4.4 BIOLOGICAL RESOURCES

This section summarizes information on biological resources in Chino and provides an evaluation of the impacts of both the Proposed General Plan and the Focused Growth Plan on biological resources. A summary of the regulatory setting that provides for the protection and conservation of important biological resources begins this chapter.

A. Regulatory Framework

This section describes the primary relevant federal, State, and local laws and regulations that provide for protection and management of natural biological resources. It is not intended as a comprehensive review of all facets of all potentially applicable laws, regulations, and policies.

1. Federal

The federal laws that specifically regulate the treatment of biological resources include the Federal Endangered Species Act (FESA), the Migratory Bird Treaty Act (MBTA), and the Clean Water Act (CWA). Relevant sections of each are discussed below.

i. Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) is the primary agency responsible for implementation of the FESA (16 U.S.C. § 1531 et seq.). The FESA protects plant and animal species listed as threatened or endangered and their habitats. "Endangered" species, subspecies, or distinct population segments are those designated in USFWS regulations as in danger of extinction through all or a significant portion of their range, and "threatened" species, subspecies, or distinct population segments are those designated as likely to become endangered in the near future.

Section 9 of the FESA prohibits the "take" of any fish or wildlife species listed under the FESA as endangered. "Take" of threatened species is also prohibited unless otherwise authorized by federal regulations. "Take," as defined by the FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Harm is

defined as "any act that kills or injures the species, including significant habitat modification." Section 9 of the FESA also prohibits take of federally-listed plants on sites under direct federal jurisdiction or through actions funded, conducted, or authorized by federal agencies, including through issuance of federal permits.

ii. Migratory Bird Treaty Act

The USFWS is also responsible for implementing the MBTA (16 U.S.C. § 703-712 et seq.). The MBTA implements a series of treaties between the United States and other countries that provide for international protection of migratory birds. Nearly all species native to California (and for which there are no hunting regulations) are covered by the MBTA. The MBTA makes it clear that most unauthorized "taking" or possession (permanent or temporary) of a covered species is a violation. The word "take" is defined as meaning "pursue, hunt, shoot, wound, kill, trap, capture or collect." Protections are afforded not only to the birds themselves but also to eggs and active nests and parts (e.g. feathers) of covered species. Intentional take can be permitted in emergency situations, but there is no provision for take incidental to otherwise lawful activities. Examples of permitted actions that do not violate the law are the possession of a hunting license to pursue specific game birds, legitimate research activities, display in zoological gardens, and similar activities.

iii. Clean Water Act

The CWA is administered by the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE). The USACE is responsible for regulating the discharge of dredged or fill material into waters of the United States. Waters of the United States generally include lakes, rivers, streams, and their tributaries as well as most wetlands. Wetlands are defined for regulatory purposes as areas "inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under nor-

mal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."[1]

The discharge of dredged or fill material into waters of the United States is subject to permitting under Section 404 (Discharges of Dredged or Fill Material). Project proponents must obtain permit authorization from the USACE for all discharges of dredged or fill material into waters of the United States, including jurisdictional wetlands, generally before proceeding with a proposed action.

Water Quality Certification has been delegated from EPA to the State Water Resources Control Board, through the regional Water Quality Control Boards Certification is also required when a proposed activity may result in discharge into waters of the United States, pursuant to Section 401 of the CWA and EPA 404(b)(1) Guidelines.

iv. Critical Habitat

Either simultaneous with or subsequent to listing of a species, locations of critical habitat may be designated. The federal government defines critical habitat as the minimum areas occupied or potentially occupied by the species that is deemed necessary to maintain present populations and to recover populations of the species to the point at which the species is no longer threatened or endangered. It does not necessarily include all suitable habitat (such as highly fragmented or isolated patches); however, it may contain highly degraded or altered habitat that can be restored, and it may include buffer zones, corridors, or other habitats. Defined critical habitat for a species differs significantly from one species to another.

2. State

The most relevant state laws regulating actions affecting biological resources are the California Endangered Species Act (CESA), the California Native

[1] U.S Environmental Protection Agency, *Wetlands Definitions*. http://www.epa.gov/owow/wetlands/what/definitions.html, accessed on December 8, 2009.

Plant Protection Act and certain other sections of the California Fish and Game Code (FGC), each of which is described below. In the FGC, only a single definition is provided for "take," relevant to all types of direct protection for species discussed below (see under California Endangered Species Act, below).

i. California Endangered Species Act

The California Department of Fish and Game (CDFG) administers the CESA, which protects wildlife and plants listed as threatened or endangered by the California Fish and Game Commission. The State Endangered Species Act does not supersede the federal Endangered Species Act. CESA requires State agencies to preserve listed threatened and endangered species (Section 2055), and thus restricts all persons from taking listed species except under certain circumstances. The FGC defines "take" as any action or attempt to "hunt, pursue, catch, capture, or kill." The CDFG may authorize "take" through the CESA under the FGC Sections 2080.1 and 2081, except for species designated elsewhere in the FGC as "fully protected species." The requirements for an application for take permits under CESA are described in Section 2081 of the FGC and in final adopted regulations for implementing Sections 2080 and 2081. Currently there is ambiguity with regard to protection of listed plants under the CESA, with conflicting statutes and little case law. However, there is a State Attorney General written opinion that listed plants are not afforded protection from take under the CESA. Such plants would still potentially be afforded protection under the CEQA.

ii. Other California Fish and Game Code Sections

Under the FGC, various species are afforded protection beyond that from the CESA. Species that are designated "fully protected" are protected against take, at this time with no provision allowed for permitting either direct or incidental take beyond that for research purposes. Most fully protected species are also considered to be threatened or endangered under more recent

laws and regulations.[2] Section 5050 lists fully protected amphibians and reptiles. Eggs and nests of all native birds are protected under Section 3503, nesting birds (including raptors and passerines) under Sections 3503.5 and 3513, birds of prey under Section 3503.5, and fully protected birds under Section 3511. All birds that occur naturally in California and are not resident game birds, migratory game birds or fully protected birds are considered nongame birds and are protected under Section 3800. Mammals designated as fully protected are listed under Section 4700.

The CDFG also protects streams, water bodies and riparian corridors through the Lake or Streambed Alteration Program under Sections 1600 to 1616 of the FGC. The FGC stipulates that it is "unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake" without notifying the CDFG. The CDFG will typically require a Streambed Alteration Agreement, wherein jurisdiction extends to the top of banks and often extends to the outer edge of riparian vegetation canopy cover. Jurisdiction may include isolated water features and those with ephemeral hydrology, but features must have distinct bed and banks.

iii. California State Wetlands Conservation Policy

The governor of California issued an executive order on August 23, 1993, that created a California State Wetlands Conservation Policy. This policy is being implemented by an interagency task force jointly headed by the State Resources Agency and the California Environmental Protection Agency (CalEPA). The policy has three goals:[3]

1. To ensure no overall net loss and a long-term net gain in wetlands acreage and values in a manner that fosters creativity, stewardship, and respect for private property.

[2] California Department of Fish and Game website, http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/fully_pro.html, accessed on December 8, 2009.

[3] Cylinder, Paul D., et al, 1995, *Wetlands Regulation: A Complete Guide to Federal and California Programs*, Point Arena: Solano Press Books.

2. To reduce the procedural complexity of State and federal wetlands conservation program administration.
3. To encourage partnerships which make restoration, landowner incentives, and cooperative planning the primary focus of wetlands conservation.

iv. Porter-Cologne Water Quality Control Act

The Porter-Cologne Act, passed in 1975, provides for the development and periodic review of Water Quality Control Plans (Basin Plans) that designate beneficial uses of California's major rivers and groundwater basins and establishes narrative and numerical water quality objectives for those waters.[4] Basin Plans are primarily implemented by using the National Pollutant Discharge Elimination System (NPDES) permitting system to regulate waste discharges so that water quality objectives are met. The Porter-Cologne Act and NPDES standards are discussed in detail in Chapter 4.8, Hydrology and Water Quality, of this EIR.

v. California Native Plant Protection Act

The California Native Plant Protection Act of 1977 prohibits unauthorized importation within or outside of California, "take," and sale of designated rare and endangered plants. Since the establishment of the CESA, most plant species previously covered are no longer listed under this act but instead are listed under the CESA.

The following activities are exempt from the California Native Plant Protection Act:

- Agricultural operations.
- Fire control measures.
- Timber harvest operations.

[4] State Water Resources Control Board, Central Valley Regional Water Quality Control Board – Overview, http://www.swrcb.ca.gov/rwqcb5/board_info/overview.shtml, accessed on December 8, 2009.

- Mining assessment work.
- Removal of plants by private landowners on private land for construction of canals, ditches, buildings, roads or other rights-of-way.
- Removal of plants for performance of a public service by a public agency or a publicly- or privately-owned utility.

3. Local

There are no locally-established ordinances or policies for the City of Chino related to the preservation of trees or habitat conservation. However, the revised Zoning Code, included in the projects being evaluated by this EIR, would provide protection for important trees. The City does implement a Resource Management Plan associated with approval of The Preserve Master Plan. In addition, both San Bernardino and Riverside Counties have relevant regulations.

i. Resource Management Plan

A Resource Management Plan for The Preserve was prepared by the City of Chino to mitigate impacts on biological resources associated with implementation of The Preserve Specific Plan. The Resource Management Plan provides the framework for coordinating the City's actions with other agencies, including the County of San Bernardino, the CDFG, the USFWS, the USACE, and associated water districts. It is intended to protect biological resources identified in the Plan's EIR, including burrowing owl habitat, raptor foraging habitat, migratory bird and waterfowl habitat, federally- and State-listed species, waters of the U.S., waters of California and other water resources available to wildlife.[5]

[5] Michael Brandman Associates, 2003, *City of Chino Subarea 2 Resources Management Plan* (identified as Appendix B: Biological Assessment of the City of Chino, 2003, The Preserve: Chino Sphere of Influence-Subarea 2, Appendices to Final Environmental Impact Report-Volume 2).

ii. County of San Bernardino Riparian Plant Conservation

The San Bernardino County Development Code, Chapter 5, Riparian Plant Conservation (1989), protects riparian habitat on private land within the unincorporated areas of San Bernardino County. The removal of any vegetation within two hundred feet of the bank of a stream, or in an area indicated as a protected riparian area on an overlay map or County Specific Plan, requires a tree or plant removal permit and is subject to environmental review. Regulated streams include those shown on United States Geological Survey (USGS) Quadrangle topographic maps as perennial or intermittent, blue or brown lines, and river wash areas. The code calls for pre-construction inspections to verify presence of any riparian vegetation. Any necessary conditions of approval for removal of riparian vegetation may be imposed. While this code section does not have the force of law within the City of Chino, City staff and others may choose to utilize the requirements therein as a regional standard under CEQA when evaluating impacts to, or mitigation for, riparian plants.

iii. Western Riverside County Multiple Species Habitat Conservation Program

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their associated habitats in Western Riverside County. The HCP's goal is to maintain biological and ecological diversity within a rapidly urbanizing region. The MSHCP allows Riverside County and its cities to streamline approval of development, while creating a system of reserves for permanent open space, community edges, and habitat conservation for species covered by the MSHCP. While the City of Chino lies outside of the MSHCP plan area, City staff and others may choose to utilize the requirements therein as a regional standard under CEQA when evaluating impacts to, or mitigation for, biological resources.[6]

[6] Riverside County, *Western Riverside County Multiple Species Habitat Conservation Plan*, http://www.rctlma.org/mshcp/volume1/sec1.html#1.1, accessed on December 8, 2009.

B. Existing Conditions

This section describes existing biological resources in the City of Chino. The information is based on a literature review of documents including other program-level EIRs for recent Specific Plans, the California Natural Diversity Database (CNDDB), and other lists of sensitive species by local resource agencies.

Biological resources in Chino are influenced by its location within the Santa Ana River drainage area. The Santa Ana River originates in the slopes of the San Bernardino Mountains to the northeast of the City and drains through the narrow Santa Ana Canyon between Chino Hills and the Santa Ana Mountains, emptying into the Pacific Ocean approximately 30 miles to the southwest. The Prado Basin, a major feature of the Santa Ana River watershed, is located in the Chino area as well. The Prado Basin terminates at the Prado Dam, which has a maximum reservoir water surface of 556 feet. The USACE and Orange County Flood Control District (OCFD) are in the process of raising the maximum reservoir water surface to 566 feet above sea level in order to accommodate additional flood control capacity for the region. The extent of land within Chino that is within that 566-foot elevation area is shown in Figure 4.8-2 in the Hydrology and Water Quality chapter of this EIR. When the raising of the dam is completed, areas below the 566-foot flood inundation line will be subject to flooding. These areas are restricted to recreation, open space and resource management uses. Land at and below that elevation is subject to flooding and has high biological resource value, including riparian and scrub habitat. The recently-approved Edgewater Communities project will occupy some of the area currently below 566 feet of elevation, but will raise certain land areas above this elevation for development.

In general, the northern portion of the City of Chino is urbanized and has limited biological resources. Biologically diverse areas are concentrated in the southeastern portion of the City and include Prado Regional Park, Prado Lake, Subarea 1 and The Preserve.

1. Vegetation and Land Use Setting

Chino currently has several vegetation and land use types at a coarse level, including urban, agricultural, riparian woodlands, seasonal wetlands, farmed wetlands, and non-native grasslands. These vegetation types, which are described below, host a wide range of wildlife and plant species reflecting the biodiversity in the Chino Valley and adjacent portions of the Santa Ana River watershed.

a. Aquatic Resources

The value of aquatic resources in Chino has been degraded as a result of urbanization and the effects of urban runoff. Aquatic resources in Chino consist of detention basins, marshes, open water, and drainages. Detention basins and drainages are typically dominated by weedy, non-native vegetation. Farmers created the majority of the detention basins to control dairy run-off, and they are located in the agricultural areas in the southern portion of the City. These basins accumulate surface flows containing manure and other waste after heavy rains. Open water areas contain little or no vegetation and either have a nearly constant flow of water or are too deep to support rooted vegetation. These areas are used as foraging and resting points for migrating and resident waterfowl, shorebirds, and raptors, along with many other species. Open water bodies include Prado Lake and the upper portion of Mill Creek, a few large dairy ponds, and some smaller areas within Chino Creek.

Seven riparian corridors run through the City:

- The concrete-lined San Antonio Channel runs along Chino's western boundary and ultimately meets with Chino Creek, and is the responsibility of San Bernardino County Flood Control (SBCFC).
- Chino Creek, entering Chino south of State Route 60, joins the San Antonio Channel, and follows the western side of the City southward. It is concrete lined upstream of Central Avenue, and a straightened earthen channel from Central Avenue to Pine Avenue. Downstream of Pine Avenue it is more natural and meanders until it flows into the Prado Flood Control Basin, and is the responsibility of the Corps.

- The West State Street Storm Drain begins in Ontario and flows through the City of Montclair and discharges into the San Antonio Channel. It serves as the northern-most portion of the 100-year flood system for the drainage area that includes Chino. It is a concrete-lined channel, and is the responsibility of SBCFC.
- The Chino Storm Drain, constructed alongside State Route 60, joins the San Antonio Channel on the western side of the City. It provides drainage for approximately 5.5 square miles between State Street and the Pomona Freeway. It is a concrete-lined channel, and is the responsibility of SBCFC.
- The concrete-lined Cypress Channel begins south of State Route 60, flows through California Institution for Men (CIM), and drains into the Corps' Prado Flood Control Basin. It is concrete lined with the exception of a small unimproved earthen section located in the CIM property. It provides storm drainage to the eastern side of the City of Chino, and is the responsibility of SBCFC.
- The Magnolia Channel extends from Edison Avenue through the southern part of the City and ultimately joins with Chino Creek. It is an unimproved earthen channel and provides some potential wildlife habitat as it passes through agricultural lands, particularly through the CIM property and is the responsibility of the City of Chino.
- Cucamonga Creek enters the City from the north after running through Rancho Cucamonga and Ontario in a channel. Referred to as Mill Creek in Chino, it is not channelized. It flows through the area to the south of The Preserve. Although agricultural uses have affected the creek, primarily through erosion, it is largely a natural creek. The channelized portion north of Chino-Corona Road is the responsibility of SBCFC, while the unchannelized portion south of Chino-Corona Road is the responsibility of the Corps.[7,8]

[7] City of Chino, 1993, *Master Plan of Drainage*, pages I-1 to I-4.

[8] Inland Empire Utilities Agency, 2006, *Chino Creek Integrated Plan,* pages 2-2 to 2-10.

b. Agricultural and Dairy Lands

Agricultural areas are located in the central and southeastern portion of the City, mostly south of Edison Avenue and east of Central Avenue. Agricultural lands in Chino, including dairy land, active fields, fallow fields, pastures and cultivated agriculture cropland, provide habitat and foraging opportunities for certain species.

Dairy fields and their associated paddocks for stock are covered by manure. Very little vegetation, especially native vegetation, occurs in these areas and they generally do not provide valuable wildlife habitat. Active fields are largely covered with crops and provide limited value to a few rodent species adapted to disturbance and urbanization. Raptors and insectivores such as swallows, swifts, and bats may also forage over these fields. In particular, fields are important foraging habitat for raptors, particularly burrowing owls. Fallow fields and pasture lands support mostly non-native ruderal vegetation but provide habitat for rodent species and foraging habitat for raptors. Fallow fields are removed from intensive agricultural operations and can develop a greater small mammal population and provide higher habitat value for raptors, as well as a variety of insectivorous and seed eating birds.[9] The dominant vegetation within the cultivated agricultural fields is planted ornamental landscaping, cultivated crops, and fields of non-native grass and opportunistic weedy species. Bird activity is relatively high within these areas, but bird diversity is low. Remnants of native vegetation are typically minimal or absent in Chino's agricultural lands.

Windrows are typically a result of historic agricultural activities. Windrows in Chino are comprised of ornamental species. However, windrows provide nesting and foraging opportunities for raptors and passerine bird species.

[9] LSA, 2002, *Assessment of Impact and Mitigation Options: The Preserve, Chino,* published in Appendix B of the City of Chino, 2003, *The Preserve: Chino Sphere of Influence-Subarea 2*, Appendices to Final Environmental Impact Report-Volume 2.

c. Developed Areas

Developed areas constitute the majority of the City. Developed areas in Chino are characterized by ornamental vegetation, landscaped parkways, barren ground, structures, asphalt, and concrete. These areas include commercial buildings, infrastructure, residential homes, industrial areas, city parks, and institutions. These developed areas support a very limited amount of vegetation, which, if present, typically comprises non-native ornamental species planted for their aesthetic and utilitarian values.

Prado Regional Park is in the southwestern portion of the City and is mainly composed of ornamental non-native vegetation. The Prado Regional Park provides a substantial amount of foraging and roosting habitat for raptors, songbirds, mammals, reptiles, and some amphibian species.

d. Natural Communities

Following a widely used, broad classification, five natural plant communities occur in Chino. Two additional vegetation types are also categorized here for consistency as areas of open space relevant to wildlife. They are described below.

i. Annual Grassland

Annual grassland consists of a dense to sparse cover of annual grasses. While most annual grasses in the region are non-native, this community is also often associated with numerous species of native wildflowers, especially in years of heavy rainfall. Annual grassland typically supports relatively high small mammal populations and is considered one of the most valuable habitat types for raptor species.[10] In Chino, non-native grasslands have historically been used for grazing and support very little diversity in species and structure. At least 11 of the special-status plants known from the City area and listed in Table 4.4-1 are found, in part, in grasslands. In addition to raptors, many of the special-status wildlife known from the City area and listed in Table 4.4-2

[10] LSA, 2002, *Assessment of Impact and Mitigation Options: The Preserve, Chino,* published in Appendix B of the City of Chino, 2003, *The Preserve: Chino Sphere of Influence-Subarea 2*, Appendices to Final Environmental Impact Report-Volume 2.

utilize grasslands for all or part of their life cycles. For example, Tricolored Blackbirds (*Agelaius tricolor*) nest mostly in marshes, but forage extensively in grasslands. Grasshopper Sparrow (*Ammodramus savannarum*) is rarely found outside grasslands, but is migratory and largely absent in winter.

ii. Southern Cottonwood Willow Riparian Forest

This community contains dense, broad-leaved, winter-deciduous riparian trees dominated by several willow species and is associated with seasonally flooded or saturated stream and river corridors. The willow tree species typically form thickets (early stages) or forests (mature stages) in riparian zones along creek channels, adjacent sandy or gravel floodplains, and low stream terraces. Where broken or open, understory development can be substantial and diverse. In shaded, closed-canopy situations, sometimes called gallery forest, understory development may be minimal. This community occurs primarily below the 566-foot elevation line along Chino and Mill Creeks. Several species of special-status plants in the City area are known from within, or at the margins of, riparian forests. These include southern tarplant (*Centromadia parryi australis*), smooth tarplant (*Centromadia pungens laevis*), and Gambel's watercress (*Rorippa gambellii*). This community provides key habitat for a wide variety of special-status and non-special-status wildlife, including least Bell's vireo, southwestern willow flycatcher, and yellow-billed cuckoo.

iii. Southern Willow Scrub

This dense, broadleafed, winter-deciduous community of low, riparian thickets is dominated by several willow species, with scattered emergent cottonwoods and sycamores. Most stands are too dense to allow much understory development. Southern willow scrub is typically found in loose, sandy or fine gravel alluvium deposited near stream channels. Special-status species occurring in this natural community include many of the species that may be found in southern cottonwood willow forest, except for those requiring substantial forest structure, such as the yellow-billed cuckoo.

iv. Coastal and Valley Freshwater Marsh

This community is dominated by perennial, emergent monocots and often forms completely closed canopies. These marshes are found in areas with still

or slow-moving water, often where permanently flooded by fresh water. Prolonged saturation over time permits accumulation of deep, peaty soils. This community can be found in parts of Chino Creek, Mill Creek, and in the Santa Ana River. This plant community does not include deep water areas where plants are absent. At least ten of the special-status plants known in the City area are often or always associated with freshwater marshes, including some that are typically found along undisturbed marsh margins. Special-status wildlife in the City area that are associated with marshy communities include tricolored blackbird, arroyo toad (*Bufo californicus*), northern harrier (*Circus cyaneus*), least bittern (*Ixobrychus exilis*), California red-legged frog (*Rana aurora draytonii*), coast range newt (*Taricha torosa torosa*), and two-striped garter snake (*Thamnophis hammondii*).

v. Mule Fat Scrub

This community is comprised of tall scrub dominated by mule fat. It is often an early successional stage of other riparian forest or woodland communities and is maintained by frequent flooding. It frequently occurs as patchy understory within and at the margins of other vegetation communities. It is a relatively common community and can be found in a variety of locations throughout Chino. While few, if any, special-status species in the City area are restricted to this natural community, plant and animal species associated with other riparian and marsh communities, and even adjacent upland communities, will frequently occur there when Mule Fat Scrub is adjacent to those communities. Mule fat scrub also frequently acts as a buffer to other natural communities, attenuating a variety of human disturbances.

vi. Ornamental Woodland

Ornamental woodlands are created by disturbance and passive introduction of ornamental vegetation. They are grouped separately here because their large size potentially provides similar wildlife values as natural areas. There are several areas of ornamental woodlands, mainly concentrated within the parks and various scattered windrows in Chino. As its non-native components suggest, there are no native plants or animals found only in these woodlands. However, depending on position in the larger landscape, vegetation

structure, hydrology, and levels of ongoing disturbance, many special-status species will occur in ornamental woodlands. In particular, raptors and some other special-status birds will nest in such areas. Typically, birds nesting in such areas are primarily native species.

vii. Arundo Scrub

Arundo scrub is completely dominated by the non-native giant reed (*Arundo donax*). This hearty perennial grass can form impenetrable forests 30 feet high in areas periodically inundated with water. Large stands of arundo scrub can be found within Mill Creek, Chino Creek, and parts of the Santa Ana River. Plant diversity typically reflects few or no species other than giant reed, though remnants of prior communities and occasional other plants will appear, especially at margins or temporary openings. Giant reed has very limited wildlife value, though native mammals will often use it for refuge or dens, and small numbers of many native bird species will occasionally forage or nest in it. Notably, there are a few records of least Bell's vireo nesting in giant reed in California, though it is certainly not a usual substrate.

2. Wildlife

The diversity of wildlife within the northwestern portion of the City is relatively low as a result of development. Species expected to occur commonly in these urbanized areas include small mammals such as desert cottontail, California ground squirrel, Botta's pocket gopher, striped skunk, Virginia opossum, Pacific chorus frog, western toad, western fence lizard, side-blotched lizard, various urban-adapted, non-migratory birds, and modest numbers of migratory birds (especially fall through spring). Some raptor species are expected to occur within developed areas, such as Cooper's hawk and red-tailed hawk. A somewhat greater diversity of wildlife is expected to occur along the flood control channels, within unimproved areas, and in the southern portion of Chino. Burrowing owls and other raptors forage in agricultural fields, searching for small rodents and birds. Wet fields attract wading birds hunting small animals that concentrate in wet areas.

The southern portion of the City is both flatter and wetter than the remainder of the City. These conditions attract migratory birds. In general, the limited development in this area has allowed a greater diversity of native and non-native wildlife to remain than in the more-developed northern portion of the City.

3. Special-Status Species

The City is home to a wide variety of native, naturalized and invasive plant and wildlife species. Due to the broad area of study and the variety of habitats contained within, a complete listing of plants and wildlife occurring or potentially occurring within the planning area is not feasible. Instead, biological resources analysis centers on special-status species, as discussed below.

The City of Chino lies within the USGS 7.5-minute *Ontario, California* quadrangle. This quadrangle and the surrounding eight USGS 7.5-minutes quadrangles (*Corona North, Prado Dam, San Dimas, Glendora, Yorba Linda, Guasti, Cucamonga Peak,* and *Mount Baldy*) were queried using the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Plants*[11] and the CNDDB[12] for records of special-status biological resources in that area, totaling approximately 510,000 acres (800 square miles). This data was used to compile a list of species to evaluate for potential impacts. The additional area beyond the City boundaries was included because many species that potentially occur in the City may currently be documented in those databases only in adjacent areas. As a refinement, we then excluded species in the larger area, or study region, if they occur only in irrelevant situations such as on carbonate soils at high elevations in the San Bernardino Mountains. Finally,

[11] California Native Plant Society (CNPS), 2008, Electronic Inventory of Rare and Endangered Vascular Plants of California, California Native Plants Society: Sacramento, California, http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi, accessed on December 9, 2009.

[12] California Department of Fish and Game (CDFG), 2008, California Natural Diversity (RareFind) Database, California Department of Fish and Game, Natural Heritage Division: Sacramento, California, http://www.dfg.ca.gov/biogeodata/cnddb/rarefind.asp, accessed on December 9, 2009.

we reviewed a current List of Special Status Animals[13] provided for this analysis by the USFWS for any additional species to include in the analysis; all species on the List were included.

In this discussion, plants and animals are considered special-status species[14] if they fall into any of the following categories:

- Listed by the USFWS as endangered, threatened, candidate, proposed as endangered or threatened, or species of concern.
- Listed by the CDFG as endangered, threatened, fully protected, or species of special concern.
- Listed by CNPS as rare and endangered in California and throughout its range (List 1B), or rare and endangered in California but more common elsewhere (List 2).

a. Special Status Plant Species

Table 4.4-1 is a current list of plant species that are known to occur, or have occurred, in the study region for the City of Chino. The very brief habitat descriptions are those provided by CNPS, and differ from the categorization provided above for natural communities in the City.

b. Special Status Wildlife Species

Table 4.4-2 is a current list of wildlife species that are known to occur, or have occurred, in the study region for the City of Chino.

[13] U.S. Fish and Wildlife Service (USFWS), 2008, Species List for the City of Chino General Plan Update, City of Chino and Bernardino County: California.

TABLE 4.4-1 **SPECIAL STATUS PLANTS KNOWN TO OCCUR IN OR NEAR THE CITY OF CHINO**

Scientific Name/ Common Name	Status (CNPS/ Federal/ State)	Habitat Affinities/Potential of Occurrence
Abronia villosa var. *aurita* Chaparral sand-verbena	1B	Sandy areas in chaparral and coastal sage scrub.
Arenaria paludicola Marsh sandwort	FE	Marshes and swamps, sandy areas. Believed to be extirpated from southern California.
Astragalus brauntonii Braunton's milk vetch	1B	Carbonate soils in coniferous forest, chaparral, coastal sage scrub, and valley and foothill grassland.
Atriplex coulteri Coulter's saltbush	1B	Coastal dunes, coastal bluff scrub.
Atriplex serenana var. *davidsonii* Davidson's saltscale	1B	Coastal sage scrub and alkaline soils.
Berberis nevinii Nevin's barberry	1B, FE, CE	Chaparral, cismontane woodland, coastal sage scrub, riparian scrub, steep facing slopes.
Brodiaea filifolia Thread-leaved brodiaea	1B, FT, CE	Cismontane woodland, coastal sage scrub, vernal pools, valley and foothill grassland.
California macrophyllum Round-leaved filaree	1B	Cismontane woodland, valley and foothill grassland.
Calochortus clavatus var. *gracilis* Slender mariposa lily	1B	Chaparral, coastal shrub, shaded foothill canyons, often on grassy slopes within other habitats.
Calochortus palmeri var. *palmeri* Palmer's mariposa lily	1B	Meadows and seeps, chaparral, lower montane coniferous forest.
Calochortus plummerae Plummer's mariposa lily	1B	Coastal sage scrub, chaparral, valley and foothill grassland, cismontane woodland, rocky and sandy sites.
Calochortus weedii var. *intermedius* Intermediate mariposa lily	1B	Rocky areas in chaparral, coastal sage scrub, and foothill grasslands.
Centromadia parryi ssp. *australis* Southern tarplant	1B	Marshes and swamp margins, valley and foothill grassland, vernal pools, often in disturbed sites.
Centromadia pungens ssp. *laevis* Smooth tarplant	1B	Grassland, ruderal and alkali meadows.
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	CE, C	Coastal scrub, valley and foothill grasslands.
Chorizanthe parryi var. *parryi* Parry's spineflower	1B	Cismontane woodland, valley and foothill grassland.
Cladium californicum California sawgrass	2	Meadows, seeps, marshes and swamps, alkaline or fresh water.
Dodecahema (Centrostegia) leptoceras Slender-horned spineflower	1B, FE, CE	Chaparral, coastal sage scrub, cismontane woodland, sandy alluvial fan soils.

TABLE 4.4-1 **SPECIAL STATUS PLANTS KNOWN TO OCCUR IN OR NEAR THE CITY OF CHINO** (CONTINUED)

Scientific Name/ Common Name	Status (CNPS/ Federal/ State)	Habitat Affinities/Potential of Occurrence
Dudleya densiflora San Gabriel mountains dudleya	1B	Cismontane woodland, chaparral, lower montane coniferous forest, riparian woodland, cliffs and canyon walls.
Dudleya multicaulis Many-stemmed dudleya	1B	Coastal sage scrub, chaparral and grasslands, and rock outcrops.
Eriastrum densifolium ssp. *sanctorum* Santa Ana woollystar	1B, FE, CE	Sandy soils of river floodplains and terraced alluvial deposits.
Horkelia cuneata ssp. *puberula* Mesa horkelia	1B	Chaparral, cismontane woodland, coastal sage scrub, sandy or gravelly soils.
Imperata brevifolia California satintail	2	Chaparral, coastal sage scrub, Mojavean desert scrub, meadows and seeps, riparian scrub, and mesic soils.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	1B	Chaparral and coastal sage scrub.
Navarretia prostrate Prostrate vernal pool navarretia	1B	Coastal sage scrub, meadows and seeps, valley and foothill grassland, vernal pools, mesic soils.
Nolina cismontane Peninsular nolina	1B	Chaparral, coastal scrub, primarily on sandstone and shale substrates.
Pseudognaphalium leucocephalum White-rabbit-tobacco	2	Chaparral, cismontane woodland, coastal sage scrub, riparian woodland, sandy or gravel areas.
Rorippa gambellii Gambel's watercress	1B, FE, CE	Marshes and swamps. Nearly extinct in U.S.; known in CA from only four occurrences.
Senecio aphanactis Chaparral ragwort	2	Chaparral, cismontane woodland, coastal sage scrub, sometimes alkaline soils.
Sidalcea neomexicana Salt spring checkerbloom	2	Chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, playas, alkaline and mesic soils.
Symphyotrichum defoliatum San Bernardino aster	1B	Cismontane woodland, coastal sage scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland, streams, and springs.
Symphyotrichum greatae Greata's aster	1B	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland, and mesic soils.

Status Definitions:

USFWS

FE: Species designated as endangered under the federal Endangered Species Act. Endangered = "any species in danger of extinction throughout all or a significant portion of its range."

FT: Species designated as threatened under the federal Endangered Species Act. Threatened = "species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

TABLE 4.4-1 **SPECIAL STATUS PLANTS KNOWN TO OCCUR IN OR NEAR THE CITY OF CHINO** (CONTINUED)

C: Candidate species are plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them as endangered or threatened under the federal Endangered Species Act, but for which development of a listing regulation is precluded by other higher priority listing activities.

PR: Proposed revised listing.

CDFG

ST: Threatened = "A species that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this Act" (California Endangered Species Act).

SE: Endangered = "A species is endangered when its prospects of survival and reproduction are in immediate jeopardy from one or more causes."

SC: Species of Special Concern.

CNPS

1B Plants Rare, Threatened, or Endangered in California and elsewhere.

2 Plants Rare, Threatened, or Endangered in California but more common elsewhere.

TABLE 4.4-2 **SPECIAL STATUS WILDLIFE KNOWN TO OCCUR IN OR NEAR THE CITY OF CHINO**

Scientific Name/ Common Name	Status (Federal/ State)	Habitat Affinities/ Potential of Occurrence
Agelaius tricolor Tricolored blackbird	SC	Marshes, agricultural fields, sewage treatment plants, or stockyards and grasslands.
Actinemys marmorata pallida Southwestern pond turtle	SC	Permanent or nearly permanent bodies of water in many habitat types.
Ammodramus savannarum Grasshopper sparrow	SC	Dense grassland on rolling hills with scattered shrubs.
Anniella pulchra Silvery legless lizard	SC	Sandy soils with shade or leaf litter and springtime moisture (but not wetlands).
Antrozous pallidus Pallid bat	SC	Deserts, grassland, shrublands, woodlands and forests, dry habitats. Most common in dry rocky areas.
Athene cunicularia Burrowing owl	SC	Open, dry annual or perennial grasslands, scrublands, and undisturbed edge lands characterized by low-growing vegetation.
Asio otus Long-eared owl	SC	Riparian and oak forests. Hunts small mammals at night in adjacent open habitats.
Aspidoscelis hyperythra Orange-throated whiptail	SC	Inhabits low-elevation coastal scrub and chaparral. Occurs on or adjacent to floodplains or the terraces of streams, in or by open sage scrub and chaparral communities.
Bufo californicus Arroyo toad	FE, D	Washes and arroyos with open water; sand or gravel beds; for breeding, pools, with sparse overstory vegetation.
Catostomus santaanae Santa Ana sucker	SC, FT, D	No potential to occur. Endemic to Los Angeles Basin south coastal streams, habitat generalist but prefers sand-rubble boulder bottoms, cool, clear water, and algae.
Campylorhynchus brunneicapillus sandiegensis Coastal cactus wren	SC	Obligate resident within a subset of coastal sage scrub habitats. Cactus wrens additionally require the presence of, but are not entirely restricted within, relatively arborescent (over 1 meter tall) stands of several species of cactus (*Opuntia* spp.).
Chaetodipus fallax fallax Northwestern San Diego pocket mouse	SC	Sandy herbaceous areas, usually in association with rocks or coarse gravel.
Circus cyaneus Northern harrier	SC	Open areas with limited disturbance and abundant suitable prey; frequently, marshes and productive grasslands.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FC, CE	Requires extensive riparian forest along broad, lower flood bottoms of large river systems.

TABLE 4.4-2 **SPECIAL STATUS WILDLIFE KNOWN TO OCCUR IN OR NEAR THE CITY OF CHINO** (CONTINUED)

Scientific Name/ Common Name	Status (Federal/ State)	Habitat Affinities/ Potential of Occurrence
Corynorhinus townsedii Townsend's big-eared bat	SC	Widespread yet uncommon at middle to lower elevations; may be limited by the need for undisturbed roosts.
Crotalus ruber ruber Northern red-diamond rattlesnake	SC	Areas of heavy brush, such as chamise chaparral, boulders and rocky outcrops.
Dendroica petechia brewsteri Yellow warbler	SC	Upper story riparian habitats especially alder woodland and forest.
Dipodomys merriami parvus San Bernardino kangaroo rat	SC, FE, PR	Soils of sandy loam, occasionally to sandy gravel, in open to moderately shrubby habitats, especially intermediate serial stages of alluvial fan sage scrub.
Dipodomys stephensi Stephens' kangaroo rat	FE, CT	Arid areas, coastal sage scrub, friable soils.
Elanus leucurus White-tailed kite	SC, FP	Savannahs, open woodlands, and productive grasslands with limited disturbance.
Empidonax traillii extimus Southwestern willow flycatcher	FE, CE	Riparian woodlands along rivers, streams, or other wetlands, dense growths of willows.
Eumpps perotis californicus Western mastiff bat	SC	Semi-arid to arid habitats including conifer and deciduous woodlands, coastal sage scrub, grasslands, chaparral.
Euphydryas editha quino Quino checkerspot butterfly	FE	Open areas in grasslands, forb-lands, coastal sage scrub, and chaparral, usually with low disturbance and a well-developed biological soil crust. Primary larval host plant is *Plantago erecta.*
Falco peregrinus Peregrine falcon	SE, FP	Primarily restricted to open areas with concentrations of water birds; a few nest in tall, urban buildings (e.g. Los Angeles, San Diego), preys on pigeons.
Gila orcuttii Arroyo chub	SC	Los Angeles basin coastal streams; slow water stream sections with mud or sand bottoms, feeds heavily on aquatic vegetation and associated invertebrates.
Haliaeetus leucocephalus Bald eagle	SE, FP	Largely restricted to extensive lakes with limited disturbance.
Icteria virens Yellow-breasted chat	SC	Riparian habitat with narrow border of streams and creeks, with a well developed shrub layer and overstory.
Ixobrychus exilis Least bittern	SC	Extensive tule or cattail marshes near open water.
Lanius ludovicianus Loggerhead shrike	SC	Open, dry areas, usually with some bare ground, limited disturbance, and abundant prey (large insects, lizards, etc.).
Lepus californicus bennettii San Diego black-tailed jackrabbit	SC	Extensive open spaces, such as grasslands or open sage scrub, usually in fairly level situations.

TABLE 4.4-2 **SPECIAL STATUS WILDLIFE KNOWN TO OCCUR IN OR NEAR THE CITY OF CHINO** (CONTINUED)

Scientific Name/ Common Name	Status (Federal/ State)	Habitat Affinities/ Potential of Occurrence
Neotoma lepida intermedia San Diego desert woodrat	SC	Shrub habitats, frequently in rocky and/or steep terrain and upper drainages.
Nyctinomops femorosaccus Pocketed free-tailed bat	SC	Arid habitat, roost in high rock crevices and cliffs.
Nyctinomops macrotis Big free-tailed bat	SC	Arid habitat, roost in high rock crevices and cliffs.
Onychomys torridus ramona Ramona southern grasshopper mouse	SC	Dry grasslands and open shrublands with abundant prey (large insects and occasionally even small vertebrates).
Pelecanus occidentalis Brown pelican	FE	Forages and rests in project area. Abundant resting locations are adjacent to the project area.
Perognathus longimembris brevinasus Los Angeles little pocket mouse	SC	Open ground, prefers fine sandy soils (for burrowing), gravel washes and on stony soils, within brush and woodland habitats.
Phrynosoma blainvillii Coast horned lizard	SC	Variety of vegetation communities, from grasslands and shrublands to woodlands, including coniferous forests.
Polioptila californica californica Coastal California gnatcatcher	SC, FT	Habitat conditions on site are not conducive to support this species.
Rana aurora draytonii California red-legged frog	FT, PR	Streams with slow moving water and deep pools; dense shrubby riparian vegetation at pool edges.
Rana muscosa Mountain yellow-legged frog	SC, FE	Federal listing refers to populations in the San Gabriel mountains; always encountered within a few feet of water.
Rhaphiomidas terminates abdominalis Delhi sands giant flower-loving fly	FE	Found only in areas of Delhi sands soils within the area formerly known as the Colton Dunes.
Salvadora hexalepis virgultea Coast patch-nosed snake	SC	Extensive shrublands, generally with minimal degradation.
Scaphiopus hammondii Western spadefoot	SC	Vernal pools, swales and even man-made pools with needed hydrology, warm water temperatures, nearby upland estivation sites, and limited predators.
Taricha torosa torosa Coast range newt	SC	Coastal drainages from Mendocino to San Diego County.
Taxidea taxus American badger	SC	Most abundant in drier open stages of most shrub and forest, herbaceous habitats with friable soils.
Thamnophis hammondii Two-striped garter snake	SC	Commonly inhabits perennial and intermittent streams having rocky beds bordered by willow thickets or other dense vegetation.
Vireo bellii pusillus Least Bell's vireo	FE, SE	Requires dense understory in riparian woodland. Second-largest population in U.S. occurs at Prado Dam flood control basin and along Chino Creek.

TABLE 4.4-2 **SPECIAL STATUS WILDLIFE KNOWN TO OCCUR IN OR NEAR THE CITY OF CHINO** (CONTINUED)

Status Definitions:

USFWS

FE: Species designated as endangered under the federal Endangered Species Act. Endangered = "any species in danger of extinction throughout all or a significant portion of its range."

FT: Species designated as threatened under the Federal Endangered Species Act. Threatened = "species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

C: Candidate species are plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them as endangered or threatened under the federal Endangered Species Act, but for which development of a listing regulation is precluded by other higher priority listing activities.

PR: Proposed revised listing.

CDFG

ST: Threatened = "A species that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this Act" (California Endangered Species Act).

SE: Endangered = "A species is endangered when its prospects of survival and reproduction are in immediate jeopardy from one or more causes."

SC: Species of Special Concern.

C. Standards of Significance

The proposed projects would have a significant impact if they would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinances.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

D. Impact Discussion

This section discusses the potential impacts of both the Proposed General Plan and the Focused Growth Plan on the biological resources of the City of Chino. The proposed projects do not differ in their impacts on biological resources because they both propose to develop the same amount of currently

undeveloped land. They differ instead in how currently urbanized properties would redevelop. Implementation of either project alternative would result in some permanent impacts on the various natural resources present throughout the City. The clearing, grading, and development of previously undisturbed areas or placing new land uses in proximity to existing natural resources, would affect plant and wildlife species, including special-status species.

This section discusses biological resources impacts that would result from both project alternatives. Quantified habitat impacts would be identified and considered as part of project-specific environmental analysis that would be required for future development implemented in accordance with both project alternatives.

1. Special-Status Species

The various plant and wildlife species residing within the City, including special-status species listed above in Tables 4.4-1 and 4.4-2, could be adversely affected by individual projects implemented pursuant to both project alternatives. Direct impacts would include mortality, injury, and harassment of the species present. Indirect impacts would include habitat loss and degradation, such as by decreasing abundance, reliability, or quality of prey; increasing predation; or reducing productivity. Impacts on particular species most likely to be affected by development are described below.

Future development under both project alternatives would be subject to regulations within the Proposed General Plan that would mitigate the effects of the development on special-status species. In accordance with OSC-1.2, Policy P1, future development would be preceded by detailed biological evaluations of the site. Additionally, most new non-infill development in the both project alternatives would be in The Preserve and Edgewater plan areas. Development in The Preserve and Edgewater areas is controlled by The Preserve Resource Management Plan, which was amended to include the Edgewater project and includes regulations and extensive mitigation measures to lessen the effect of development on special-status species.

Impacts to specific special-status species are discussed below.

a. Least Bell's Vireo and Southwestern Willow Flycatcher

Currently, all areas within the 100-year floodplain below the 566-foot elevation line where areas of riparian trees and shrubs occur or may become established as a result of natural floodplain processes are designated as least Bell's vireo and southwestern willow flycatcher critical habitat by the USFWS. Areas within The Preserve Master Plan area have also been identified as least Bell's vireo and southwestern willow flycatcher critical habitat. The Preserve Master Plan EIR states that areas that support potential habitat are designated as open space and do not allow urban development. Therefore, no significant impacts are expected in The Preserve. According to CNDDB 2009 data, a small area to the east of The Preserve area has also been identified as having one or more least Bell's vireos. This area is currently occupied by vacant and open space land uses and is designated under both the Proposed General Plan and the Focused Growth Plan as Recreation/Open Space. Therefore, this land is not proposed for urban development and neither project alternative would result in impacts to least Bell's vireo in this area.

Areas in the Edgewater Communities project have been identified as containing, or having the potential to contain, least Bell's vireo habitat. Under both the Proposed General Plan and the Focused Growth Plan, a small portion of land within this habitat area is designated to be developed under the Low Density Residential and Estate Residential land use designations. The Edgewater Communities EIR finds that impacts to the least Bell's vireo that occupy habitat associated with Mill Creek are potentially significant, but finds these impacts to be less than significant after mitigation. In addition, the Edgewater Communities EIR states that the project site plan contains measures to avoid and buffer least Bell's vireo critical habitat.

Any potential impacts in The Preserve and Edgewater areas are disclosed and mitigated by the plans' respective EIRs. Land outside of The Preserve and Edgewater areas that could support least Bell's vireo habitat are not proposed

for development. Therefore, both project alternatives would have a *less-than-significant* impact on these species.

b. Delhi Sands Giant Flower-Loving Fly

The Recovery Plan for the Delhi Sands Giant flower-loving fly (DSF), prepared by the USFWS, indicates that areas where Delhi Sands are present may provide suitable restorable habitat conditions. A remnant of the Delhi Sands series soils is found within the extreme northeasterly section of The Preserve, east of Chino Airport. There are no reports that indicate DSF occupy this area. The majority of DSF habitat that once occupied this section of the City has been eliminated by long-standing agricultural land uses, development and invasive exotic vegetation. The long-term goal of the recovery plan is to protect and restore existing and potentially suitable habitat within each of the three Recovery Units (Colton, Jurupa, and Ontario) and to provide links to suitable potentially restorable habitat outside of these Recovery Units. While most of the City is not located within any of the Recovery Units, The Preserve Specific Plan is located within the Ontario Recovery Unit. The Delhi Sands remnant within The Preserve is not located adjacent to the existing habitat conservation area in Ontario, nor is this remnant area close enough to be considered part of a movement and dispersal corridor. If restored, this area would be isolated and therefore would not contribute to the recovery of DSF. Additionally, per the Recovery Plan for this species, restoration of unoccupied habitat depends entirely on the voluntary participation of landowners.

Under the thresholds of significance, if DSF is found to occupy the remnant Delhi Sands within The Preserve area, impacts to the DSF would be considered significant. Although protocol surveys have not been conducted within this area of The Preserve, it appears that there is no reasonable potential for the area to be occupied by DSF due to extensive long-standing agricultural land uses. This area is likely to remain uninhabitable without costly and long-term restoration measures. Numerous protocol level inventories for DSF in the adjacent cities and communities have been negative. These inventories have included the cities of Rancho Cucamonga, Ontario, and Fontana as well as the unincorporated Mira Loma area of Riverside County. Due to

the existing conditions stated above, both project alternatives would have a *less-than-significant* impact on the DSF.

c. Raptors and Migratory birds

Much of the agricultural lands and other open space within the southern part of the City provide roosting and foraging habitat for populations of burrowing owls, foraging raptors and migratory birds, and waterfowl. The loss of portions of this agricultural open space would involve a loss of 2.2 percent of suitable raptor habitat in the region, which would not have a significant adverse effect on regional raptor populations, except for burrowing owls.[15] The loss of agricultural open space would have an adverse effect on the local burrowing owl population.

The Resource Management Plan for The Preserve includes extensive mitigation measures to lessen the impacts of development in The Preserve area on burrowing owls. These mitigations measures include:

- **Conservation Area.** A 300-acre conservation area will be established to provide burrowing owl habitat. A weed removal program will be established for this area to create high-quality raptor foraging habitat. Twenty artificial burrowing owl nesting sites will be constructed on the site. Stands of trees will be planted to provide burrowing owl habitat.
- **Relocation.** If burrowing owls are found on any development site, the developer will be required to follow CDFG burrowing owl relocation protocols, including the creation of artificial burrows.
- **Existing Windrows.** Existing windrows that provide raptor habitat will be incorporated into the design of future development wherever practical. If incorporated windrows are not practical, the developer will provide replacement windrow trees as specified by an ornithologist specializing in raptor biology.

[15] PCR Services Corporation, 2002, *The Preserve Raptor Foraging Habitat Assessment,* published in Appendix B of the City of Chino, 2003, The Preserve: Chino Sphere of Influence-Subarea 2, Appendices to Final Environmental Impact Report-Volume 2.

The mitigation measures listed above would potentially reduce the effects of development on raptors, including burrowing owls. However, The Preserve Master Plan EIR finds that this impact would remain significant after mitigation.

The Edgewater Communities EIR also finds that burrowing owls would be affected by future development in the Edgewater Communities project. However, the following mitigation measures contained in the Edgewater Communities EIR are expected to reduce impacts to burrowing owls to a less-than-significant level:

- Establish 30 acres of restored native grassland habitat as a conservation easement and deed it to a land stewardship organization.
- Provide a planting plan to establish and manage vegetation for three detention basins and perimeter slopes.
- Avoid burrowing owls by 75 meters during the nesting season and by 50 meters outside of the nesting season. Do not disturb occupied burrows during the nesting season.
- Use passive relocation techniques if burrowing owls must be moved away from disturbance areas.
- Conduct a 30-day preconstruction survey for burrowing owls to map all occupied burrows and develop a strategy to avoid harm resulting from project construction.
- Submit a burrowing owl relocation and habitat management plan prior to passive relocation.

Implementation of both the Proposed General Plan and the Focused Growth Plan has the potential to adversely affect burrowing owls. However, these impacts are disclosed and evaluated in The Preserve Master Plan EIR and Edgewater Communities EIR. Neither of the project alternatives analyzed would result in impacts beyond those analyzed in The Preserve and Edge-

water Communities projects. Therefore, impacts to raptors, including burrowing owls, would be *less than significant*.

d. Loggerhead Shrike

The Edgewater Communities EIR finds that the permanent loss of nesting and foraging habitat for loggerhead shrike, a California Species of Special Concern, would be potentially significant. The Edgewater Communities EIR contains a mitigation measure to compensate for this loss of habitat by enhancing open space areas with native shrubs that are suitable as nest sites. The Edgewater Communities EIR finds that this mitigation measure would reduce this impact to a less-than-significant level.

Implementation of both the Proposed General Plan and the Focused Growth Plan has the potential to adversely affect loggerhead shrike. However, these impacts are disclosed and mitigated in the Edgewater Communities EIR. Neither of the project alternatives analyzed would result in impacts beyond those analyzed in the Edgewater Communities project. Therefore, impacts to loggerhead shrike would be *less than significant*.

e. Western Yellow-Billed Cuckoo

The western yellow-billed cuckoo is designated as endangered by the State of California and is a candidate for listing at the federal level. Data for the 2009 CNDDB indicates there is a 1931 record for the western yellow-billed cuckoo in an area with a 1-mile radius in the northern portion of the City. This area is centered near the intersection of Central Avenue and Riverside Drive, and is largely built out, with the exception of a small number of scattered vacant parcels and three parcels that are currently in agricultural use. Development has already been proposed and approved for the agricultural parcels in this area, and future development on these agricultural lands has already undergone separate, project-level environmental review. The vacant parcels in this area, due to their small size relative to other parcels and their location adjacent to built out parcels, are not potentially suitable habitat for this species, which consists of extensive, mature, native riparian forests. Both project al-

ternatives would have a *less-than-significant* impact on western yellow-billed cuckoo.

2. Riparian Habitat and Sensitive Natural Communities

Riparian corridors represent a significant biological resource in Chino because they contain aquatic and riparian communities, provide a physical connection between the mountains and the ocean, provide a refuge for wildlife in urban areas, enhance water quality, and potentially support many special-status species.

Any proposed urban development extending across and within existing jurisdictional drainages requires a delineation and subsequent agency determination for jurisdictional waters of the United States, including wetlands. This assessment includes an evaluation of the extent of and potential impacts to USACE jurisdiction pursuant to Section 404 of the CWA, Regional Water Quality Control Board jurisdiction pursuant to Section 401 of the CWA, and CDFG jurisdiction pursuant to Section 1602 of the Fish and Game Code. Development impacting areas considered jurisdictional by the USACE and CDFG will likely require mitigation programs to off-set impacts to sensitive aquatic resources.

Both project alternatives limit development that may be located on or near riparian habitat or sensitive natural communities to The Preserve and Edgewater areas.

Development in The Preserve would be controlled by The Preserve Resource Management Plan, which includes regulations and mitigation measures to lessen the effect of development on riparian habitat and sensitive natural communities. The Preserve Resource Management Plan requires all development to do the following:

- Satisfy any applicable requirements of USACE, Regional Water Quality Control Board and CDFG for Section 404 CWA permits and streambed alteration agreements.
- Maintain Cucamonga Creek/Mill Creek channel as a natural drainage.

- Construct a minimum of 10 acres of marsh and/or riparian habitat in order to provide mitigation for loss of the low-quality habitat.

Development of the Edgewater Communities project is subject to the following mitigation measures of the Edgewater Communities EIR:

- Establish a 22.9-acre conservation easement and deed it to a land stewardship agency to ensure that land within Mill Creek is preserved for least Bell's vireo and other riparian species.
- Do not allow construction activity within 500 feet of riparian habitat during the least Bell's vireo nesting season.
- Avoid the use of invasive and non-native plant species.
- Prepare a Pest/Turf Management Plan for common areas to ensure that fertilizers and pesticides do not enter habitat areas.
- Do not permit outdoor lighting within least Bell's vireo habitat and reduce adjacent night lighting to the greatest extent practicable.
- Do not permit recreational sports fields or structures within 250 feet of riparian habitat suitable to least Bell's vireo.
- Prepare a plan for use of Open Space-Recreation areas.
- Post signs indicating that intrusion into the Mill Creek habitat area by people and pets is not permitted.
- Post signs on all trails that dogs must remain leashed.
- Encourage residents with pet cats to have them remain indoors.

With the implementation of these mitigation measures, the Edgewater Communities EIR finds significant impacts to be mitigable to less-than-significant levels.

In addition, General Plan Policies OSC-1.1 P4 promotes conservation and preservation easements that protect habitat areas, habitat corridors, and sensi-

tive biological resources. Policy P1 of OSC-1.2 would require all future development to be preceded by detailed biological evaluations of the site.

With adherence to General Plan Policies, the Resource Management Plan for The Preserve and the mitigation measures contained in the Edgewater Communities EIR, both project alternatives would have a *less-than-significant* impact on riparian habitat and sensitive natural communities.

3. Federally Protected Wetlands

Existing wetlands are concentrated in the southern portions of the City, especially within The Preserve Specific Plan area. However, moderate-sized to very small wetlands can be present or develop nearly anywhere there is sufficient water at or just below the ground surface. Though wetlands in open spaces typically provide higher functions and values, they are not restricted to such areas. A formal delineation of waters of the United States would need to be conducted prior to the initiation of construction activities in the City where potentially jurisdictional features are present. The results of the delineation, including a report and map, would be submitted to the local district office of the USACE for verification. If the USACE determines that no waters of the United States are present, a Clean Water Act Section 404 permit would not be required, although waste discharge requirements from the RWQCB might be required, as discussed in Section D.1.b. If the USACE determines that waters of the United States are present, a Section 404 permit from the USACE for placement of fill within waters of the United States and a Section 401 water quality certification from the RWQCB would be required. Placement of fill materials into waters of the United States would require compensation to ensure no net loss of aquatic resources. Required compensation for the loss of degraded habitat could be less than that of undisturbed habitat, but compensation ratios would ultimately be determined by the resource agencies and be stated in the permit conditions.

Implementation of the Proposed General Plans' goals, objectives, policies, and actions; conditions associated with Section 404 permits and Section 401 water quality certifications; and additional mitigation protection of wetlands during

construction activities would reduce potential impacts on federally protected wetlands to a *less than significant* level.

In addition, through the Resource Management Plan covering The Preserve Specific Plan area, both project alternatives intend to preserve sensitive wetlands, allowing resources to maintain their biological viability and their important role in the regional ecosystem. Individual projects implemented pursuant to both project alternatives would be required to demonstrate a reduction in impacts on wetlands through implementation of the Resource Management Plan. With adherence to these practices, both project alternatives would have a *less-than-significant* impact on protected wetlands.

4. Interference with the Movement of Wildlife Species

Wildlife movement in Chino is generally constrained by traffic on major roadways such as Highway 71, Highway 60, Euclid Avenue, and Central Avenue. Traffic and limited habitat make wildlife movement from the south to the north of the City unlikely. However, wildlife species travel between the Prado Basin, the open spaces in Chino Hills, the Santa Ana River watershed and the interior regions of Riverside and San Bernardino counties. Wildlife species use the open spaces in the southernmost portion of The Preserve to move between these areas. This southernmost portion of the City also provides year-round water supplies and foraging areas.[16] Neither project alternative would allow expanded development in this most southern portion of the City, allowing existing wildlife connections to remain.

In addition, the Resource Management Plan for The Preserve would require development to maintain an urban buffer or transition area in the southernmost portions of the development in The Preserve area. This buffer area would protect the open spaces to the south for use as wildlife habitat and for the movement of wildlife species.[17]

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[16] City of Chino, 2003, *The Preserve: Chino Sphere of Influence Subarea 2 Final Environmental Impact Report- Volume 1*, pages 5.4-37 to 5.4-38.

[17] City of Chino, 2003, *The Preserve: Chino Sphere of Influence Subarea 2 Final Environmental Impact Report-Volume 1*, page 5.4-44.

With adherence to the Resource Management Plan, both project alternatives would have a *less-than-significant* impact to the movement of wildlife species.

5. Conflicts with Local Policies or Ordinances

Local policies and ordinances would be maintained with the implementation of both project alternatives. Chino Municipal Code Chapter 12.16 protects important trees in Chino. Future development allowed by both project alternatives would be subject to these regulations. Both project alternatives are also consistent with the Resource Management Plan for The Preserve. The Edgewater Communities EIR finds a significant impact associated with conflicts with local policies and ordinances protecting biological resources. However, the provision of conservation easements and the management and maintenance of biological resources protected by these easements would reduce this impact to a less-than-significant level. Both projects would be required to follow these mitigation measures. Consequently, the policy conflict impacts of both the Proposed General Plan and the Focused Growth Plan would be *less than significant.*

6. Conflicts with Habitat Conservation, Natural Community Conservation, or Other Plans

There are three plans related to biological resources in the Chino region. They are the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the County of San Bernardino Riparian Plan Conservation Ordinance, and The Preserve Resource Management Plan (RMP).

First, the MSHCP includes habitat restoration goals for western Riverside County. However, Chino lies outside of the MSHCP plan area and so neither project alternative would conflict with the plan.

Second, the County of San Bernardino Riparian Plant Conservation Ordinance protects riparian habitat on private land within the unincorporated areas of San Bernardino County, including the Chino SOI. This ordinance prohibits the removal of any vegetation within two hundred feet of the bank

of a stream or in an area indicated as a protected riparian area. Future development in the Chino's SOI must comply with these regulations.

Third, the RMP for The Preserve describes areas to be left as open space serving as buffers to other adjacent areas described for conservation. The Edgewater Communities EIR finds a potentially significant impact associated with conflicts with the RMP. These conflicts include loss of a portion of a candidate conservation area for burrowing owl habitat, loss of open land below the 566-foot elevation and relocation of the urban buffer/transition area. The Edgewater Communities EIR finds that this impact would remain significant after mitigation.

Impacts associated with conflicts with the RMP are disclosed and evaluated in the Edgewater Communities EIR. Neither of the project alternatives analyzed would result in impacts beyond those analyzed in the Edgewater Communities project EIR. All other development under both the Proposed General Plan and the Focused Growth Plan would be subject to and consistent with the regulations in these three documents. Therefore, impacts associated with conflicts with regional conservation plans would be *less than significant*.

E. Cumulative Impacts

The biological resources in the City are part of a larger ecosystem within the region and are connected to significant resources outside of the City including Chino Hills, the Santa Ana River watershed, and the San Bernardino mountains. The functions and values of such ecosystems can be evaluated to include adjacent open space areas, wildlife corridors, and fly ways.

Development in this growing region would result in cumulative impacts on biological resources, and future development within the City could contribute to such impacts. Future development proposed in accordance with both project alternatives and cumulative development outside of the City boundaries could contribute to the cumulative regional loss and degradation of natu-

ral communities, and thereby potentially cause regionally significant impacts to special-status plants and wildlife. The Western Riverside County MSHCP is a regional planning document that restricts development from areas known to contain sensitive biological resources and thereby minimizes the cumulative effects of regional development on natural areas, plants, wildlife, and wetlands.

The Proposed General Plan and Focused Growth Plan would not result in greater than negligible impacts to natural communities beyond those analyzed in The Preserve and Edgewater Communities EIRs. Therefore, the project alternatives will make a less than cumulatively considerable impact to natural communities. Development of agricultural land into urban uses would be a contribution to a cumulative loss of this type of wildlife habitat in the region. This type of wildlife habitat is important to the foraging of certain raptor species, including the burrowing owl, and loss of this habitat would contribute to a cumulative effect on these species. This type of impact cannot be offset by the creation of new land.[18]

An independent regional analysis of raptor foraging habitat by PCR Services Corporation found that the loss of foraging habitat for raptors in The Preserve and Edgewater Communities, including the burrowing owl and other raptor species, would be significant when considered cumulatively.[19] This cumulative loss is a significant adverse impact to regional populations of raptors. Impacts associated with the development of The Preserve and the Edgewater Communities project are disclosed and evaluated in those plans' respective EIRs. The Proposed General Plan and Focused Growth Plan would not result in any impacts to raptors beyond those analyzed in The Pre-

[18] LSA, 2002, *Assessment of Impact and Mitigation Options: The Preserve, Chino*, published in Appendix B of the City of Chino, 2003, *The Preserve: Chino Sphere of Influence-Subarea 2*, Appendices to Final Environmental Impact Report-Volume 2.

[19] PCR Services Corporation, 2002, *The Preserve Raptor Foraging Habitat Assessment,* published in Appendix B of the City of Chino, 2003, The Preserve: Chino Sphere of Influence-Subarea 2, Appendices to Final Environmental Impact Report-Volume 2, page 4.

serve and Edgewater Communities EIRs. Therefore, the project alternatives will make a *less than cumulatively considerable* contribution to a regionally significant impact to raptor foraging habitat.

F. Significant Impacts and Mitigation Measures

Since there are no significant impacts related to biological resources as a result of the Proposed General Plan or Focused Growth Plan, no mitigation measures are required.