5. Biology

5.1 OVERVIEW

This chapter describes the existing conditions in the Southwest Fresno Specific Plan Area related to biological resources, and evaluates the potential impacts to biological resources and regulated habitats. Specifically, this chapter:

- Summarizes the environmental laws and regulations that apply to the Plan Area.
- Outlines the methods by which habitats and other biological resources in the Plan Area were identified.
- Describes the Plan Area's habitats, including those that may fall under the jurisdiction of resource agencies, as well as the Plan Area's potential to support special-status species.

5.2 REGULATORY SETTING

5.2.1 FEDERAL REGULATIONS

FEDERAL ENDANGERED SPECIES ACT

Federal Endangered Species Act (ESA) provisions protect species federally listed as threatened or endangered and their habitats from unlawful take and ensure that federal actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Under the ESA, take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or...attempt to engage in any of the specifically enumerated conduct." The U.S. Fish and Wildlife Service's (USFWS) regulations define *harm* as "an act which actually kills or injures wildlife." Such an act "may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 Code of Federal Regulations Section 17.3).

Critical habitat is defined in Section 3(5)(A) of the ESA as:

"(i) the specific areas within the geographical area occupied by the species on which are found those physical or biological features (I) essential to the conservation of the species, and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species upon a determination by the Secretary of Commerce or the Secretary of the Interior (Secretary) that such areas are essential for the conservation of the species."

The effects analyses for designated critical habitat must consider the role of the critical habitat in both the continued survival and the eventual recovery (i.e., the conservation) of the species in question, consistent

with the recent Ninth Circuit judicial opinion, *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*. Activities that may result in take of individuals are regulated by USFWS.

Candidate species, species currently under review for legal protection, are not covered under the ESA. However, candidate species typically receive special attention from federal and state agencies during the environmental review process. USFWS released an updated list of candidate species on December 5, 2014 (79 *Federal Register* 72450).

MIGRATORY BIRD TREATY ACT

Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and State regulations. The federal Migratory Bird Treaty Act (MBTA) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary. This act encompasses whole birds, parts of birds, and bird nests and eggs.

5.2.2 STATE REGULATIONS AND AUTHORITIES

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) requires State and local agencies to document the environmental implications of their actions and to refrain from approving projects with significant environmental effects if feasible alternatives or mitigation measures that could substantially lessen or avoid those effects are available. It requires the full disclosure of a project's environmental effects on resources such as air quality, water quality, cultural resources, and biological resources, and it requires development of feasible mitigation measures to protect these resources when impacts would be significant. The City of Fresno, as the lead agency of the Southwest Fresno Specific Plan project, is responsible for complying with CEQA.

CALIFORNIA ENDANGERED SPECIES ACT

Provisions of the California Endangered Species Act (CESA) protect species that are listed by the State as threatened or endangered. CESA prohibits the "take" of any plant or wildlife listed or proposed for listing as rare (plants only), threatened, or endangered.¹ Take is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill..." In accordance with CESA, the California Department of Fish and Wildlife (CDFW) has jurisdiction over State-listed species. CDFW regulates activities that may result in take of individuals listed under the act. Habitat degradation or modification is not expressly included in the definition of take under the California Fish and Game Code. CDFW, however, has interpreted take to include the "killing of a member of a species which is the proximate result of habitat modification."

An incidental take permit (ITP) is the mechanism CDFW uses to transmit protective requirements for a project affecting State-listed species. The impacts of the authorized take must be minimized or fully mitigated, and adequate funding must be provided to implement the mitigation measures and to monitor compliance with the measures and their effectiveness. The issuance of the ITP must not jeopardize the

¹ California Endangered Species Act (CESA). *California Fish and Game Code,* Chapter 1.5, Sections 2050–2116.

continued existence of a State-listed species. A 2081 ITP may not authorize take of "fully protected" species and "specified birds." If a project is planned in an area where a fully protected species or a specified bird is found, the project applicant must design the project to avoid all take of these species. A permit for take of a fully protected species, however, may be issued through the natural community conservation plan (NCCP) process. (See the discussion of NCCPs in the "California Fully Protected Species" section below.)

CALIFORNIA DEPARTMENT OF FISH AND GAME CODE

In addition to federally listed and State-listed species, the California Fish and Game Code contains protections for groups or taxa of wildlife.

Birds, Nests, Eggs, and Young

Section 3503 of the California Fish and Game Code makes it unlawful to take, possess, or needlessly destroy the nests or eggs of any bird. Birds of prey are protected in California under Fish and Game Code Section 3503 but receive special mention in Section 3503.5, which states that it is "unlawful to take, possess, or destroy any birds in orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered take by CDFW. Under Sections 3503 and 3503.5 of the California Fish and Game Code, activities that would result in the taking, possessing, or destroying of any birds of prey, the taking or possessing of any migratory nongame bird as designated in the Migratory Bird Treaty Act (MBTA), the taking, possessing, or needless destroying of the nest or eggs of any raptors or nongame birds protected by the MBTA, or the taking of any nongame bird under California Fish and Game Code.

Nongame Mammals

Section 4150 of the California Fish and Game Code provides protection for nongame mammals, such as bats. In each case, CDFW may issue permits authorizing limited take of otherwise protected species.

California Fully Protected Species

In the 1960s, before implementation of CESA, the State of California developed a list of species that were rare or faced possible extinction and afforded them special protection as "fully protected species" in Sections 3511 [birds], 4700 [mammals], 5050 [reptiles and amphibians], 5515 [fish] of California Fish and Game Code. Such species may not be taken or possessed at any time, and no licenses may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. An NCCP can be used to obtain an ITP for State-listed species, including those designated as fully protected. An NCCP identifies and provides for regional or area wide protection of plants, wildlife, and their habitats, in perpetuity, while allowing compatible and appropriate economic activity. It must present the results of independent scientific analysis, include independent input, and identify foundational principles for landscape and habitat conservation, species protection, and adaptive management.

Species of Special Concern

As part of its role in general biological resource protection, CDFW has produced a list of species of special concern to serve as a "watch list." Species on this list have such a limited distribution or the extent of their habitats has been reduced so substantially that threats to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have statutory protection.

CALIFORNIA WATER CODE AND PORTER-COLOGNE WATER QUALITY CONTROL ACT

All wastewater discharges in the state, whether to land or water (including groundwater), are subject to regulation under the California Water Code and Porter-Cologne Water Quality Control Act through issuance of waste discharge requirements by the regional water quality control board (RWQCB).

CALIFORNIA RARE PLANT PROGRAM

The mission of the California Native Plant Society's (CNPS's) Rare Plant Program is to develop current, accurate information on the distribution, ecology, and conservation status of California's rare and endangered plants and to use this information to promote science-based plant conservation in California. After a species has been identified as being of potential conservation concern, it is put through an extensive review process. Following the review process, information on all aspects of the species (e.g., listing status, habitat, distribution, and threats) is entered into CNPS's online Inventory of Rare, Threatened, and Endangered Plants of California.

5.2.3 LOCAL REGULATIONS AND PLANS

FRESNO COUNTY GENERAL PLAN

The Fresno County Board of Supervisors adopted the Fresno County General Plan in October 2000. This plan is the main policy document for the county that directs issues involving economic development, agriculture and land use, transportation, public facilities and services, open space and conservation, health and safety, housing, and other policy decision-making tasks.² The Open Space and Conservation Element in the General Plan focuses on protecting and preserving natural resources, preserving open space areas, management and production of commodity resources, protecting and enhancing cultural resources, and providing recreational opportunities. The Board of Supervisors defines four sections under Natural Resources: Wetland and Riparian Areas; Fish and Wildlife Habitat; Vegetation; and Air Quality. There are 53 policy guidance measures that are the result of the following goals: conserving the function and values of wetland communities and related riparian areas while allowing compatible uses where appropriate (Goal OS-D); protecting, restoring, and enhancing habitats that support fish and wildlife species so that populations are maintained at viable levels (Goal OS-E); preserving and protecting valuable vegetation resources (Goal OS-F); improving air quality and minimizing adverse effects of air pollution (Goal OS-G).

² City of Fresno, 2000. *Fresno General Plan*. http://www.fresno.gov/NR/rdonlyres/34DF414A-15FB-4C92-9CE7-3CD69A7A5451/0/GPFinalEntireDocumentJan202015.pdf, accessed June 11, 2015.

5.2.4 REGULATED HABITATS OVERVIEW

U.S. ARMY CORPS OF ENGINEERS JURISDICTION

Areas meeting the regulatory definition of *waters of the United States* (jurisdictional waters) are subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) under provisions of Section 404 of the Clean Water Act (1972) and Section 10 of the Rivers and Harbors Act (1899). These waters may include all waters used, or potentially used, for interstate commerce, including all waters subject to the ebb and flow of the tide, all interstate waters, all other waters (e.g., intrastate lakes, rivers, streams, mudflats, sandflats, playa lakes, natural ponds), all impoundments of waters of the United States," the territorial seas, and wetlands (termed *special aquatic sites*) adjacent to "waters of the United States" (33 Code of Federal Regulations Part 328.3). Wetlands on nonagricultural lands are identified using the *Corps of Engineers Wetlands Delineation Manual*.³ Construction activities in jurisdictional waters are regulated by USACE. The placement of fill into such waters must comply with the permit requirements of USACE.

REGIONAL WATER QUALITY CONTROL BOARD AUTHORITY

No USACE permit would be effective without State water quality certification under Section 401 of the Clean Water Act. The RWQCBs are charged with implementing water quality certification in California. They are the State's primary water quality regulatory agencies. Their duties include regulating wetlands and riparian areas, which are critical to the protection and enhancement of water quality throughout California's watersheds. Specifically, the RWQCBs are tasked with protecting the waters of the state under the Porter-Cologne Water Quality Control Act. Waters of the state are defined as "all surface water or groundwater, including saline waters, within the boundaries of the State" of California (CA Water Code Section 13050(e)). The RWQCBs' responsibility for protecting waters of the state is further necessitated by statewide policies, including the Wetlands Conservation Policy (Executive Order W-59-93), also known as the State's "no net loss" policy for wetlands.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION

California Fish and Game Code Section 1602 requires that CDFW be notified of any proposed activity that may substantially modify a river, stream, or lake. CDFW potentially extends the definition of *stream* to include "intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams (USGS [topographical maps]), and watercourses with subsurface flows. Canals, aqueducts, irrigation ditches, and other means of water conveyance can also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife."⁴ Activities that would result in the diversion or obstruction of the natural flow of a stream; substantially change its bed, channel, or bank; or use any materials (including vegetation) from the streambed typically require that the project proponent enter into a streambed alteration agreement with CDFW.

³ United States Army Corps of Engineers (USACE), Environmental Laboratory, 1987. *Corps of Engineers Wetlands Delineation Manual*. Vicksburg, Massachusetts.

⁴ California Department of Fish and Game (CDFG), 1994. *A Field Guide to Lake and Streambed Alteration Agreements,* Sections 1600–1607. Environmental Services Division.

5.3 **EXISTING CONDITIONS**

5.3.1 SPECIAL-STATUS SPECIES

Figure 5.1 shows all current CNDDB records within the Southwest Fresno Specific Plan Area plus a 5-mile radius buffer around the Plan Area. It includes a preliminary analysis of the records documented by the California Natural Diversity Database⁵ within a 5-mile radius of the Plan Area indicates that some special-status species have the potential to occur within the Plan Area.

5.3.2 WETLANDS AND WATERS

Figure 5.2 illustrates known features that may be jurisdictional. Two sets of data were utilized for this figure: the National Wetlands Inventory (NWI) (http://www.fws.gov/wetlands/) and National Hydrography Dataset (NHD) (http://nhd.usgs.gov/). The NHD represents natural and constructed surface water bodies. The NWI is an effort to identify and classify wetlands and deepwater habitats from aerial imagery. These data will be incorporated into the analysis and will help focus the survey effort. It is important to note that some of the areas identified in the datasets may no longer be wetlands, and that some wetlands may not have been identified by the mapping efforts.

⁵ California Natural Diversity Database (CNDDB), 2015. *Rarefind*. California Department of Fish and Game, Sacramento.

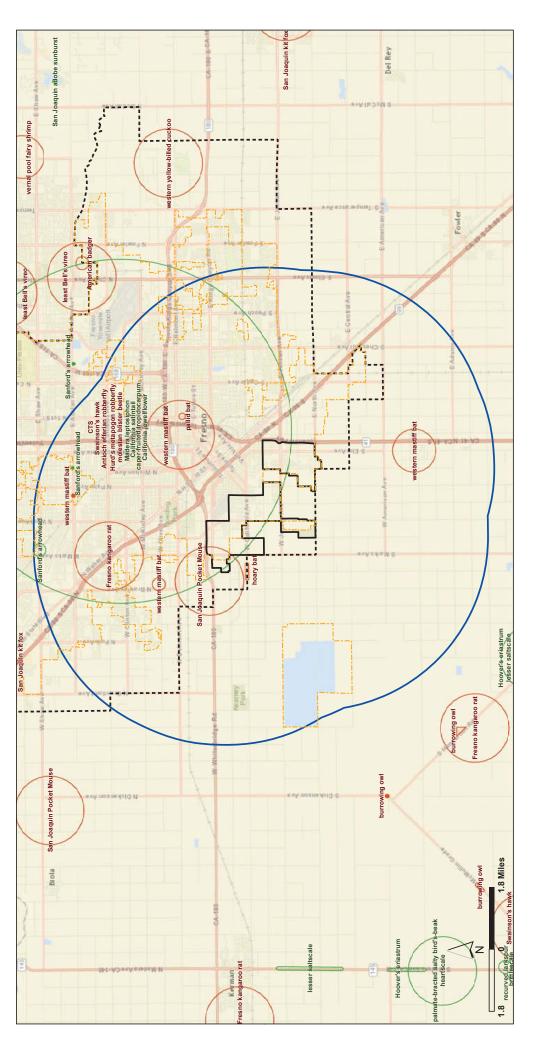
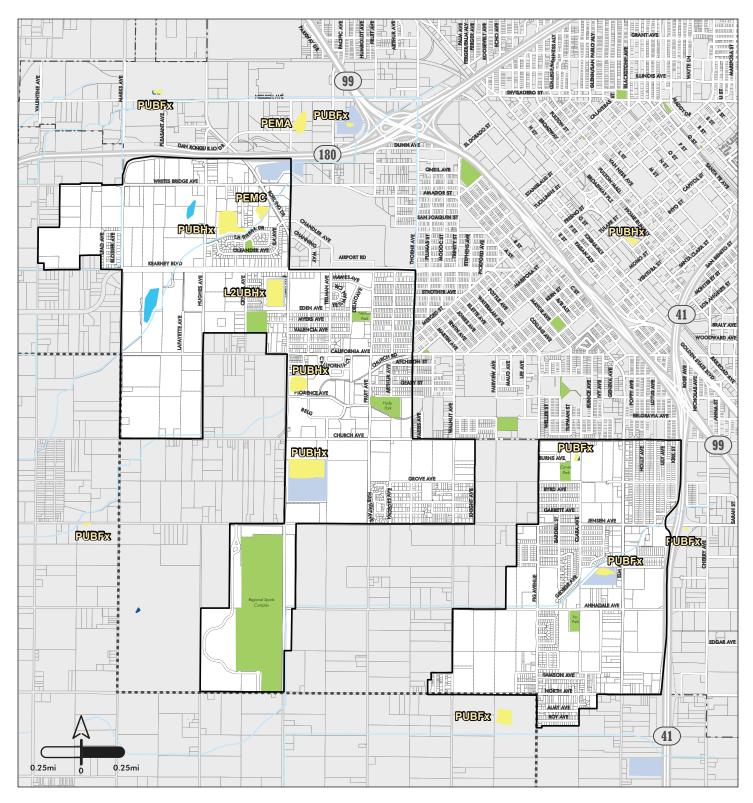


Figure 5.1 CNDDB Potential Special-Status Species





Potential Jurisdictional Habitats Map Figure 5.2

-- City Limit

- •• Sphere of Influence
 - Plan Area
 - Park/Open Space
- National Hydrography Dataset (NHD) Intermittent Lake/Pond
 - Perennial Lake/Pond
 - Reservoir
 - Canal/Ditch

National Wetlands Inventory (NWI)

- Lacustrine, Littoral, Unconsolidated Bottom, Permanently Flooded, Excavated L2UBHx
- - PEMA Palustrine, Emergent, Temporarily Flooded
 - PEMC Palustrine, Emergent, Seasonally Flooded
 - Palustrine, Unconsolidated Bottom, Semipermanently Flooded, Excavated PUBFx
 - Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated PUBHx