some patches of native vegetation remain, and many native trees exist including coast live oaks (*Quercus agrifolia*) and western sycamores (*Platanus racemosa*).

Linear stretches of open spaces are found along the Sierra Madre, Santa Anita, and Arcadia Washes, with larger areas in the upper Santa Anita Wash in the northeastern portion of



Regional Vegetation Map

Exhibit 4.4-1

Arcadia General Plan Update

N W E S

1 0.5 0 1 Miles

BonTerra CONSULTING

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the City and Peck Road County Park in the southeastern portion of the City. The Santa Anita Wash open space area consists mainly of mechanically disturbed areas that function as access routes and spreading grounds for flood control activities. It also supports many coast live oak and western sycamore trees, along with patches of native habitat, including oak-sycamore riparian forest with native understory components and high quality coastal sage scrub. Peck Road County Park was once a gravel mining pit, and now consists of a large lake fed by the Santa Anita and Sawpit Washes. The park is utilized by the public for fishing and bird-watching and supports a few stands of willow (*Salix* spp.) riparian forest and scrub vegetation at the lake margins.

Wildlife

Based on regional familiarity with and personal knowledge of natural resources present within the study area, the following discussion was developed by BonTerra Consulting biologists. While the majority of the City is developed, the remaining open space areas and undeveloped parcels provide some patches of wildlife habitat. The following discussion is intended to provide a general description of wildlife species that may be expected to occur within the existing open space areas.

Fish habitat is present at Peck Road County Park, which contains a lake regularly stocked by the CDFG for recreation purposes. Non-native fish expected to occur here include rainbow trout (*Oncorhynchus mykiss*), bullhead/catfish (*Ameiurus* sp.), largemouth bass (*Micropterus salmoides*), bluegill (*Lepomis* sp.), and common carp (*Cyprinus carpio*).

Widespread amphibian species expected to occur in the Santa Anita Debris Basin include Pacific treefrog (*Pseudacris regilla*) and western toad (*Bufo boreas*). Open space areas are expected to support common reptile species, including western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), southern alligator lizard (*Elgaria multicarinata*), western skink (*Plestiodon* [*Eumeces*] *skiltonianus*), gopher snake (*Pituophis catenifer*), coachwhip (*Masticophis flagellum*), common kingsnake (*Lampropeltis getula*), and western rattlesnake (*Crotalus oreganus*).

Various bird species are expected to occur in the open space areas throughout the City, including native species such as red-tailed hawk (*Buteo jamaicensis*), great horned owl (*Bubo virginianus*), barn owl (*Tyto alba*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), acorn woodpecker (*Melanerpes formicivorus*), black phoebe (*Sayornis nigricans*), western scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), spotted towhee (*Pipilo maculates*), California towhee (*Pipilo crissalis*), song sparrow (*Melospiza melodia*), house finch (*Carpodacus mexicanus*), and lesser goldfinch (*Carduelis psaltria*). Other native species such as the California quail (*Callipepla californica*), Bewick's wren (*Thryomanes bewickii*), wrentit (*Chamaea fasciata*), and California thrasher (*Toxostoma redivivum*) are expected to have a restricted distribution within the City, primarily confined to the northern parts of the City adjacent to open spaces of the San Gabriel Mountains (e.g., Santa Anita Debris Basin). Introduced bird species expected to occur in the City include rock pigeon (*Columba livia*), European starling (*Sturnus vulgaris*), and house sparrow (*Passer domesticus*). These non-native species were introduced into the region many years ago and have developed stable breeding populations. A variety of other non-native species or "exotics" are expected to occur in the City, particularly parrots, but most of these species have not yet established self-sustaining populations in the region. However, the red-crowned parrot (*Amazona viridigenalis*) is one parrot species that was recently recognized by ornithological institutions as an "introduced" species in the region.

Mammal species expected to occur in most open space areas of the City include desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), and coyote (*Canis latrans*). A more diverse assemblage of mammals is expected to occur in the northern parts of the City adjacent to open spaces of the San Gabriel Mountains (e.g., Santa Anita Debris Basin). These open space areas are expected to support species such as desert woodrat (*Neotoma lepida*), bobcat (*Felis rufus*), and mule deer (*Odocoileus hemionus*). Even the occasional American black bear (*Ursus americanus*) and mountain lion (*Puma concolor*) may occur in these parts of the City. Mammal species expected to occur throughout much of the City, including the more developed areas, include introduced species such as Virginia opossum (*Didelphis virginiana*) and black rat (*Rattus rattus*), and native species such as raccoon (*Procyon lotor*) and striped skunk (*Mephitis mephitis*).

Wildlife Movement

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (e.g., foraging for food or water, defending territories, or searching for mates, breeding areas, or cover). A number of terms such as "wildlife corridor", "travel route", "habitat linkage", and "wildlife crossing" have been used in various wildlife movement studies to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this analysis, these terms are defined as follows:

- ***Travel Route:*** a landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and to provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It contains adequate food, water, and/or cover for wildlife moving between habitat areas and provides a relatively direct link between target habitat areas.

- ***Wildlife Corridor:*** a linear habitat area that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bound by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate wildlife movement while in the corridor. Larger, landscape-level corridors, often referred to as "habitat or landscape linkages", can provide both transitory and resident habitat for a variety of species.

- ***Wildlife Crossing:*** a small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These often represent "choke points" along a movement corridor, which may impede wildlife movement and increase the risk of predation.

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, transitions in vegetation, or human disturbance. This is exacerbated by fragmentation of open spaces due to urbanization that creates isolated "islands" of wildlife habitat. In the absence of linkages that allow movement between areas of suitable habitat, various studies have

concluded that some wildlife species, especially larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat because they prohibit the immigration of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990).

Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between areas of remaining habitat, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events, such as fire or disease, will result in population or local species extirpation; and (3) serving as travel routes for individual animals as they move in their home ranges in search of food, water, mates, and other necessary resources (Noss 1983; Farhig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

It is important to note that wildlife corridors, as defined above, may not yet exist in a large open space area in which there are few or no man-made or naturally occurring physical constraints to wildlife movement. Given an open space area that is both large enough to maintain viable populations of species and provide a variety of travel routes (e.g., canyons, ridgelines, trails, riverbeds, and others), wildlife will use these "local" routes while searching for food, water, shelter, and mates and will not need to cross into other large open space areas. Based on their size, location, vegetative composition, and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer lengths of time and serve as source areas for food, water, and cover, particularly for small- and medium-sized animals. This is especially true if the travel route is within a larger open space area. However, once open space areas become constrained and/or fragmented as a result of urban development or the construction of physical obstacles, such as roads and highways, the remaining landscape features or travel routes that connect the larger open space areas become corridors as long as they provide adequate space, cover, food, and water and do not contain obstacles or distractions (e.g., man-made noise, lighting) that would generally hinder wildlife movement.

Ideally, a corridor should encompass a heterogeneous mix of habitats to accommodate the ecological requirements of the variety of species in any particular region. Most species typically prefer an adequate amount of vegetation cover during movement periods that serve as both a food source as well as protection from weather and potential predators. Drainages, riparian areas, and canyon bottoms typically serve as natural movement corridors because these features provide cover, food, and often water for a variety of species. Very few species will move across large expanses of open, uncovered habitat unless it is the only option available to them. For some species, habitat linkages and movement corridors should be able to support animals for a sustained period of time, not just for travel. Smaller or less mobile animals (such as rodents and reptiles) may require long periods to traverse a corridor, so the corridor must contain adequate food and cover for survival.

While the City of Arcadia is directly connected to large open spaces within the San Gabriel Mountains/Angeles National Forest via Santa Anita Wash, other than limited wildlife movement options along this wash down to the lake at the Peck Road County Park (which is then connected to Sawpit Wash, Arcadia Wash, and the Rio Hondo), the City of Arcadia consists mainly of developed areas. Since the City is surrounded by development in every direction except for the northeast, opportunities for wildlife movement are extremely limited. Travel along the drainages may allow for limited regional wildlife movement, especially during portions of the year when water is present, but the washes traverse heavily populated areas and do not contain significant biological resources to shelter or support most wildlife species. Therefore, although

the drainages may allow for some limited regional wildlife movement, they do not constitute high quality travel routes, wildlife corridors, or wildlife crossings.

Special Status Biological Resources

Special status biological resources include plant and wildlife species that have been afforded special status and/or recognition by federal and State resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (i.e., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution resulting in most cases from habitat loss. In addition, special status biological resources include jurisdictional drainages and their riparian vegetation. Sources used to determine the special status of biological resources are as follows:

- ***Plants:*** the California Native Plant Society's (CNPS') Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2010); the CDFG's California Natural Diversity Database (CNDDB) (CDFG 2010); various Federal Register notices from the USFWS regarding listing status of plant species; and the CDFG's List of Special Vascular Plants, Bryophytes, and Lichens.

- ***Wildlife:*** the CNDDB (CDFG 2010); various Federal Register notices from the USFWS regarding listing status of wildlife species; and the CDFG's List of Special Animals.

A federally listed Endangered species is a species facing extinction throughout all or a significant portion of its geographic range. A federally listed Threatened species is a species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally listed Threatened or Endangered species on an area proposed for development leads to a CEQA determination of "significance" and, for wildlife or where there is a federal nexus, for plants, requires consultation with USFWS, particularly if development would result in "take" of the species or its habitat.

Federally listed "Proposed" species are those officially proposed by the USFWS for addition to the federal Threatened and Endangered species lists. Because species may become listed as Threatened or Endangered prior to or during implementation of a project, they are treated here as though they are listed species.

The State of California considers an Endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A Threatened species is a species in such small numbers throughout its range that it is likely to become an Endangered species in the near future in the absence of special protection or management. A Rare species is one present in such small numbers throughout its range that it may become Endangered if its present environment worsens. The Rare species designation applies to California native plants listed prior to the CESA. State-listed Threatened and Endangered species are protected against take unless an incidental take permit is obtained from the resource agencies.

California Species of Special Concern is an informal designation used by the CDFG for some declining wildlife species that are not State candidates for listing. This designation does not provide legal protection, but signifies that these species are recognized as special status by the CDFG. Recently, the CDFG has downgraded some species into the Watch List (WL) category. Species that are California Fully Protected include those protected by special legislation for various reasons, such as the mountain lion and white-tailed kite. Fully Protected Species may not be taken or possessed at any time.

Special Plant and Special Animal are general terms that refer to all of the species the CNDDB is interested in tracking, regardless of their legal or protection status. This term includes species designated as any of the above terms but also includes species that (1) may be considered biologically rare, restricted in distribution, and/or declining throughout their range; (2) are on the periphery of their range and are threatened with extirpation in California; (3) are associated with special status habitats; or (4) are considered by other State or federal agencies or private organizations to be sensitive or declining.

The CNPS is a local resource conservation organization that has developed an inventory of California's special status plant species (CNPS 2010). This inventory is a summary of information on the distribution, rarity, and endangerment of California's vascular plants, and is comprised of four lists. The CNPS includes plants into List 1A if the plant species are extinct in California because they have not been seen in the wild for many years. The CNPS's List 1B includes plants that are Rare, Threatened, or Endangered throughout their range. List 2 plant species includes those considered Rare, Threatened, or Endangered in California but are more common in other states. List 3 is a "review" list of plants for which more information is needed, and List 4 is a "watch" list of plants that have limited distribution.

The CNPS also assigns a threat rank extension to the List categories. An extension of .1 is assigned to plants that are considered "seriously threatened" in California (high degree/immediacy of threat). Extension .2 indicates the plant is "fairly threatened" in California (moderate degree/immediacy of threat). Extension .3 is assigned to plants that are considered "not very threatened" in California (low degree/immediacy of threat or no current threats known).

Tables 4.4-1 and 4.4-2 provide a summary of each special status plant and wildlife species that has the potential to occur in the City and include information on the definitions for the various status designations and presence or absence of suitable habitat.

Special Status Plants

According to the CNPS' Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2010) and the CDFG's California Natural Diversity Database (CDFG 2010), many special status plant species have been reported to occur in the vicinity of the City (i.e., within the U.S. Geological Survey [USGS] Pasadena, Mount Wilson, Azusa, Los Angeles, El Monte, and Baldwin Park 7.5-minute quadrangles). These species are listed in Table 4.4-1.

TABLE 4.4-1
SPECIAL STATUS PLANT SPECIES
REPORTED TO OCCUR IN THE STUDY AREA VICINITY

Species	Status			Occurrence Information[a]
	USFWS	CDFG	CNPS	
Astragalus brauntonii Braunton's milk-vetch	FE	—	1B.1	Observed in the Monrovia foothills, immediately east of Arcadia.
Atriplex serenana var. *davidsonii* Davidson's saltscale	—	—	1B.2	Historically observed in 1902 near Hollywood, more than 10 miles southwest of Arcadia.
Berberis nevinii Nevin's barberry	FE	SE	1B.1	Observed in Arroyo Seco several miles northwest of Arcadia, and in Whittier Narrows several miles south of Arcadia.

TABLE 4.4-1 (Continued)
SPECIAL STATUS PLANT SPECIES
REPORTED TO OCCUR IN THE STUDY AREA VICINITY

Species	Status			Occurrence Information[a]
	USFWS	CDFG	CNPS	
California macrophylla round-leaved filaree	—	—	1B.1	Known in vicinity only from anonymous undated collection from Garvanza area, several miles west of Arcadia.
Calochortus clavatus var. *gracilis* slender mariposa lily	—	—	1B.2	Historically observed in 1921 at West Fork of the San Gabriel River, several miles northeast of Arcadia.
Calochortus plummerae Plummer's mariposa lily	—	—	1B.2	Observed in Monrovia immediately east of Arcadia, and in Sierra Madre immediately west of Arcadia.
Calochortus weedii var. *intermedius* intermediate mariposa lily	—	—	1B.2	Observed in Puente Hills, several miles south of Arcadia.
Centromadia parryi ssp. *australis* southern tarplant	—	—	1B.1	Historically observed in 1951 in Altadena, several miles northwest of Arcadia.
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	FC	SE	1B.1	Occurrence located within the Mt. Wilson USGS quadrangle now thought to be extirpated (destroyed).
Chorizanthe parryi var. *parryi* Parry's spineflower	—	—	1B.1	Historically observed in 1902/1919 at Mt. Lowe and Arroyo Seco several miles northwest of Arcadia, and in 1920 in San Gabriel River a few miles east of Arcadia.
Cladium californicum California saw-grass	—	—	2.2	Historically observed in 1861 at mouth of Santa Anita Canyon, in or immediately north of Arcadia.
Dodecahema leptoceras slender-horned spineflower	FE	SE	1B.1	Historically observed in 1920 in the Santa Anita Wash, in or immediately north of Arcadia.
Dudleya cymosa ssp. *crebrifolia* San Gabriel River dudleya	—	—	1B.2	Observed in Fish Canyon, several miles east of Arcadia.
Dudleya densiflora San Gabriel Mountains dudleya	—	—	1B.1	Observed in Fish Canyon, several miles east of Arcadia.
Dudleya multicaulis many-stemmed dudleya	—	—	1B.2	Historically observed in 1927 in Puente Hills, several miles south of Arcadia.
Galium grande San Gabriel bedstraw	—	—	1B.2	Observed at Chantry Flat, a few miles north of Arcadia.
Helianthus nuttallii ssp. *parishii* Los Angeles sunflower	—	—	1A	Species presumed extinct; historically observed in 1903 in Pasadena, several miles west of Arcadia.
Hordeum intercedens vernal barley	—	—	3.2	Occurrences located within the Los Angeles and El Monte USGS quadrangles considered uncertain.
Horkelia cuneata ssp. *puberula* mesa horkelia	—	—	1B.1	Historically observed in 1918 in Sierra Madre, immediately west of Arcadia.
Imperata brevifolia California satintail	—	—	2.1	Observed between Fish Canyon and Roberts Canyon, several miles east of Arcadia.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	—	—	1B.1	Occurrences located within the Pasadena and Mt. Wilson USGS quadrangles now thought to be extirpated (destroyed).
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	—	—	1B.2	Observed in Fish Canyon, several miles east of Arcadia.

TABLE 4.4-1 (Continued)
SPECIAL STATUS PLANT SPECIES
REPORTED TO OCCUR IN THE STUDY AREA VICINITY

Species	Status			Occurrence Information[a]
	USFWS	CDFG	CNPS	
Linanthus concinnus San Gabriel linanthus	—	—	1B.2	Historically observed in 1921 on Mt. Markham, several miles northwest of Arcadia.
Linanthus orcuttii Orcutt's linanthus	—	—	1B.3	Historically observed in 1925 in Pasadena, a few miles west of Arcadia.
Muhlenbergia californica California muhly	—	—	4.3	Historically observed in 1899 at Mt. Lowe several miles northwest of Arcadia, and from an undated collection in Pasadena a few miles west of Arcadia.
Navarretia prostrata prostrate vernal pool navarretia	—	—	1B.1	Historically observed in 1881 in Los Angeles, more than 10 miles southwest of Arcadia.
Phacelia stellaris Brand's star phacelia	FC	—	1B.1	Historically observed in 1935 along San Gabriel River near El Monte, a few miles south of Arcadia.
Pseudognaphalium leucocephalum white rabbit-tobacco	—	—	2.2	Historically observed in 1929 along Eaton Canyon, a few miles northwest of Arcadia.
Ribes divaricatum var. *parishii* Parish's gooseberry	—	—	1A	Species presumed extinct; observed in Whittier Narrows several miles south of Arcadia, and historically observed in 1882 in Pasadena several miles west of Arcadia.
Scutellaria bolanderi ssp. *austromontana* southern mountains skullcap	—	—	1B.2	Occurrence noted in 1943 flora located near El Monte, a few miles south of Arcadia, considered questionable.
Symphyotrichum greatae Greata's aster	—	—	1B.3	Observed at confluence of Pine Canyon with Arroyo Seco, about 10 miles northwest of Arcadia.
Thelypteris puberula var. *sonorensis* Sonoran maiden fern	—	—	2.2	Observed in Monrovia Canyon a few miles northeast of Arcadia, and also known from an undated collection in Santa Anita Canyon in or immediately north of Arcadia.

[a] Unless otherwise indicated, species was observed within the past 50 years.

LEGEND:

Federal (USFWS)

FE Endangered
FT Threatened
FC Candidate

State (CDFG)

SE Endangered
ST Threatened
SR Rare
SC Candidate

California Native Plant Society (CNPS) List Categories

List 1A Plants Presumed Extinct in California
List 1B Plants Rare, Threatened, or Endangered in California and Elsewhere
List 2 Plants Rare, Threatened, or Endangered in California But More Common Elsewhere
List 3 Plants About Which We Need More Information - A Review List
List 4 Plants of Limited Distribution – A Watch List

California Native Plant Society (CNPS) Threat Rank Extensions

.1 Seriously threatened in California (high degree/immediacy of threat)
.2 Fairly threatened in California (moderate degree/immediacy of threat)
.3 Not very threatened in California (low degree/immediacy of threat or no current threats known)

Sources: CDFG 2010 and CNPS 2010

Special Status Wildlife

Many special status wildlife species are also known to occur in the vicinity of the City (i.e., within the USGS Pasadena, Mount Wilson, Azusa, Los Angeles, El Monte, and Baldwin Park 7.5-minute quadrangles). These species are summarized in Table 4.4-2. Note that these species are grouped by taxon and then listed alphabetically according to scientific name.

TABLE 4.4-2
SPECIAL STATUS WILDLIFE SPECIES
POTENTIALLY OCCURRING IN THE STUDY AREA VICINITY

Species Scientific Name/Common Name	Status		Habitat Suitability
	USFWS	CDFG	
Fish			
Catostomus santaanae Santa Ana sucker	FT	SSC	No suitable habitat present.
Gila orcuttii arroyo chub	—	SSC	No suitable habitat present.
Rhinichthys osculus Santa Ana speckled dace	—	SSC	No suitable habitat present.
Amphibians			
Rana muscosa Sierra Madre yellow-legged frog	FE	SSC	No suitable habitat present.
Taricha torosa torosa Coast Range newt	—	SSC	Limited marginally suitable habitat present.
Reptiles			
Emys [*Actinemys*] *marmorata pallida* southwestern pond turtle	—	SSC	Limited marginally suitable habitat present.
Phrynosoma coronatum [*blainvillii*] coast horned lizard	—	SSC	Limited suitable habitat present.
Thamnophis hammondii two-striped garter snake	—	SSC	Limited marginally suitable habitat present.
Birds			
Athene cunicularia burrowing owl (burrow sites and some wintering sites)	—	SSC	Limited marginally suitable habitat present.
Coccyzus americanus occidentalis western yellow-billed cuckoo (nesting)	FC	SE	No suitable habitat present.
Cypseloides niger black swift (nesting)	—	SSC	No suitable nesting habitat present.
Empidonax traillii extimus southwestern willow flycatcher (nesting)	FE	SE	Limited potentially suitable habitat present.
Icteria virens yellow-breasted chat (nesting)	—	SSC	Limited suitable habitat present.
Polioptila californica californica coastal California gnatcatcher	FT	SSC	Limited marginally suitable habitat present.
Vireo bellii pusillus least Bell's vireo (nesting)	FE	SE	Limited suitable habitat present.

TABLE 4.4-2 (Continued)
SPECIAL STATUS WILDLIFE SPECIES
POTENTIALLY OCCURRING IN THE STUDY AREA VICINITY

Species Scientific Name/Common Name	Status USFWS	 CDFG	Habitat Suitability
Mammals			
Antrozous pallidus pallid bat	—	SSC	Limited suitable roosting habitat present.
Eumops perotis californicus California mastiff bat	—	SSC	No suitable roosting habitat present.
Lasiurus xanthinus western yellow bat	—	SSC	Limited suitable roosting habitat present.
Lepus californicus bennettii San Diego black-tailed jackrabbit	—	SSC	Limited marginally suitable habitat present.
Nyctinomops femorosaccus pocketed free-tailed bat	—	SSC	Limited suitable roosting habitat present.
Nyctinomops macrotis big free-tailed bat	—	SSC	Limited suitable roosting habitat present.
Onychomys torridus ramona southern grasshopper mouse	—	SSC	Limited marginally suitable habitat present.
Taxidea taxus American badger	—	SSC	Limited marginally suitable habitat present.

LEGEND:

Federal (USFWS)		**State (CDFG)**	
FE	Endangered	SE	Endangered
FT	Threatened	ST	Threatened
FC	Candidate Species	SSC	Species of Special Concern
—	No Designation	FP	Fully Protected
		—	No Designation

Source: CDFG 2010

Jurisdictional Resources

Wetlands and permanent or intermittent drainages, creeks, and streams are generally subject to the jurisdiction of the USACE under Section 404 of the CWA. By USACE definition, all aquatic or riverine habitats between the "ordinary high water mark" of rivers, creeks, and streams are considered "Waters of the U.S." and may fall under USACE jurisdiction. If adjacent wetlands occur, the jurisdictional limits extend beyond the ordinary high water mark to the outer edge of the wetlands. The USACE defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency or duration to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Environmental Laboratory 1987). The presence and extent of wetland areas are normally determined by examining the vegetation, soils, and hydrology of a site. The USACE definition of wetlands requires that all three wetland identification parameters be met.

Streambeds are also subject to CDFG regulation under Sections 1600 et seq. of the *California Fish and Game Code*. A stream is defined under these regulations as a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish or other aquatic life. This definition includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation. The CDFG jurisdiction typically extends to the edge of the riparian vegetation canopy. In addition, groundwater, surface water, and wetlands fall under RWQCB jurisdiction.

Based on the location and distribution of open space areas within the City of Arcadia, it is assumed that special status vegetation types and jurisdictional resources may occur in association with existing drainages within these areas. Because these resources are subject to change over time, the extent and precise location of the resources should be determined at the time of any proposed development in proximity to these locations.

4.4.4 THRESHOLDS OF SIGNIFICANCE

The criteria for determining significant impacts on biological resources were developed in accordance with the State CEQA Guidelines. Section 15065(a) of the CEQA Guidelines states that a project may have a significant effect on the environment if "…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, 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 significant must consider both the resource itself and how that resource fits into a regional or local context. Significant impacts would be those that would diminish or result in the loss of an important biological resource or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally adverse but not significant 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- or region-wide basis.

The following significant criteria are derived from the State CEQA Guidelines. A project would result in a significant adverse impact related to biological resources if it would:

Threshold 4.4a: 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 CDFG or USFWS;

Threshold 4.4b: 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 CDFG or USFWS;

Threshold 4.4c: 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;

Threshold 4.4d: 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;

Threshold 4.4e: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or

Threshold 4.4f: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

4.4.5 GENERAL PLAN GOALS, POLICIES, AND IMPLEMENTATION ACTIONS

A number of goals and policies in the General Plan Update address the protection of sensitive biological resources and their habitats. Implementation of these goals and policies would reduce impacts on biological resources from future development. These include:

> ***Policy LU-3.6:*** *Encourage preservation of the natural topography of a site and existing mature trees.*

Goal LU-5: *Hillside management approaches that balance desires for unique neighborhoods and home sites with the need to protect residents from environmental hazards and to respect wildlife habitat and viewsheds.*

Goal PR-3: *Ensuring that trees and the urban forest make a continuing and significant contribution to community character.*

> ***Policy PR-3.1:*** *Provide consistent funding for the street tree program reflective of the importance of the urban forest to community aesthetics and the environment.*
>
> ***Policy PR-3.2:*** *Heighten public awareness regarding the City's Street Tree Master Plan and comprehensive tree management program.*
>
> ***Policy PR-3.3****: Strive to be business friendly regarding the planting and maintenance of street trees in business districts without compromising overall City objectives regarding public landscaping and community aesthetics.*
>
> ***Policy PR-3.4:*** *Continue to use the Arcadia Tree Commission or any successor advisory group to further City objectives regarding public trees.*
>
> ***Policy PR-3.5:*** *Require that new private and public developments incorporate trees in a manner that maximizes the utility of trees for passive cooling, screening, carbon sequestration, erosion and runoff control, and integration of landscape design into the overall design of the development.*
>
> ***Policy PR-3.6:*** *Ensure that existing mature trees on private property are considered in the planning and development process and are retained to the greatest extent feasible.*

Goal RS-8: *Balanced use of hillside properties that respects the natural environment and private property rights.*

> ***Policy RS-8.1:*** *Determine the environmental sensitivity of individual hillside sites using site-specific investigations, information in the General Plan EIR, and other applicable information sources and regulatory documents. Incorporate the findings into conditions of approval for individual development projects.*
>
> ***Policy RS-8.2:*** *Require detailed biological and other appropriate environmental resource and hazard studies for properties within the foothills, and ensure that appropriate mitigation is employed to avoid and/or minimize impacts.*

Policy RS-8.3: *Investigate the value and feasibility of establishing hillside areas within Arcadia as habitat mitigation/banking sites.*

A number of implementation actions are proposed in the General Plan Update that would reduce impacts on biological resources. These are provided in Appendix D and include:

Implementation Action 6-13: *Habitat Protection*

Implementation Action 6-14: *Compliance with State Endangered Species Act and Federal Clean Water Act*

Implementation Action 7-8: *Preservation of the Urban Forest*

4.4.6 STANDARD CONDITIONS

There are existing federal, State and City regulations that relate to the protection and preservation of sensitive biological resources. Compliance with these standard conditions (SCs) would reduce impacts to biological resources from future developments. These include the following:

SC 4.4-1: A qualified biologist shall conduct nesting bird surveys in areas with suitable habitat prior to all construction or site preparation activities that would occur during the nesting and breeding season of native bird species (typically March 1 through August 15). The survey area shall include all potential bird nesting areas within 200 feet of any disturbance. The survey shall be conducted no more than three days prior to commencement of activities (i.e., grubbing or grading).

If active nests of bird species protected by the MBTA and/or the *California Fish and Game Code* (which, together, apply to all native nesting bird species) are present in the impact area or within 200 feet of the impact area, a temporary buffer fence shall be erected a minimum of 200 feet around the nest site. This temporary buffer may be greater or lesser depending on the bird species and type of disturbance, as determined by the biologist and/or applicable regulatory agency permits.

Clearing and/or construction within temporarily fenced areas shall be postponed or halted until juveniles have fledged and there is no evidence of a second nesting attempt. The biologist shall serve as a construction monitor during those periods when disturbance activities will occur near active nest areas to ensure that no inadvertent impacts on these nests will occur.

SC 4.4-2: Prior to any fill of or alteration to jurisdictional resources including drainage tributaries, wetlands, and/or riparian vegetation, the project proponent shall obtain the appropriate regulatory agency permits and/or agreements from the USACE, the CDFG, and the applicable RWQCB. The project proponent shall comply with the conditions and mitigation measures specified in the regulatory agency permits and/or agreements in order to ensure no net loss in biological resource values.

SC 4.4-3: In compliance with the City's Oak Tree Regulations, prior to vegetation clearing or grading, surveys shall be performed to determine if any protected oak trees are located within disturbance areas. If protected oak trees would be affected, the project proponent shall be required to obtain an Oak Tree Permit from the

City pursuant to the City's Oak Tree Regulations and shall comply with all stipulated mitigation measures.

SC 4.4-4: In compliance with the City's Street Tree Master Plan, a City permit shall be obtained prior to any planting, removal, cutting, or damage to a City-owned tree or shrub on any public property (in City parks, within street medians and along parkways, and on other public properties). The Public Works Department shall review the plans of any development, redevelopment, or public and infrastructure projects for compliance with the number of street trees or the species, as listed in the City's Street Tree Master Plan.

4.4.7 ENVIRONMENTAL IMPACTS

Future development pursuant to the General Plan Update could include vegetation clearing that could impact sensitive biological resources and natural communities.

Sensitive Species

Threshold 4.4a: Would the proposed 2010 General Plan Update 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 CDFG or USFWS?

The proposed Land Use Policy Map in the General Plan Update would designate the Peck Road County Park and the Santa Anita Wash open space areas (along with linear segments of Arcadia, Sierra Madre, and Santa Anita Washes) as Open Space-Resource Protection areas, and would designate other City parks as Open Space-Outdoor Recreation areas. This change in land use designation from Public to Open Space would allow for the indefinite retention of these open space areas and for the protection of any biological resources occurring there.

New development could affect landscaped areas and introduced species, and new development on vacant lands has the potential to affect special status plant and wildlife species (sensitive species). There is limited vacant land in the City, and the majority of these vacant lands are infill lots that have been previously developed or are highly disturbed. Thus, they are unlikely to contain sensitive species. However, they would still be subject to a biological assessment if existing plant and animal habitats would be disturbed or removed as part of future development or public and infrastructure projects in the City (MM-4.4-1).

Also, several large, vacant parcels at the northern end of the City contain scrub vegetation and may serve as habitat for sensitive species. Consistent with the existing General Plan, the proposed General Plan Update designates the undeveloped properties located in the northeastern corner of the City adjacent to the Wilderness Park as Residential Estate (allowing up to two dwelling units per acre). Future development on these parcels may result in the loss of existing natural habitat areas and may impact special status plant and/or wildlife species potentially occurring on these properties.

Adverse impacts to sensitive species that may occur in areas proposed for development, construction, or other ground disturbance would be reduced to a less than significant level with the implementation of MM 4.4-1, which calls for a biological survey for sensitive species and appropriate avoidance and/or mitigation measures. Furthermore, General Plan Update

Goals LU-5 and RS-8 and supporting policies also require detailed biological studies for foothill properties prior to any development in addition to appropriate mitigation for significant impacts to natural resources. Implementation Action 6-13 calls for habitat protection and Implementation Action 6-14 requires compliance with the FESA, the CESA, and the CWA. Thus, potential impacts on sensitive species would be less than significant.

Future development pursuant to the General Plan Update may involve vegetation clearing and tree removal that could also result in the direct loss of active bird nests or the abandonment of active nests by adult birds. In particular, raptor species are prone to nest abandonment. Bird nests with eggs or young are protected under the MBTA and the *California Fish and Game Code*. Specific provisions of the statute include the establishment of a federal prohibition, unless permitted, to:

> pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of the Convention for the protection of migratory birds or any part, nest, or egg of any such bird (16 USC Section 703).

Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (50 *Code of Federal Regulations* [CFR] Section 10.13, as updated by the 1983 American Ornithologists' Union [AOU] Checklist and the USFWS-published supplements through 2006).

Implementation of SC 4.4-1 would reduce adverse impacts to nesting birds to a less than significant level by minimizing disturbance to nesting birds during construction through seasonal avoidance or pre-construction surveys and avoidance of designated active nesting areas.

Even with implementation of the General Plan Update goals and policies, MM 4.4-1, SC 4.4-1, and Implementation Actions 6-13 and 6-14, impacts to sensitive species and nesting birds would need to be addressed in detailed biological studies if development or other habitat alteration is proposed. Compliance with the conditions or mitigation measures identified in individual permits from resource agencies would prevent any significant adverse impacts. Thus, impacts on sensitive species would be less than significant.

Riparian Habitat and Wetlands

Threshold 4.4b: Would the proposed 2010 General Plan Update have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS?

Threshold 4.4c: Would the proposed 2010 General Plan Update 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?

Major drainages within the City that are currently designated as Public and would be re-designated Open Space-Resource Protection areas with the proposed General Plan Update. As such, the undeveloped portions of Santa Anita Wash would be designated as Open Space-

Resource Protection, and riparian habitats and wetlands in this area would be preserved. However, future infrastructure projects or flood control maintenance could impact drainages, resulting in potential disturbance of jurisdictional features subject to CDFG or USFWS regulations and permits that may be present in these drainage channels.

The scrub and chaparral vegetation occurring on some parcels within the northernmost portion of the City would most likely not be considered sensitive natural communities. However, as mentioned earlier, this information is based only on general state-wide mapping efforts, and so the actual vegetation present should be determined by a field survey prior to any potential site development to confirm the composition of vegetation.

In accordance with SC 4.4-2, prior to any impacts to biological resources under the jurisdiction of the USACE, the CDFG, or the RWQCB, appropriate permits would have to be obtained from these resource agencies. These permits would identify necessary mitigation to reduce disturbance impacts and require appropriate replacement habitat in order to ensure no net loss in biological resource values. Compliance with the permit requirements would prevent any significant adverse impacts to wetlands and riparian communities. Implementation Action 6-14 also requires compliance with the FESA, the CESA, and the CWA to avoid impacts to water quality and riparian resources. Therefore, compliance with SC 4.4-2 and Implementation Action 6-14 would provide for impacts to jurisdictional resources to be less than significant.

Wildlife Movement

Threshold 4.4d: Would the proposed 2010 General Plan Update interfere substantially with the movement of any native or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Wildlife movement is already greatly restricted within the City of Arcadia due to existing urban development in most areas of the City; no native wildlife nursery sites are known to occur within the study area. Wildlife movement is confined to the undeveloped areas of the San Gabriel Mountains to the north of the City and Santa Anita Wash, which provides limited wildlife movement to the lake at the Peck Road County Park. This wash is proposed for designation as Open Space-Resource Protection, which would preclude future development along the wash and thus, would prevent impacts to wildlife movement in this area.

Future development pursuant to the General Plan Update is unlikely to have an impact on wildlife movement in the San Gabriel Mountains, except for new development that would occur at the foothill areas of the City. The General Plan Update would permit Residential Estate development in the foothills on existing vacant land, adjacent to the Angeles National Forest, and in the vacant areas of the San Gabriel Mountains to the north, which are used for wildlife movement. However, development is restricted in this area and the majority of the steep hillsides would be preserved as open space, allowing continued wildlife movement. Still, future development at the northern portion of the City could restrict wildlife movement where future development would occur due to the construction of structures, fences, walls, and other site improvements. However, this impact would be confined to the developable parcels and would not have a significant adverse impact on wildlife movement within the Angeles National Forest or the rest of the San Gabriel Mountains. Further, as stated above, wildlife movement is already greatly restricted within the City due to existing urban developments, and therefore future development is unlikely to have an impact on the already greatly restricted wildlife movement in all other areas of the City.

Compliance with Goals LU-5 and RS-8 and supporting policies in the General Plan Update would assist in the preservation of the natural environment in the City's northern end, reducing potential impacts to wildlife movement. Impacts would be less than significant, and no mitigation is required.

Tree Preservation Policies

Threshold 4.4e: Would the proposed 2010 General Plan Update conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As previously discussed, the City of Arcadia has policies and ordinances for the protection of trees. While future development pursuant to the General Plan Update may lead to the removal of trees, the City's Oak Tree Regulations protect Engelmann oaks, coast live oaks, and other oak trees. Compliance with SC 4.4-3, which requires the proponent to obtain an Oak Tree Permit from the City pursuant to the City's Oak Tree Regulations and comply with all stipulated mitigation measures, would reduce removal and disturbance of oak trees in the City and/or require appropriate mitigation for any potential impacts to protected trees. Also, the City has a Comprehensive Tree Management Program for the protection of street trees and the implementation of the Street Tree Master Plan (SC 4.4-4). Goal PR-3 and supporting policies and Implementation Action 7-8 call for the protection of trees and the urban forest in the City. Compliance with these goals, policies, implementation action, and SCs would minimize the removal, cutting, or damage to a City-owned tree or shrub on any public property and protect oak trees in the City and would allow individual development projects to comply with local policies or ordinances protecting biological resources, including trees. Impacts would be less than significant, and no mitigation would be required.

Habitat Conservation Plan or Natural Community Conservation Plan

Threshold 4.4f: Would the proposed 2010 General Plan Update conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

There are no adopted, approved, or proposed Habitat Conservation Plans; Natural Community Conservation Plans; or other approved local, regional, or State habitat conservation plans that cover habitats located within the City of Arcadia. There would, therefore, be no conflict with any such provisions with adoption of the General Plan Update or with future development pursuant to the General Plan Update. No mitigation is required.

4.4.8 CUMULATIVE IMPACTS

The cumulative impacts on biological resources are evaluated based on the potential impacts of growth and development in the City and in the San Gabriel Valley. Future development pursuant to the General Plan Update could contribute to the cumulative changes in plant and animal habitats in the San Gabriel Valley due to increasing urbanization and population growth in the region.

Development on disturbed lands and developed areas, which are likely to support non-native species or disturbed habitats, are less likely to have adverse impacts on sensitive plant and animal species. Development on vacant and undeveloped lands that contain suitable habitat that may supports sensitive species would be required to conduct biological surveys for

sensitive animal species, including nesting birds, and for sensitive habitat or wildlife corridors. The disturbance or destruction of sensitive or protected species on a site would require a Section 10 or Section 7 consultation and coordination with the USFWS, the CDFG, the RWQCB, and other resource agencies, and would require on-site preservation or off-site mitigation, as stated by existing regulations.

In addition, sensitive habitats such as wetland areas, streams and channels, and riparian habitats would also need to be preserved through on-site or off-site mitigation. The biological surveys and requisite mitigation would be made in coordination with the CDFG, the USFWS, the USACE, and the RWQCB, as necessary (MM 4.4-1, SCs 4.4-1, and 4.4.-2). Thus, while changes in the biological diversity of the San Gabriel Valley could occur with future growth and development, programs and regulations are in place that would reduce cumulative impacts on sensitive biological resources.

Anticipated future development within the City would have a less than significant adverse cumulative impact on wildlife movement due to the extent of existing development and resulting restrictions on wildlife movement opportunities. Compliance with the City's Oak Tree Regulations through SC 4.4-3 would result in anticipated future development within the City to have a less than significant adverse cumulative impact on protected tree resources.

There is no adopted habitat conservation plan or natural community conservation plan for the City or surrounding area. Thus, no conflict with a habitat conservation plan or natural community conservation plan is expected with the proposed General Plan Update or with future growth and development in the San Gabriel Valley.

Because potentially significant impacts to biological resources resulting from future development pursuant to the General Plan Update would be less than significant with implementation of the SCs and relevant goals, policies, and implementation actions in the General Plan Update, future development is are not expected to significantly contribute to cumulative impacts to biological resources.

4.4.9 MITIGATION MEASURES

MM 4.4-1: Prior to the development of vacant and undeveloped areas, a qualified biologist, under the direction from the City, shall determine whether a habitat assessment is required to assess site potential to support any special status plant or wildlife species. If potentially suitable habitat is present for any special status species, then the City shall direct appropriate focused surveys to be performed to determine the presence or absence of special status species. If any special status species is identified on the site, then appropriate avoidance and/or mitigation measures shall be implemented, as approved by the resource agencies, and subject to the necessary permits under the FESA, the CESA, the *California Fish and Game Code*, and other applicable regulations.

4.4.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Sensitive Species

Less Than Significant With Mitigation

Riparian Habitat and Wetlands

Less Than Significant Impact

Wildlife Movement

Less Than Significant Impact

Tree Preservation Policies

Less Than Significant Impact

Habitat Conservation Plan or Natural Community Conservation Plan

No Impact

Cumulative Impacts

Less Than Significant Impact