

4.3 BIOLOGICAL RESOURCES

This chapter provides information on biological resources found within and in the immediate vicinity of the Draft 2030 General Plan and Climate Action Plan (CAP) area. An evaluation of the potential impacts the Draft 2030 General Plan and CAP may have on the biological resources in the area is provided. Furthermore, a summary of the regulatory framework, which provides for the protection and conservation of important biological resources, is also included.

A. Regulatory Framework

This section describes the federal and State regulations that provide for protection and management of sensitive biological resources.

1. Federal Laws

The federal laws that regulate the treatment of biological resources include the Endangered Species Act, the Migratory Bird Treaty Act, and the Clean Water Act. The following sections outline the relevant principles of each.

a. Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) is responsible for implementation of the Federal Endangered Species Act (FESA) (16 U.S.C. § 1531 et seq.). The Act protects fish and wildlife species that are listed as threatened or endangered, and their habitats. “Endangered” species, subspecies, or distinct population segments are those that are in danger of extinction through all or a significant portion of their range, and “threatened” species, subspecies, or distinct population segments are likely to become endangered in the near future.

Section 7 of the FESA mandates that all federal agencies consult with USFWS and NOAA Fisheries if they determine that a proposed project may affect a listed species or its habitat. The purpose of consultation with USFWS and NOAA Fisheries is to ensure that the federal agencies’ actions do not jeopard-

ize the continued existence of a listed species or destroy or adversely modify critical habitat for a listed species.

Section 9 of the FESA prohibits the take of any fish or wildlife species listed as endangered, including the destruction of habitat that prevents the species' recovery. Take is defined as an action or attempt to hunt, harm, harass, pursue, shoot, wound, capture, kill, trap, or collect a species. Section 9 prohibitions also apply to threatened species unless a special rule has been defined with regard to take at the time of listing.

Under Section 9 of the FESA, the take prohibition applies only to wildlife and fish species. However, Section 9 does prohibit the unlawful removal and possession, or malicious damage or destruction, of any endangered plant from federal land. Section 9 prohibits acts to remove, cut, dig up, damage, or destroy an endangered plant species in nonfederal areas in knowing violation of any state law or in the course of criminal trespass. Candidate species and species that are proposed or under petition for listing receive no protection under Section 9.

b. Federal Clean Water Act

The Federal Clean Water Act (FCWA) is administered by the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps). The Corps is responsible for regulating the discharge of fill material into waters of the United States, including lakes, rivers, streams and their tributaries, as well as 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 normal circumstances support a prevalence of vegetation typically adapted for life in saturated soil conditions."

The discharge of dredged or fill material into waters of the United States is subject to permitting under Section 404 (Discharges of Dredge or Fill Material). Section 401 (Certification) specifies additional requirements for permit review, particularly at the State level. Project proponents must obtain a per-

mit from the Corps for all discharges of dredged or fill material into waters of the United States, including wetlands, before proceeding with a proposed action. Corps permits must be certified by the State Water Resources Control Board (SWRCB) in order to be valid. Thus, certification from the SWRCB should be requested at the same time an application is filed with the Corps.

Certification from the San Francisco Bay Regional Water Quality Control Board (RWQCB) is also required when a proposed activity may result in discharge into navigable waters, pursuant to Section 401 of the Clean Water Act and EPA 404(b)(1) Guidelines.

c. **Migratory Bird Treaty Act**

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.) governs the taking, killing, possession, transportation and importation of migratory birds and their eggs, parts and nests. Moreover, the MBTA prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, of any migratory bird and their eggs, parts and nests, except as authorized under a valid permit (50 CFR 21.11).

2. State Laws and Regulations

The most relevant State laws regulating biological resources are the California Endangered Species Act, the California Fish & Game Code and the California Native Plant Protection Act, each of which is described below.

a. **California Endangered Species Act**

The California Endangered Species Act (CESA) (California Fish and Game Code Section 2050 et seq.) establishes state policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that State agencies should not approve projects that jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. For projects that would affect a species that is on the federal and State lists, compliance with FESA satisfies CESA if the California Department of Fish and Game

(CDFG) determines that the federal incidental take authorization is consistent with CESA under California Fish and Game Code Section 2080.1. For projects that would result in take of a species that is only State-listed, the project proponent must apply for a take permit under Section 2081(b).

b. California Fish and Game Code

Under the California Fish and Game Code, the CDFG provides protection from “take” for a variety of species. The CDFG also protects streams, water bodies and riparian corridors through the Streambed Alteration Agreement process under Section 1601 to 1606 of the California Fish and Game Code. The Fish and Game Code 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 Department, incorporating necessary mitigation and obtaining a Streambed Alteration Agreement. CDFG’s jurisdiction extends to the top of banks and often includes the outer edge of riparian vegetation canopy cover.

c. California Native Plant Protection Act

The California Native Plant Protection Act of 1977 prohibits importation of rare and endangered plants into California, “take” of rare and endangered plants and sale of rare and endangered plants. CESA defers to the California Native Plant Protection Act, which ensures that state-listed plant species are protected when State agencies are involved in projects subject to CEQA. In this case, plants listed as rare under the California Native Plant Protection Act are not protected under CESA but rather under CEQA.

3. Local Regulations

a. San Mateo County General Plan

The San Mateo County General Plan contains a section of policies devoted to vegetation, water, fish and wildlife resources which would govern unincorporated land within San Carlos’ SOI. The following are the policies most relevant to this document.

i. General Policies

- ◆ 1.20 Importance of Sensitive Habitats. Consider areas designated as sensitive habitats as a priority resource requiring protection.
- ◆ 1.22 Regulate Development to Protect Vegetative, Water, Fish and Wildlife Resources.
 - Regulate land uses and development activities to prevent, and if infeasible mitigate to the extent possible, significant adverse impacts on vegetative, water, fish and wildlife resources.
 - Place a priority on the managed use and protection of vegetative, water, fish and wildlife resources in rural areas of the County.

ii. Regulation of Development

- ◆ 1.23 Regulate Location, Density and Design of Development to Protect Vegetative, Water, Fish and Wildlife Resources. Regulate the location, density and design of development to minimize significant adverse impacts and encourage enhancement of vegetative, water, fish and wildlife resources.

iii. Resource Protection

- ◆ 1.25 Protect Water Resources. Ensure that development will: (1) minimize the alteration of natural water bodies, (2) maintain adequate stream flows and water quality for vegetative, fish and wildlife habitats; (3) maintain and improve, if possible, the quality of groundwater basins and recharge areas; and (4) prevent to the greatest extent possible the depletion of groundwater resources.

iv. Sensitive Habitats

- ◆ 1.27 Regulate Development to Protect Sensitive Habitats. Regulate land uses and development activities within and adjacent to sensitive habitats in order to protect critical vegetative, water, fish and wildlife resources; protect rare, endangered, and unique plants and animals from reduction

in their range or degradation of their environment; and protect and maintain the biological productivity of important plant and animal habitats.

- ◆ 1.28 Establish Buffer Zones. Establish necessary buffer zones adjacent to sensitive habitats which include areas that directly affect the natural conditions in the habitats.
- ◆ 1.29 Uses Permitted in Sensitive Habitats. Within sensitive habitats, permit only those land uses and development activities that are compatible with the protection of sensitive habitats, such as fish and wildlife management activities, nature education and research, trails and scenic overlooks and, at a minimum level, necessary public service and private infrastructure.
- ◆ 1.30 Permitted in Buffer Zones. Within buffer zones adjacent to sensitive habitats, permit the following land uses and development activities: (1) land uses and activities which are compatible with the protection of sensitive habitats, such as fish and wildlife management activities, nature education and research, trails and scenic overlooks, and at minimum level, necessary public and private infrastructure; (2) land uses which are compatible with the surrounding land uses and will mitigate their impact by enhancing or replacing sensitive habitats; and (3) if no feasible alternative exists, land uses which are compatible with the surrounding land uses.
- ◆ 1.31 Regulate the Location, Siting and Design of Development in Sensitive Habitats. Regulate the location, siting and design of development in sensitive habitats and buffer zones to minimize to the greatest extent possible adverse impacts, and enhance positive impacts.
- ◆ 1.32 Performance Criteria and Development Standards. Establish performance criteria and development standards for development permitted within sensitive habitats and buffer zones, to prevent and if infeasible mitigate to the extent possible significant negative impacts and to enhance positive impacts.
- ◆ 1.45 Consolidate Regulations Protecting Sensitive Habitats in Rural Areas. Consolidate existing performance criteria and development stan-

dards to regulate all development in sensitive habitats in rural areas. Consider using the consolidated regulations as an overlay zoning district.

- ◆ 1.46 Develop Performance Criteria and Development Standards for Sensitive Habitats in Urban Areas. Develop a set of performance criteria and development standards to protect sensitive habitats in urban areas. Consider using the consolidated regulations as an overlay zoning district.
- ◆ 1.47 Develop Guidelines for Vegetation and Debris Control in Riparian Corridors. Develop guidelines for vegetation and debris control in riparian corridors. Such guidelines should set forth clear direction on procedures to: (1) facilitate the abatement of avoidable flood hazards and (2) minimize adverse impacts on riparian communities.
- ◆ 1.48. Encourage the Management of Riparian Corridors. Encourage and, to the maximum extent feasible, reward the efforts of those responsible for managing riparian corridors in a manner that is consistent with County and State guidelines.

b. City of San Carlos Municipal Code

Section 18.144.040 of the Municipal Code regulates the maintenance of areas adjacent to stream channels. The Code requires a 25-foot setback from the top of bank on each side of the creek. Filling and excavation of creeks is prohibited. The Code also states that the 25-foot setback may be used for low intensity purposes, passive recreation or conservation uses as approved by the City Council. Vegetation within the 25-foot setback shall not be cut or removed except for necessary maintenance.

c. Master Plan for Edgewood County Park

The May 1997 Edgewood Park and Natural Reserve Master Plan identifies low intensity recreation activities and limited complementary site improvements for the Edgewood County Park project area. The plan provides for natural resource protection; permitted uses conducive to Edgewood's environment; identifies access, parking and associated amenities; and plans for interpretive activities.

B. Existing Biological Communities

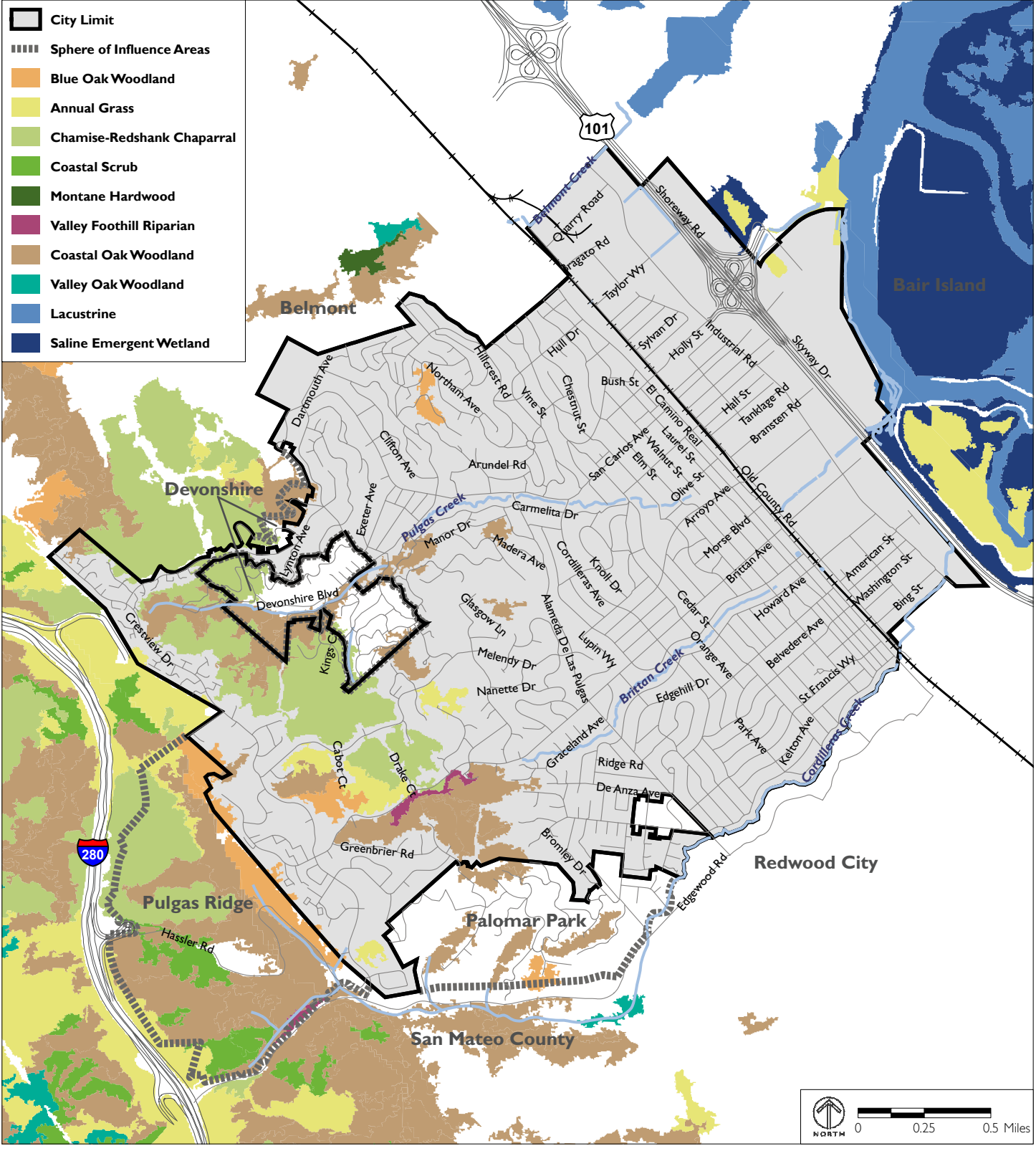
This section discusses the natural and non-natural communities and special-status species that are known to occur or have potential to occur in the Planning Area.

1. Natural Communities in San Carlos

Although native vegetation within San Carlos has been substantially altered, the presence of large areas of undeveloped lands to the west, and the remaining riparian corridors along creeks contributes to a diverse assemblage of resident and migrant wildlife species. In general, each habitat differs in its relative value to specific species and can be characterized by both vegetation and dependent animal species, although some wildlife species may utilize more than one habitat type. Figure 4.3-1 shows a general map of the vegetation and habitat types based on CalVeg mapping by the USDA Forest Service.

The habitat types found within and around San Carlos all provide different ecological functions and value. The more common habitat types are outlined below:

- ◆ *Non-vegetated and sparsely vegetated habitat.* Most of the non-vegetated and sparsely vegetated habitat areas are located east of Alameda de las Pulgas as shown on Figure 4.3-1.
- ◆ *Aquatic habitat.* Aquatic habitat includes streams, ponds, lakes and bay shoreline that provide habitat to a variety of birds, amphibians, fish and mammals.
- ◆ *Wetlands.* Wetlands are areas that are periodically or permanently inundated by surface or ground water, and support vegetation adapted to life in saturated soil. Wetlands provide habitat for fish and wildlife and provide stormwater, flood, and water recharge, filtration and purification functions. Seasonal wetlands are areas of prolonged saturation that are dry during the summer months. Wetlands tend to be present near aquatic features such as creeks, lakes or ponds and along the bay shore,



Source: USDA Forest Service, CALVEG: A Classification of California Vegetation, 1997.

FIGURE 4.3-1
 VEGETATION AND HABITAT TYPES

but also may be found within seasonal swales or isolated depressions such as a low spot in the ground. Wetlands and major waterbodies in and near San Carlos are shown in Figure 4.3-2. Although there are only documented areas of wetlands near the eastern city border, it is likely that these features exist in other areas of the city and its SOI.

- ◆ *Riparian habitats.* Riparian habitat is a distinct plant community found along the margins of creeks and rivers. It has a very high value to wildlife and generally exhibits a rich and diverse animal community. Although mostly urbanized, Pulgas, Brittan, Belmont and Cordilleras Creeks support areas of riparian habitat. However, the scale of the riparian habitat area is too small to be shown in Figure 4.3-1.
- ◆ *Oak woodland.* Oak woodland habitat consists of patches of several or more mature trees frequently dominated by California coast live oak and valley oak. Some areas of oak woodland habitat also support a dense understory shrub layer of vegetation that includes coyote brush, poison oak, California coffeeberry, Himalayan blackberry and California rose. Several types of oak woodland are shown on Figure 4.3-1. This habitat is found in small patches in single-family neighborhoods and concentrated in open space and park areas.
- ◆ *Annual grassland.* The majority of grassland habitat in San Carlos is rather low-quality grassland dominated by annual, non-native upland grasses and forbs.
- ◆ *Scrub.* Scrub habitat in the San Carlos area is characterized by Chamise-Redshank Chapparal. Scrub is found in some of the upland open space and park areas.

2. Sensitive Plant and Wildlife Species in San Carlos

San Carlos' hilly, densely vegetated open space areas and proximity to the San Francisco Bay provide potential habitat for a variety of sensitive plant or wildlife species. As of February 2009, the California Natural Diversity Database (CNDDDB), an inventory of rare plants and animals in California, identified no occurrences of sensitive species or habitats in the urban areas of San

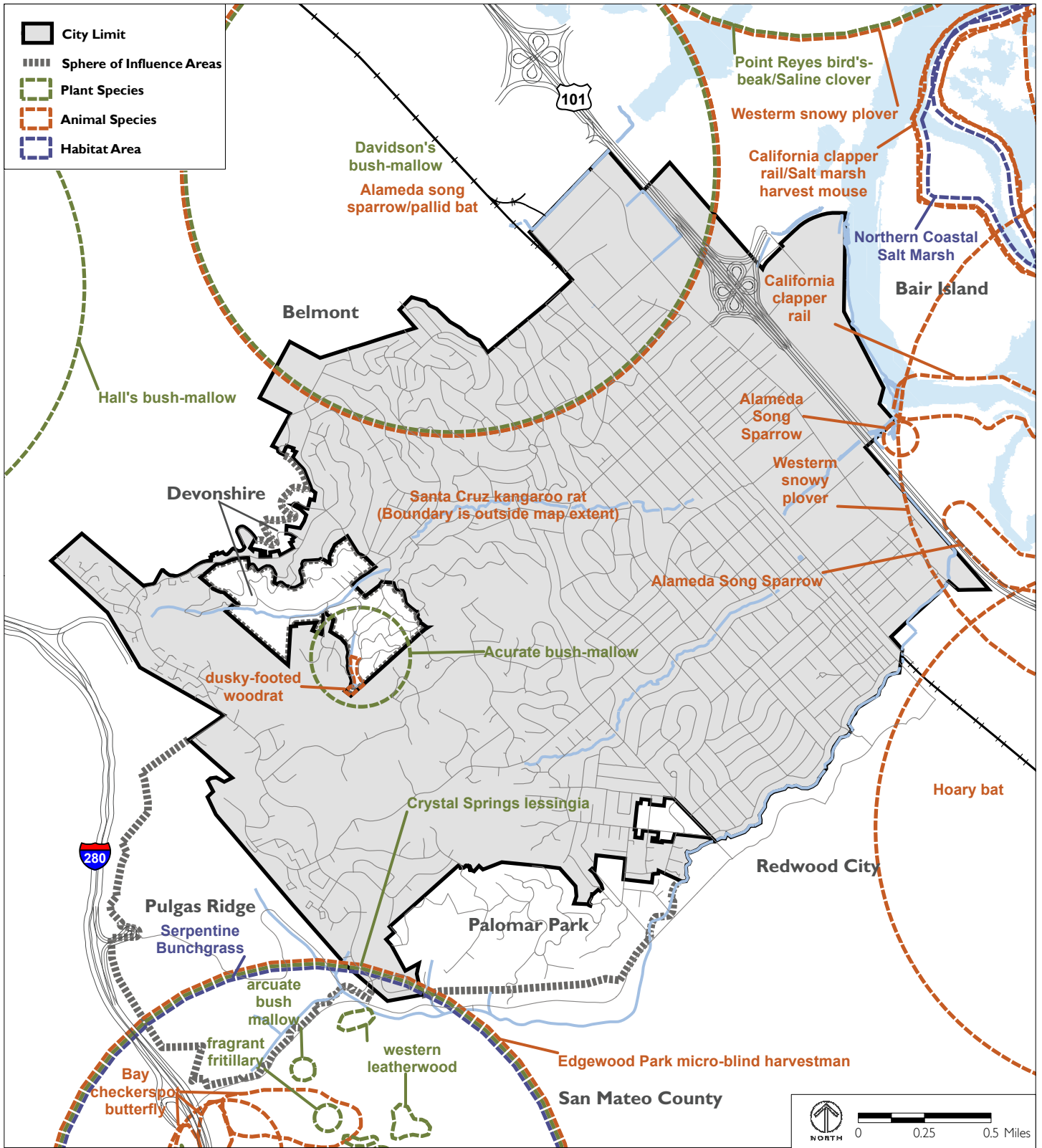
Carlos. The CNDDDB lists known occurrences of sensitive species based on reported and verified sighting locations of these species. It is not a comprehensive or exhaustive list and sensitive species may exist that are not shown in the database. Circles around sighting locations, using radii given in the CNDDDB, are drawn on Figure 4.3-3. Sensitive habitat, plants and wildlife found within the city limit and SOI are summarized in Table 4.3-1.

Known occurrences of sensitive species are documented nearby that are not in the CNDDDB. Specifically, the dusky footed woodrat (*Neotoma fuscipes annectans*) is known to be located on, or in the immediate vicinity of an area at the western end of Devonshire Boulevard, and the highest concentrations of nests occur in riparian, coast live oak woodland, and chaparral dominated by chamise and toyon.

In addition, there are additional sensitive plant species identified by the CDFG and USFWS as having the potential to occur in the area. Although there are no documented sightings of these species, the valley and foothill grasslands and seasonal wetland habitat types found in the area could support their existence. These sensitive species include the following:¹

- ◆ Alkali milk-vetch (*Astragalus tener var. tener*)
- ◆ San Joaquin spearscale (*Atriplex joaquiniana*)
- ◆ Contra Costa goldfields (*Lasthenia conjugens*)
- ◆ Large flowered linanthus (*Linanthus grandiflorus*)
- ◆ Greene's popcorn flower (*Plagiobothrys greenei*)
- ◆ Salinas Valley popcorn flower (*Plagiobothrys uncinatus*)
- ◆ Fragrant fritillary (*Fritillaria liliacea*)
- ◆ San Francisco collinsia (*Collinsia multicolor*)
- ◆ Western leatherwood (*Dirca occidentalis*)
- ◆ Franciscan Onion (*Allium peninsulare var. franciscanum*)

¹ City of San Carlos, *Winding Way Property Tax Exchange Agreement for Annexation to the City of San Carlos Draft Focused Environmental Impact Report*, 2005, page 3-19.



Source: California Natural Diversity Database, 2009. Location of dusky-footed woodrat mapped by H.T. Harvey and Associates, December 2006.

FIGURE 4.3-3
 KNOWN OCCURENCES OF SENSITIVE SPECIES AND HABITAT

TABLE 4.3-1 SENSITIVE SPECIES FOUND IN THE CITY LIMIT AND SPHERE OF INFLUENCE

Species	Habitat	Status
Habitat		
Serpentine Bunchgrass	N/A	Recognized as a sensitive community by California Department of Fish and Game
Plants		
Arcuate bush-mallow (<i>Malacothamnus arcuatus</i>)	Chaparral and coastal scrub on dry slopes	California Native Plant Society List 1B (rare, threatened or endangered in California)
Crystal Springs lessingia (<i>Lessingia arachnoidea</i>)	Mixed woodlands, oak woodlands, valley and foothill grasslands, coastal scrub on serpentine soils	California Native Plant Society List 1B (rare, threatened or endangered in California)
Davidson’s bush-mallow (<i>Malacothamnus davidsonii</i>)	Coastal scrub	California Native Plant Society List 1B (rare, threatened or endangered in California)
Serpentine benchgrass	Serpentine soils	Recognized as a sensitive community by California Department of Fish and Game
Insects		
Bay checkerspot butterfly (<i>Euphydryas editha bayensis</i>)	Serpentine rock outcrops and serpentine soils	Federally threatened
Edgewood Park micro-blind harvestman (<i>Microcina edgewoodensis</i>)	Serpentine rock outcrops and serpentine grasslands	Recognized as a species of special concern by California Department of Fish and Game
Birds		
Alameda song sparrow (<i>Melospiza melodia pusillula</i>)	Tidal marsh	Recognized as a species of special concern by California Department of Fish and Game
California clapper rail (<i>Rallus longirostris obsoletus</i>)	Tidal marsh	State and Federally Endangered

Species	Habitat	Status
Western snowy plover (<i>Charadrius alexandrinus nivosus</i>)	Tidal salt, brackish freshwater marsh	Federally threatened
Mammals		
Dusky-footed woodrat (<i>Neotoma fuscipes annectans</i>)	Forest and chaparral	Recognized as a species of special concern by California Department of Fish and Game
Pallid bat (<i>Antrozous pallidus</i>)	Desert scrub with rocky outcrops, forested oak and pine regions	Recognized as a species of special concern by California Department of Fish and Game
Santa Cruz kangaroo rat (<i>Dipodomys venustus venustus</i>)	Desert scrub and sandy hills	Recognized as a species of special concern by California Department of Fish and Game

Source: California Natural Diversity Database (CNDDB), February 2009.

In addition, coastal salt marsh and wetland habitat near the San Carlos Airport, but outside the city limit and SOI, are known to support sensitive species. Water birds such as the endangered California clapper rail (*Rallus longirostris obsoletus*) and the threatened western snowy plover (*Charadrius alexandrinus nivosus*) could potentially be present in areas adjacent to the San Carlos Airport. There is also potential for the federal endangered salt marsh harvest mouse (*Reithrodontomys raviventris*) to occur in these areas, particularly in places with cordgrass or alkali brush.

The San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*) and dusky footed wood rat (*Neotoma fuscipes annectans*) all have potential to occur in open space areas in and around San Carlos. The San Francisco garter snake, a federal Endangered species, typically resides in densely vegetated ponds near exposed hillsides where it can sun itself, feed and find cover in rodent burrows. Often the prey of the San Francisco garter snake, the California red-legged frog, a federal Threatened species, occurs in areas of riparian vegetation with deep, still or slow-moving water. The California tiger salamander, also a federal Endangered species, is found in vernal

pools and seasonal ponds in grassland and low foothills. The dusty footed wood rat, a California species of concern, typically is found in woodland areas with dense underbrush. Additionally, native shrubs like the Acurate bush mallow could potentially occur in open space areas west of Alameda de las Pulgas.

3. Invasive Plants

Invasive plants are a concern throughout the Bay Area. Detrimental effects from invasive plants particular to urban areas include the displacement of native plants and wildlife and increasing risk of exposure to wildfires and floods. Plants and trees such as eucalyptus, Scotch and French broom and pampas grass increase fire fuel loads and can also be highly flammable. Other invasive plants, such as the giant reed, can clog stormwater systems which can increase the risk of flooding. San Carlos' open spaces and landscaped areas are highly susceptible to these invasive species.

The California Invasive Plant Inventory and the Invasive Plants of California's Wildlands are lists maintained by the California Invasive Plant Council (Cal-IPC) that can assist in determining if a plant is an invasive species. Cal-IPC ranks species as "High," "Moderate," or "Limited" impact, and any species from these can be evaluated for potential threat to local habitat. Even species ranked as "Limited" impact for California as a whole can have severe impacts in a particular county or property due to local history and site conditions. The inventory lists 257 species ranked as limited, moderate or high impact invasive species for the region surrounding San Carlos.

4. Watersheds and Riparian Corridors

Natural drainage in San Carlos is divided into two main watersheds: Pulgas Creek and Cordilleras Creek. Within the watersheds are Pulgas, Brittan, Belmont and Cordilleras Creeks, which are the main drainage ways through San Carlos emptying into San Francisco Bay. Salt and brackish marshes are found near the terminus of each of the creeks east of Highway 101. The upper portions of these watersheds are generally undeveloped, the middle sections are primarily residential and the eastern portions are typically commer-

cial and industrial. The quality of the watersheds is discussed in Section D.1.c below.

The four creeks in San Carlos are identified in Figure 4.3-2. Belmont Creek is located at the northern San Carlos boundary in the East Side area. Belmont Creek flows into Belmont Slough and O'Neill Slough.

Pulgas and Brittan Creeks are the two main creeks within San Carlos. The creeks have mostly unhardened channels in the upper reaches and hardened channels in the lower flatlands, where Brittan Creek joins Pulgas Creek via an underground conduit (paralleling El Camino Real). Following the confluence of Pulgas Creek and Brittan Creeks, the combined flow drains into Smith Slough south of Bair Island.

Cordilleras Creek, the longest of the four creeks, defines the southern boundary of San Carlos which is shared with Redwood City. Cordilleras Creek, like the combined Pulgas/Brittan Creek, also flows into San Francisco Bay via Smith Slough. Similar to Pulgas and Brittan Creeks, the upper reaches of Cordilleras Creek are mostly unhardened channels.

The creeks discussed above are “losing creeks,” meaning they are not recharged by groundwater. Consequently, they are intermittent and generally flow during the winter wet-weather season and from irrigation runoff during the dry months.

C. Standards of Significance

The Draft 2030 General Plan and CAP would result in significant impacts on biological resources if they would:

- a. Have a substantial adverse effect, either directly or through habitat modifications, on a plant or animal population, or essential habitat, defined as a candidate, sensitive or special status species;

- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community type, such as native grasslands;
- c. 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;
- d. Have a substantial interference with the movement of any native resident or migratory fish or wildlife species, their wildlife corridors, or native nursery sites;
- e. Conflict with any local policies or ordinances protecting biological resources; or
- f. Conflict with 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 impacts of the Draft 2030 General Plan and the CAP on the biological resources in the Planning Area. The Planning Area is taken to be the San Carlos Sphere of Influence, a greater area than that defined by the City limits. Areas outlined for development changes in this Draft 2030 General Plan are all within the nine planning areas as identified in Figure 3-3 of the Project Description. In general, these areas have little vegetation and provide little wildlife habitat that would be affected by the proposed changes.

This discussion is organized by and responds to each of the potential impacts identified in the Standards of Significance first for the Draft 2030 General Plan, and then for the CAP.

1. Draft 2030 General Plan Project Impacts

Although adoption of the Draft 2030 General Plan would not, by itself, result in impacts to biological resources, reasonably foreseeable future projects proposed under the Plan could produce impacts on biological resources in a variety of ways. For example, ground-disturbing activities have the potential to impact special-status species both directly through physical injury and indirectly through habitat alteration or removal. Other potential impacts include increased noise, lighting, and dust resulting from ground-disturbing activities in the Planning Area. Potential impacts are discussed in greater detail below.

a. Sensitive or Special Status Species

i. *Crystal Springs Lessingia (Lessingia Arachnoidea)*

The Crystal Springs lessingia has been recorded in areas that are adjacent to the very south of San Carlos and in its Sphere of Influence with the Pulgas Ridge Open Space Preserve, Hetch-Hetchy Aqueduct Corridor and Edge-wood Park. No development is planned for these areas under the Draft 2030 General Plan so there would be *no impact* upon the Crystal Springs lessingia.

ii. *Acurate Bush Mallow (Malacothamnus Arcuatus)*

The Acurate bush mallow is recorded in the hilly areas towards the south of San Carlos and in the unincorporated area around the top of Pulgas Creek within the city boundaries. However, Policy EM-1.1 in the Environmental Management would ensure that potential impacts to biological resources are carefully evaluated prior to approval of development projects. Policy EM-1.2 in the Environmental Management Element would ensure that development is consistent with all federal, State and regional regulations for habitat and species protection. The application of these two policies would reduce or prevent impacts to the Acurate bush-mallow and the impact would be *less than significant*.

iii. *Davidson's Bush-Mallow (Malacothamnus Davidsonii)*

Davidson's bush-mallow is known from lowland areas of adjacent unincorporated San Mateo County and may range into northern San Carlos. It is possible that there will be development in these areas. Application of Policies EM-1.1 and EM-1.2 of the Environmental Management Element would reduce or

prevent impacts to the Davidson's bush-mallow and the impact would be *less than significant*.

iv. Serpentine Benchgrass

Serpentine benchgrass is known from Edgewood Park and may range into the south of San Carlos and its Sphere of Influence. No development is planned for these areas under the Draft 2030 General Plan so there would be *no impact* upon the Serpentine Benchgrass.

v. Bay Checkerspot Butterfly (Euphydryas Editha Bayensis)

Known habitat for the Bay checkerspot butterfly is known from Edgewood Park in close proximity to the San Carlos Sphere of Influence. No development is planned for these areas under the Draft 2030 General Plan so there would be *no impact* upon the Bay checkerspot butterfly.

vi. Edgewood Park Micro-Blind Harvestman (Microcina Edgewoodensis)

Edgewood Park micro-blind harvestman is known from Edgewood Park and its range may extend into the south of San Carlos and its Sphere of Influence. No development is planned for these areas under the Draft 2030 General Plan so there would be *no impact* upon the Edgewood Park micro-blind harvestman.

vii. Alameda Song Sparrow (Melospiza Melodia Pusillula)

The Alameda song sparrow is known from wetland areas just outside, but immediately adjacent to the northern city limits. The areas in the city include some that could be developed to bring existing land uses in line with the General Plan Land Use Map. Application of Policies EM-1.1 and EM-1.2 of the Environmental Management Element would reduce or prevent impacts to the Alameda song sparrow and the impact would be *less than significant*.

viii. California Clapper Rail (Rallus Longirostris Obsoletus)

The California clapper rail is known from marshland habitat that is immediately adjacent to the City of San Carlos. Development activity that is planned in the Draft 2030 General Plan could potentially affect these areas by causing noise or water quality impacts. Application of Policies EM-1.1 and

EM-1.2 of the Environmental Management Element would reduce or prevent impacts to the California clapper rail and the impact would be *less than significant*.

ix. Dusky-Footed Woodrat (Neotoma Fuscipes Annectans)

The dusky-footed woodrat is common throughout the California coast range, among other areas of the west coast. The San Francisco dusky-footed woodrat and the Monterey dusky-footed woodrat are California species of special concern. As of 2006, known occurrences of the dusky-footed woodrat have been recorded in the Devonshire Canyon area. Development activity under the Draft 2030 General Plan could potentially impact dusky-footed woodrat habitat. Application of Policies EM-1.1 and EM-1.2 of the Environmental Management Element would reduce or prevent impacts to a *less-than-significant* level.

x. Pallid Bat (Antrozous Pallidus)

Pallid bats are known from urban areas in San Mateo and could potentially range into northern San Carlos. They could be found in areas that would be affected by development allowed under the Draft 2030 General Plan. Application of Policies EM-1.1 and EM-1.2 of the Environmental Management Element would reduce or prevent impacts to the Pallid bat and the impact would be *less than significant*.

xi. Santa Cruz Kangaroo Rat (Dipodomys Venustus Venustus)

The Santa Cruz kangaroo rat is known from San Carlos and could potentially be found in areas that would be affected by development outlined in the Draft 2030 General Plan. Application of Policies EM-1.1 and EM-1.2 of the Environmental Management Element would reduce or prevent impacts to the Santa Cruz kangaroo rat and the impact would be *less than significant*.

b. Riparian Habitat or Other Sensitive Natural Community Type

There are four significant creeks that run through San Carlos: Brittan, Belmont, Pulgas and Cordilleras Creeks. However the USDA Forest Service's CalVeg Mapping program, which defines these areas based on satellite im-

agery, does not show riparian habitat along these creeks. On a local scale, it is still likely that this habitat exists. It is likely that there are areas in San Carlos where development could occur under the Draft 2030 General Plan that are located in these areas. However, the following policies in the Environmental Management Element would apply to this development. Under Policy EM-2.1, riparian habitat would be preserved and enhanced; under Policy EM-2.2, there would be continuing enforcement of the City's Riparian Ordinance for all four of the city's creeks; and under Policy EM-2.7 Pulgas, Brittan, Cordilleras, and Belmont Creek channels and their 100 year flood plans would be retained wherever possible as natural open space areas to allow their continued primary function as storm drainage facilities and open space greenbelt to support natural habitat, balanced with safety consideration. This would minimize development in these areas ensuring a *less-than-significant* impact to riparian habitat.

Other communities considered sensitive and with a high inventory priority for the CNDDDB include freshwater marsh, freshwater seeps and springs, riparian forest and woodland, willow riparian scrub, valley oak woodland and valley needlegrass grassland. Of these, valley oak woodland is known from areas near San Carlos.

c. Federally Protected Wetlands

As shown on Figure 4.3-2, there are wetlands immediately adjacent to the San Carlos City limits in the north of the city. Existing land use maps show that there is some vacant land in these areas. Development on adjacent parcels could potentially affect these. Application of Policy EM-1.2 of the Environmental Management Element would ensure that development is consistent with all federal, State and regional regulations for habitat and species protection and the impact to federally protected wetlands would be *less than significant*.

d. Interference with the Movement of Any Native Resident or Migratory Fish or Wildlife Species

Fish inhabit San Carlos' four urban creeks and numerous wildlife species migrate through the area, particularly in the southern hilly area adjacent to the open space of the Peninsula Watershed Lands, Pulgas Ridge Open Space Preserve, Hetch-Hetchy Aqueduct Corridor and Edgewood Park. It is possible that development described under the Draft 2030 General Plan would impede migration and affect those species.

Application of Policy EM-1.1 of the Environmental Management Element would ensure that potential impacts to biological resources are carefully evaluated prior to approval of development projects. Application of Policy EM-1.2 of the Environmental Management Element would ensure that development is consistent with all federal, State and regional regulations for habitat and species protection. Adherence to these two policies should ensure that impacts due to the interference with migration of fish and wildlife are *less than significant*.

e. Conflict with any Local Policies or Ordinances Protecting Biological Resources

Policies described in the Draft 2030 General Plan form a coherent set and are not contradictory and also work in conjunction with the policies of other local entities, such as San Mateo County. Application of Policy EM-1.2 of the Environmental Management Element would ensure that development is consistent with all federal, State and regional regulations for habitat and species protection. Adherence to this policy should ensure that there is *no impact* from conflict with local policies or ordinances protected biological resources.

f. Habitat Conservation Plan or Natural Community Conservation Plan

The Master Plan for Edgewood Park and Natural Reserve, adopted in 1997, designates sensitive habitats in the park as natural preserves. The County Park abuts the southern tip of San Carlos. The site in this area currently vacant is to be designated as open space under the Draft 2030 General Plan.

There would therefore be *no impact* to the Master Plan for Edgewood Park and Natural Reserve.

2. Climate Action Plan Impacts

The CAP does not include goals or policies that would affect riparian corridors, sensitive and natural communities and species, and federally-protected wetlands. The Plan does not directly affect land use decisions, but instead focuses on human activity within the built urban environment. The Plan also would not conflict with any applicable local habitat plans or policies as there are no such plans in the city. Therefore, the proposed CAP would have *no impact* to biological resources in San Carlos.

3. Cumulative Impacts

Development associated with implementation of the Draft 2030 General Plan would not significantly contribute to the ongoing loss of natural lands in San Mateo County. Proposed development under the Draft 2030 General Plan would be predominantly within urbanized areas and established neighborhoods. As described in this section, there is very little biological diversity remaining in San Carlos, and it is located predominantly in the park and open space areas, and in Devonshire Canyon. The Draft 2030 General Plan would continue to preserve the park and open space areas, and would not specifically regulate the land use in Devonshire Canyon. Policies in the Draft 2030 General Plan would be sufficient to protect the remaining biological resources in the other parts of the city. Therefore, implementation of the Draft 2030 General Plan would cumulatively have a *less-than-significant* impact on biological resources in the region.

The CAP would cumulatively have *no impact* to biological resources in San Carlos.

E. Impact and Mitigation Measures

Since implementation of the Draft 2030 General Plan would result in *less-than-significant* project-level impacts to biological resources, no mitigation measures are required.

CITY OF SAN CARLOS
DRAFT 2030 GENERAL PLAN
BIOLOGICAL RESOURCES