

## 3.5 Biological Resources

This section describes the regulatory and environmental setting for biological resources. It also describes impacts on biological resources that would result from implementation of the *Climate Action 2020: Community Climate Action Plan (CAP)* and includes mitigation for significant impacts, where feasible and appropriate.

### 3.5.1 Environmental Setting

The environmental setting for biological resources has been modified from the *Sonoma County General Plan 2020, Draft Environmental Impact Report* (Sonoma County 2006).

Sonoma County encompasses over one million acres of diverse landscape, ranging from the marine environments of the coastal zone, to the forests, woodlands, and grasslands of the coast range foothills and mountains; the vernal pools, seasonal wetlands, and freshwater marshes of the Santa Rosa Plain and Laguna de Santa Rosa; and the extensive marshlands along San Pablo Bay. Urban development occupies much of the valley floors through the central portion of the County along U.S. 101 and State Routes 116 and 12, with cities separated and generally surrounded by grazing lands and agricultural uses, primarily vineyards, dryland crops, and irrigated pasture.

The remaining natural communities in Sonoma County support a wide diversity of plant and animal species, including a high number of special-status species and sensitive natural communities. Natural community types in the County include mixed evergreen forests, oak woodlands and savanna, native and nonnative grasslands, coastal beach dune, coastal bluff, northern coastal scrub, chaparral, coastal salt marsh, brackish marsh, freshwater marsh, and riparian scrub and woodland. Major distinguishable characteristics in Sonoma County include: the mosaic of forest, woodland, grassland, and chaparral in the northwest and in the Mayacamas and Sonoma mountains to the northeast and east, the extensive agricultural and urban development on the valley floors, and the grasslands across the southwestern portion of the County.

Historic land use has altered much of the landscape in the County, including the plant communities and wildlife dependent on them. Beginning in the mid-nineteenth century and continuing into the present, activities such as livestock grazing, timber operations, clearing and disking for agricultural production, road building, and urban and suburban development have markedly altered the remaining natural communities. Native perennial grasslands have been largely replaced by nonnative annual grasslands, and a number of highly invasive species now threaten the remaining grasslands. Most of the conifer forests have been logged extensively in the past, with only a few scattered stands of old growth redwood remaining in the Russian River and Gualala River watersheds. Fire suppression, livestock grazing, timber harvest, vineyard conversion, and more recently the effects of Sudden Oak Death have greatly altered the extent of woodland and forest cover. Grazing and clearing for firewood and agricultural production have reduced the extent of oak woodland and savanna and continue to affect oak regeneration, particularly on the valley floors and lower foothills where development pressures continue today as croplands are converted to urban and suburban uses. The past effects of poorly managed timber harvesting, gravel mining, and livestock overgrazing continue to influence the aquatic habitat of the rivers and streams in the County, and limit the viability of the anadromous fisheries. Urban and suburban development, freeway and highway widening projects, vineyard expansion, and use of exclusionary fencing to

protect crops have all contributed to considerable fragmentation of the remaining natural areas in the County. Although past influences have greatly altered the natural landscape, Sonoma County contains considerable land area that remains undeveloped or is used for grazing and timber production, which continues to provide important habitat for native plants and animals. These remaining undeveloped lands serve as core areas for habitat biodiversity, and maintenance of connectivity between these areas is essential for their sustainability. The scattered permanently protected open space; the remaining undeveloped, agricultural, and timber production lands; and the network of riparian corridors throughout the County serve as a foundation for protecting and restoring the values and functions of the natural environment.

### 3.5.1.1 Special-Status Species

The primary information source on the distribution of special-status species in California is the California Natural Diversity Database (CNDDDB) inventory, which is maintained by the Wildlife and Habitat Data Analysis Branch of the California Department of Fish and Wildlife (CDFW). The CNDDDB inventory provides the most comprehensive state-wide information on the location and distribution of special-status species and sensitive natural communities. The occurrence of a species of concern in a particular region is an indication that an additional population may occur at another location if habitat conditions are suitable. However, the absence of an occurrence in a particular location does not necessarily mean that special-status species are absent from the area in question, only that no data has been entered into the CNDDDB inventory. Detailed field surveys are generally required to provide a conclusive determination on presence or absence of sensitive resources from a particular location where there is evidence of potential occurrence. The records of the CNDDDB indicate that special-status plant and animal species occur in a wide range of habitat types throughout Sonoma County. Approximately 42 animal species and 86 plant species have been reported in Sonoma County in the CNDDDB.

It should be noted that the occurrence records of the CNDDDB tend to focus on listed species or those with a high inventory priority. Occurrence information for numerous special-status species known to occur in Sonoma County is either not monitored at all, or is recorded on only a sporadic basis by the CNDDDB. This includes the possible seasonal occurrence of some bird species, the limited status of some animal species as a California Special Concern (CSC) species by the CDFW, and the limited status of many plant species on Lists 2, 3, or 4 of the California Native Plant Society Inventory (CNPS).

The U.S. Fish and Wildlife Service (USFWS) also maintains information on special-status species as part of their project review and consultation responsibilities, and will prepare lists of known or suspected species from a particular county or U.S. Geological Survey (USGS) quadrangle. A request for special-status species known or suspected to occur in Sonoma County generated a list of 46 species that are threatened or endangered. A number of marine wildlife species not in the CNDDDB inventory are also included in the USFWS list. Appendix D, *USFWS Species List*, provides the official list of threatened and endangered species in the County.

For many of the special-status species known to occur in Sonoma County, habitat suitability is severely limited by the direct and indirect effects of development. These include the direct loss of habitat as a result of conversion to urban uses, effects of ongoing habitat modifications due to vegetation management and agricultural practices, and indirect effects such as non-point discharge into aquatic habitat and recreational activities on open space lands. Habitat fragmentation is an important consideration in evaluating the recovery of listed species and the viability of natural

communities as a whole. Identification and protection of essential habitat for special-status species must be recognized during the environmental review of proposed development applications and in planning future open space acquisitions. Detailed surveys may be needed for sites where there is a potential for occurrence of special-status plant and animal species.

A number of special-status species reported from Sonoma County are wide-ranging and are the focus of management efforts by trustee agencies. Species of particular concern include: California tiger salamander, California red-legged frog, coho salmon, steelhead trout, Chinook salmon, northern spotted owl, and numerous plant species associated with vernal pool habitat. The following provides a summary of relevant management issues for each of these species.

### **Coho Salmon, Steelhead Trout, and Chinook Salmon**

Central California Coast coho salmon is listed as endangered under the federal Endangered Species Act (ESA) and is state listed as endangered by CDFW, and Central California Coast steelhead trout is listed as threatened under the federal ESA. California Coastal chinook salmon is also listed as threatened under the federal ESA. All are anadromous, spawning in coastal streams and rivers and then migrating to and maturing in the ocean. Timber harvest activities, overgrazing, gravel mining operations, channel modifications and removal of riparian vegetation, flood control facilities, hydroelectric facilities, and secondary water quality degradation have all contributed to a decline of these species. Coho and steelhead are native species of the County, which is part of the Central California Coast Evolutionarily Significant Unit (ESU) defined as part of species listings. It is uncertain whether Chinook salmon is a native species of the County, although the Russian River is part of the California Coastal ESU for the species listing.

### **California Tiger Salamander**

The Sonoma County population of California tiger salamander is listed as endangered by the USFWS and is state listed as threatened by CDFW. California tiger salamander occurs in grassland and savanna habitat, breeding in vernal pools and swales, seasonal drainages, and human-made ponds, and spending most of the year in subterranean refugia such as rodent burrows, cracks, and under rocks and logs. Adults migrate to suitable breeding locations with the onset of sustained rainfall, and have been reported to move considerable distances. Most of the occurrences of this subspecies in Sonoma County are from the complex of vernal pools and drainages of the Santa Rosa Plain along the Laguna de Santa Rosa watershed, generally between Sebastopol, Santa Rosa, and Cotati, although a recent population has been found in the Roblar Valley. Extensive habitat conversion and fragmentation of breeding habitat has eliminated this species from much of its former range, and is considered a serious threat to the Sonoma County population. The USFWS has joined with other responsible agencies, the County, cities, and interest groups in developing a California tiger salamander conservation strategy (the Santa Rosa Plain Conservation Strategy) aimed at preservation of the species. The USFWS and CDFW have mapped critical habitat for the species in the County and have also created maps pursuant to the conservation strategy.

### **California Red-Legged Frog**

This species is listed as threatened by the USFWS and is recognized as a CSC by the CDFW. It typically occurs in aquatic habitat of streams and ponds, but can disperse considerable distances in search of breeding and aestivation sites. Scattered occurrences of California red-legged frog are known from the west Petaluma and south Cotati vicinity, the Salmon Creek watershed, and the

Sonoma Valley. Three areas were identified as part of the critical habitat for this species as mapped by the USFWS (U.S. Fish and Wildlife Service 2010). In Sonoma County, the previously mapped critical habitat consisted of the areas surrounding Laguna Lake west of Petaluma, the grasslands east of Petaluma Marsh, and part of the Sonoma Mountains. Continued loss of upland dispersal habitat, fragmentation of remaining breeding locations, competition and predation by bullfrog, and degradation of aquatic habitat are primary concerns regarding protection and recovery of this species.

### **Northern Spotted Owl**

The USFWS listed the northern spotted owl as a threatened species in 1990, and it is recognized as a CSC by the CDFW. The southern limit of their range extends across the coastal and inland forests and woodlands of Sonoma County southward into Marin County. Occurrences of this species extend along the entire coast of the County, the Mayacamas Mountains, and Sonoma Mountain. Ongoing studies have been conducted to monitor population health and further define essential habitat. The southern population of spotted owl is subject to several threats, including habitat loss and disturbance due to timber harvest, agricultural conversion, development at the fringe of existing forest and woodland habitat, hazardous fuel management, potentially catastrophic wildfires along the urban/wildland interface, and continued range expansion of the barred owl. Of particular concern is the continuing die-off of tanbark and coast live oaks throughout spotted owl habitat due to Sudden Oak Death, and the long-term impacts this may have on prey populations and owl nesting and foraging habitat.

### **Special-Status Plant Species**

Several plant species with special-status are known to occur in the seasonal wetland habitats of the Santa Rosa Plain. Four of them, Sonoma sunshine, Burke's goldfields, Sebastopol meadowfoam, and many-flowered navarretia, are federally and state-listed as endangered. Several others are believed to have been extirpated from the Santa Rosa Plain or have no legal protective status under the ESA but are CNPS list species associated with seasonal wetlands and uplands. These include dwarf downingia, Baker's navarretia, Gairdner's yampah, hayfield tarplant, the state-listed rare North Coast semaphore grass, the state- and federally listed endangered white sedge, the federally listed endangered Sonoma alopecurus, and the federally listed showy Indian clover.

Many other rare plants occur on the wide range of habitats throughout the County. Native habitats found within the County that tend to have the highest degree of rare plant species, other than the seasonal wetlands/vernal pool habitats, include serpentine habitat, coastal scrub, and chaparral. Serpentine habitat, for example, is distinct because of its unique soil chemical and physical characteristics, and thus is host to a high number of rare plants in Sonoma County. These species include ceanothus species (*Ceanothus divergens*, *Ceanothus confuses*, *Ceanothus sonnomensis*), dwarf soaproot (*Cholorgalum pomeridianum* var. *minus*), Franciscan onion (*Allium peninsulare* var. *franciscanum*), daisies (*Erigeron angustatus*, *Erigeron serpentinus*), buckwheat (*Eriogonum nervulosum*), fragrant fritillary (*Fritillaria lilaceae*), two-carpellate flax (*Hesperolinon bicarpellatum*), Crystal spring lessingia (*Lessingia arachnoidea*), and jewelflower species (*Streptanthus brachiatus* ssp. *hoffmani*, *Streptanthus brachiatus* ssp. *brachiatus*, *Streptanthus brachiatus* ssp. *brachiatus*).

Coastal scrub and chaparral are also unique natural landscapes associated with many rare plants such as: Mendocino Coast Indian paintbrush (*Castilleja mendocinensis*), San Francisco Bay spineflower (*Chorizanthe cuspidate* var. *villosa*), larkspur species (*Delphinium bakeri* and *Delphinium*

*luteum*), manzanita species (*Arctostaphylos bakeri* ssp. *bakeri*, *Arctostaphylos bakeri* ssp. *sublavis*, *Arctostaphylos canescens* ssp. *sonomensis*), thin-lobed horkelia (*Horkelia tenuiloba*), and clovers (*Trifolium amoenum* and *Trifolium buckwestiorum*).

### 3.5.1.2 Sensitive Natural Communities

The CNDDDB maintains records of sensitive natural communities, those considered rare or threatened in the state. Several of the natural communities in the County are considered to have a high priority for mapping and protection with the CNDDDB. These communities have been designated as sensitive due to rarity and continuing loss as a result of human presence and other factors. No comprehensive mapping of sensitive natural community types in the County has been done: currently there are only 34 occurrence records contained in the CNDDDB inventory. Only eight different sensitive natural community types have been mapped by the CNDDDB: coastal and valley freshwater marsh, coastal brackish marsh, coastal terrace prairie, central dune scrub, northern coastal salt marsh, northern vernal pool, and valley needlegrass grassland. Each of these natural community types has been greatly reduced in extent due to a number of human-induced activities such as the filling of marshlands, leveling and conversion of vernal pools for agricultural crops and development, and historical overgrazing and replacement of native grasslands with nonnative species.

### 3.5.1.3 Wetlands

Although definitions vary to some degree, wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife; use as storage areas for storm and flood waters; and water recharge, filtration, and purification functions. Technical standards for delineating wetlands have been developed by the U.S. Army Corps of Engineers (USACE) and the USFWS, which generally define wetlands through consideration of three criteria: hydrology, soils, and vegetation.

Wetlands in the County include areas of salt and brackish water marsh along the shoreline of the coast and bay, riparian habitat along creeks and streams, the vernal pools and swales of the Santa Rosa Plain, and freshwater seeps and springs. Major wetland systems in Sonoma County include the marine and estuarine system of the ocean, bays, and lagoons; the riverine and lacustrine systems of major creeks and channels; and the palustrine system composed of freshwater marsh, riparian scrub and woodland, and scattered stock ponds.

The wetlands associated with the Santa Rosa Plain are of particular significance because of the complexity of the habitat and the presence of a high number of special-status plant and animal species. The wetlands consist of perennial, intermittent, and seasonal features including: the Laguna de Santa Rosa, Mark West Creek, Santa Rosa Creek, tributary drainages, marshes, permanent ponds, vernal pools, and vernal swales.

### 3.5.1.4 Habitat Connectivity

Sonoma County contains a diverse assemblage of both natural and human-influenced environments: the Mendocino Highlands and Mayacamas Range in the north, bisected by the immensely varied Russian River watershed; the cities and agricultural uses on the valley floors juxtaposed with the

highly sensitive Laguna de Santa Rosa and the remaining vernal pool complex of the Santa Rosa Plain; the Sonoma Creek watershed to the southeast; and the extensive grasslands to the south bordered by the marshlands of San Pablo Bay. The natural areas that remain are increasingly threatened by continued land conversion, declining water quality, habitat destruction, and fragmentation.

Protecting and enhancing habitat connectivity and functional movement corridors between the remaining natural areas is essential to sustaining populations and allowing for the continued dispersal of native plant and animal species. Natural linkages include riparian corridors and drainages, canyons, ridgelines, and corridors across valley floors where impermeable barriers such as dense urban development, exclusionary fencing, and heavily traveled roadways have not yet eliminated options for wildlife movement and plant dispersal. Although narrow corridors may be the only option in some locations due to the extent of existing development, habitat linkages are most effective through maintenance of a permeable landscape (i.e., one that allows for uninhibited movement of species across large areas).

There are nine habitat linkages for the North Coast and Bay Area Ecoregions encompassing the Sonoma County vicinity. Linkages extending into and across Sonoma County include Coastal Wetlands for the Pacific Flyway, Russian River Riparian Corridor, Lake Sonoma-Cooley Ranch, North Sonoma Coast-Lake Sonoma, Mayacamas-Mark West, Sonoma Mountain-Mayacamas Mountains, Sonoma Creek, Sonoma Mountain-Burdell Mountain, and the Bay Wetlands.

## 3.5.2 Regulatory Setting

### 3.5.2.1 Federal

#### Endangered Species Act

The federal ESA (United States Code [USC], Title 42, Section 4321 et seq.) and subsequent amendments provide guidance for conserving federally listed species and the ecosystems upon which they depend. The ESA is administered by the USFWS for terrestrial and freshwater fish species and by the National Marine Fisheries Service (NMFS) for marine and anadromous species. Species can be listed as either endangered or threatened. An endangered species is at risk of extinction throughout all or a significant portion of its range (ESA Section 3[6]). A threatened species is likely to become endangered within the foreseeable future (ESA Section 3[19]).

Section 9 of the ESA prohibits the take of any fish or wildlife species listed under ESA as endangered or threatened. Take, as defined by ESA, 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 or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering” (Code of Federal Regulations [CFR], Title 50, Section 17.3).

Section 9 prohibits the “removal or reduction to possession” of any listed plant species “under federal jurisdiction” (i.e., on federal land, where federal funding is provided, or where federal authorization is required). The ESA includes mechanisms that provide exceptions to the Section 9 take prohibitions. These are addressed in Section 7 for federal actions and Section 10 for nonfederal actions.

Section 7 (Interagency Consultation and Biological Assessments) requires federal agencies to consult with the USFWS or NMFS, as appropriate, to ensure that actions they authorize, fund, or

carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat. Section 10 applies to non-federal actions and allows activities that would potentially take a listed species to proceed only upon issuance of an incidental take permit and associated habitat conservation plan.

## Clean Water Act

### Section 404

The objective of the Clean Water Act (CWA) 1977, as amended, is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Discharge of fill material into waters of the U.S., including wetlands, is regulated by the USACE under Section 404 of the federal CWA (33 USC 1251–1376). USACE regulations implementing Section 404 define waters of the U.S. to include intrastate waters, including lakes, rivers, streams, wetlands, and natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce. Wetlands are defined for regulatory purposes as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3; 40 CFR 230.3). The jurisdictional boundaries for other waters of the U.S. are identified based on the presence of an ordinary high water mark (OHWM) as defined in 33 CFR 328.3(e). The placement of structures in “navigable waters of the U.S.” is also regulated by USACE under Section 10 of the federal Rivers and Harbors Act (33 USC 401 et seq.). Projects are permitted under either individual or general (e.g., nationwide) permits. Specific applicability of permit type is determined by USACE on a case-by-case basis.

In 1987, USACE published a manual that standardized the manner in which wetlands were to be delineated nationwide. To determine whether areas that appear to be wetlands are subject to USACE jurisdiction (jurisdictional wetlands), a wetland delineation must be performed. Under normal circumstances, positive indicators from three parameters—(1) wetland hydrology, (2) hydrophytic vegetation, and (3) hydric soils—must be present to classify a feature as a jurisdictional wetland. More recently, USACE developed the *Arid West Regional Supplement* (U.S. Army Corps of Engineers 2008) for identifying wetlands and distinguishing them from aquatic habitats and other non-wetlands. The supplement presents wetland indicators, delineation guidance, and other information that is specific to the Arid West Region. For any wetland delineations submitted after June 5, 2007, USACE is requiring that the site be surveyed according to both the 1987 manual and the supplement guidelines. In addition to verifying wetlands for potential jurisdiction, USACE is responsible for the issuance of permits for projects that propose filling of wetlands. Any permanent loss of a jurisdictional wetland as a result of project construction activities is considered a significant impact.

A “no net loss” wetlands policy is an overall policy goal for wetland protection first adopted by the George H. W. Bush Administration (1989–1993) and endorsed and updated by the Clinton Administration (1993–2001).

### Section 401

Section 401 of the CWA requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards. The appropriate Regional Water Quality Control Board regulates Section 401 requirements.

## **Migratory Bird Treaty Act and Executive Order 13186**

The Migratory Bird Treaty Act (16 USC 702–712) (MBTA) protects selected species of birds that cross international boundaries (i.e., species that occur in more than one country at some point during their annual life cycle). The law applies to the removal of active nests, eggs, and feathers.

Executive Order 13186 directs each federal agency taking actions that have or may have adverse impacts on migratory bird populations to work with USFWS to develop a memorandum of understanding that will promote the conservation of migratory bird populations.

### **3.5.2.2 State**

#### **California Endangered Species Act**

The California Endangered Species Act (CESA) mandates that state agencies not approve a project that would jeopardize the continued existence of listed or candidate species if reasonable and prudent alternatives are available that would avoid a jeopardy finding. The CDFW may allow the limited take of such species upon issuance of an incidental take permit under Section 2081. Take is defined under the California Fish and Game Code (more narrowly than under ESA) as any action or attempt to “hunt, pursue, catch, capture, or kill.” Therefore, take under CESA does not include “the taking of habitat alone or the impacts of the taking.”<sup>1</sup> Rather, the courts have affirmed that under CESA, “taking involves mortality.”

#### **California Fish and Game Code**

##### **Section 1600 et seq. (Lake and Streambed Alteration)**

Section 1600 et seq. requires notifying CDFW prior to any project activity undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. CDFW will issue a Lake and Streambed Alteration Agreement that conditionally allows work within the bed and bank of the lake or stream.

##### **Section 3503 (Bird Nests and Birds of Prey)**

Section 3503 states that it is “unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the code or any regulation made pursuant thereto.” Section 3503.5 specifically addresses birds in the orders Falconiformes (hawks, eagles, and falcons) and Strigiformes (owls), collectively referred to as “birds-of-prey.” Under this subsection, both the nests and individual birds-of-prey may not be taken, possessed, or destroyed at any time.

##### **Sections 3511, 4700, 5050, and 5515 (Fully Protected Species)**

Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) identify 37 fully protected species that may not be taken or possessed at any time, and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of bird species for the protection of livestock, or as part of an approved natural community conservation plan (NCCP). The fully protected classification was the state’s initial effort in the 1960s to identify and provide additional protection to those animals that were rare or faced

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<sup>1</sup> *Environmental Council of Sacramento v. City of Sacramento*, 142 Cal. App. 4th 1018 (2006).

possible extinction. Most fully protected species have also been listed as threatened or endangered under the more recent endangered species laws.

### **California Native Plant Protection Act**

The California Native Plant Protection Act (Sections 1900–1913) requires all state agencies to use their authority to carry out programs to conserve endangered and rare native plants. It gives CDFW the power to designate native plants as endangered or rare and to protect endangered and rare plants from take.

#### **3.5.2.3 Local**

Appendix C, *Local General Plan Goals, Objectives, and Policies*, provides a list of the goals, objectives, and policies in the local general plans of the participating jurisdictions, including those related to biological resources. These goals, objectives, and policies were reviewed to assess whether the Project is consistent with the general plans of participating jurisdictions. Disclosure of this consistency analysis is for informational purposes. An additional purpose of providing a list of relative local policies is, where appropriate, to provide the context within which the CAP will be locally implemented. As described in the CAP, most of the CAP measures represent implementation of many of the priorities outlined in existing local policies.

Inconsistencies with general plan policies are not necessarily considered a significance impact under CEQA unless it is related to a physical impact on the environment that is significant in its own right.

Implementation of the CAP is consistent with the applicable general plan goals, objectives, and policies of the participating jurisdictions in relation to biological resources.

### **3.5.3 Impacts Analysis**

#### **3.5.3.1 Methodology**

The analysis of biological resources presented in this section is based on a review of the project description and available literature from federal, state, and local agencies, with emphasis on the potential for activities that could occur during implementation of the CAP to result in physical effects on the resources present.

#### **3.5.3.2 Significance Criteria**

The State CEQA Guidelines Appendix G (California Code of Regulations [CCR], Title 14, Section 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing biological resources.

An impact would be considered significant if construction or operation of the project would have any of the following consequences.

- 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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on federally or state protected wetlands or waters (including, but not limited to creeks, rivers, marshes, vernal pools, coastal wetlands, 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 a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

### 3.5.3.3 Impacts and Mitigation Measures

#### **Impact BIO-1: Implementation of the CAP could impact sensitive and special-status species and their associated habitat or migratory corridors (less than significant with mitigation).**

The CAP is a policy-level document that does not include any site-specific designs or proposals, or grant any entitlements for development that would have the potential to impact sensitive and special-status species and their associated habitat or migratory corridors. As a policy document, the CAP would have no direct impact, but future implementation of activities supported by the CAP could impact special-status species or their habitat.

Retrofits of existing buildings and placement of solar installations on rooftops and in parking lots would be within existing developed areas and would have limited to no effect on special-status species or their habitat, except in the case of tree removal where the trees contain nests for special-status migratory bird species.

The CAP also promotes the construction of mixed-use and transit-oriented development in city centers. Infill mixed-use and transit-oriented development in city centers would be located in urban areas and would not likely substantially impact special-status species and their habitats. Furthermore, as noted previously, the CAP would not change local land use policy as the local land use plans already call for mixed use and transit-oriented development, and thus any associated biological resource impacts would not represent new impacts above the approved land use plans.

The CAP also promotes solid waste facilities to increase waste diversion, reuse of materials, and recycling. Although the siting and location of the solid waste facilities are unknown, there is presently no basis to conclude that there will be impacts on sensitive and special-status species and their habitat associated with these facilities.

The CAP also promotes certain transportation improvements, such as bicycles and pedestrian facilities, minor transit support facilities, and electric vehicle charging stations. Several CAP measures also promote the extension of recycled water lines. In most cases, such facilities would have limited to no impact on biological resources as they are often located along, under, or as part of existing roadways. Where such facilities are not located as part of existing roadways, it is possible that they may affect extant areas providing habitat for special-status species.

New facilities promoted by the CAP that are proposed on land containing biological resources would be required to provide independent CEQA review and need to determine whether there is potential habitat on site for sensitive species. If potential habitat were found on site, focused surveys for those sensitive species potentially present would normally be required as part of the CEQA review process. If listed species were found, the project proponent would be required to consult with the CDFW and/or USFWS regarding impacts on sensitive species and ensuing mitigation. Mitigation for unavoidable impacts on sensitive species is often in the form of acquisition or restoration of habitat, on- or off site, at a ratio to the area of impacted land that would be determined by the CDFW or USFWS.

Construction impacts are outside of the scope of the CAP, and are outside of RCPA's jurisdiction to address. Nonetheless, there is no reason to anticipate future significant impacts on biological resources, as these impacts can normally be mitigated to less than significant. As required by CEQA, this EIR identifies potential mitigation measures that lead agencies could and should impose in their consideration of particular projects. In order to ensure that potential impacts on special-status species, whether formally protected or not, are addressed, Mitigation Measures BIO-1a, BIO-1b, and BIO-1c (described below) are recommended. After compliance with all local, state, and federal regulatory requirements and with implementation of proposed mitigation, implementation of the proposed CAP would have a less-than-significant impact on special-status species.

**Mitigation Measure BIO-1a: Project-level biological surveys and avoidance, minimizations, and compensation for impacts on CEQA-defined special-status species, sensitive natural communities, state- and federally protected waters/wetlands, and riparian habitat.**

Lead agencies will require that any new project that could potentially impact a CEQA-defined special status species, sensitive natural community, state- or federally protected water/wetland, or riparian habitat conduct a biological resources survey of the site to determine if any areas would have the potential to contain such resources and, if such resources are found in the areas, whether they would be affected by the project. If such resources are found on the site, measures necessary to avoid, minimize, and/or compensate for identified impacts on these resources will be identified in the project-level CEQA review. The lead agency will adopt the feasible measures necessary to reduce impacts on such resources to a less-than-significant level.

**Mitigation Measure BIO-1b: Replacement of removed trees.**

Lead agencies will require that any new project removing trees will replace all trees removed in accordance with the tree preservation policies or ordinances of the jurisdiction in which the improvements are constructed.

**Mitigation Measure BIO-1c: Preconstruction surveys.**

Projects will avoid conducting vegetation removal during the migratory bird nesting season (February 1–August 31), if feasible. If construction activities must commence during the migratory bird nesting season, the project sponsor will retain a qualified wildlife biologist to conduct a survey for nests of migratory birds. Surveys for nesting migratory birds will occur within three (3) days prior to the commencement of ground disturbance and vegetation removal.

If an active nest is discovered, a no-disturbance buffer zone around the nest tree or shrub (or, for ground-nesting species, the nest itself) will be established. The no-disturbance zone will be

marked with flagging or fencing that is easily identified by the construction crew and will not affect the nesting bird or attract predators to the nest location. In general, the minimum buffer zone widths will be as follows: 50 feet (radius) for non-raptor ground-nesting species, 50 feet (radius) for non-raptor shrub- and tree-nesting species, and 300 feet (radius) for raptor species. Buffer widths may be modified based on discussion with the CDFW. Buffers will remain in place as long as the nest is active or young remain in the area and are dependent on the nest. If a burrowing owl nest is identified during preconstruction surveys, no-activity buffers will adhere to the recommendations in the 2012 Department of Fish and Game *Staff Report on Burrowing Owl Mitigation*.

**Impact BIO-2: Implementation of the CAP could impact wetland and riparian habitat in some areas of the County (less than significant with mitigation).**

Implementation of the CAP would not directly result in removal of riparian vegetation or wetlands in the County because the CAP does not confer entitlements for development.

New facilities necessary for CAP implementation could potentially be built in areas that might contain wetland or riparian habitat. A number of regulatory mechanisms address various types of construction-related impacts on wetlands and riparian areas. Disturbance within any water of the U.S. would require a Section 404 permit from the USACE (and disturbance within any water of the state would require a permit under state water quality law), which would place certain requirements for avoidance or replacement of lost water or wetland habitat to ensure no net loss of wetland resources. When a project would alter the natural flow or bed, channel, or bank of any river, stream, or lake, a Section 1602 streambed alteration agreement would need to be obtained from the CDFW. Like the 404 permit, this agreement would be expected to include measures that alleviate impacts on riparian habitats. Preparation and implementation of the stormwater pollution prevention plans for construction required under Section 402 of the CWA would alleviate potential indirect impacts relating to increased erosion, sedimentation, and runoff.

Retrofits of existing buildings and placement of solar installations on rooftops and in parking lots would be within existing developed areas and would have limited to no effect on wetland and riparian habitat. The CAP also promotes the construction of mixed-use and transit-oriented development in city centers. Infill mixed-use and transit-oriented development in city centers would be located in urban areas and would not likely substantially impact wetlands or riparian areas. Furthermore, as noted previously, the CAP would not change local land use policy as the local land use plans already call for mixed-use and transit-oriented development and thus any associated biological resource impacts would not represent new impacts above the approved land use plans.

The CAP also promotes certain transportation improvements such as bicycles and pedestrian facilities, minor transit support facilities, and electric vehicle charging stations. Additionally, the CAP promotes the extension of recycled water lines. In most cases, such facilities would have limited to no impact on wetland or riparian habitat as they are often located along, under, or as part of existing roadways. Where such facilities are not located as part of existing roadways, it is possible that they may affect extant wetland or riparian habitat.

Compliance with local general plan policies and existing regulations, such as Sections 401 and 404 of the CWA (which requires no net loss of wetlands), Section 1601 of the Fish and Game Code, and the state Porter-Cologne Water Quality Control Act, would protect wetlands and riparian resources from direct and indirect impacts and assure no net loss. Furthermore, direct and indirect impacts with the potential to have adverse effects on riparian and/or wetland habitats would be mitigated by avoidance, habitat restoration, or offsite compensation per the requirements of recommended

Mitigation Measures BIO-1a, BIO-1b, and BIO-1c (described above). Therefore, with compliance with federal, state, and local regulations and required mitigation, impacts on wetlands, waters, and riparian habitats would be less than significant.

**Impact BIO-3: Implementation of the CAP could conflict with local policies or ordinances protecting biological resources or the provisions of an adopted habitat conservation plan/natural community conservation plan (less than significant with mitigation).**

Some of the facilities promoted by the CAP may also require tree removal, but local tree ordinance requirements and/or project-level CEQA review (as warranted) would result in mitigation of any tree removals with tree replanting and replacement. Some CAP measures promote solar roofs and solar parking. If these improvements are proposed in areas with overhanging trees that substantially hinder solar access, trees may need to be removed on the property where the solar installation is proposed. Some of these trees may be protected by local tree ordinances. The California Solar Rights Act limits lead agency authority to deny permits for solar roof installations except in cases of public health and safety, which is usually not the case with potential tree removal. However, the act allows for use of feasible methods to satisfactorily mitigate specific adverse effects, which will allow local lead agencies to require mitigation of tree removal through tree replanting/replacement off site but not through complete avoidance of tree removal. Furthermore, solar installations are not eligible for the SB 226 CEQA exemption if they require tree removal subject to federal, state, or local regulations or if they remove a tree more than 25 years old. With imposition of tree replanting/replacement requirements in local tree ordinances and policies and/or CEQA level review (as warranted), including implementation of recommended Mitigation Measure BIO-1b (described above), this impact can be mitigated to a less-than-significant level.

There are no landscape level habitat conservation plans, natural community conservation plans, or other approved conservation plans that have been adopted encompassing all or large portions of Sonoma County. There are certain habitat conservation plans (HCPs) (called Low-Effect HCPs) for individual projects adopted pursuant to Section 10 of the federal ESA; if any CAP-promoted projects were proposed in an area subject to these project-level HCPs, they would be required to comply with the HCP requirements.

The Santa Rosa Plain Conservation Strategy was developed by the USFWS with other responsible agencies, the County, cities, and interest groups to address impacts on California tiger salamander and other listed federal species, but it is not an HCP or NCCP. Rather, it is a guidance document that is used by USFWS in considering individual project applications for projects with impacts on listed federal species on the Santa Rosa Plain. All contributing agencies have agreed to implement the conservation strategy locally. If individual projects supported by the CAP were to have impacts on listed federal species on the Santa Rosa Plain, USFWS would use the strategy in processing any necessary federal endangered species permits.

Given the above analysis, implementation of the CAP would not conflict with any conservation plans or local tree ordinances.

### 3.5.3.4 Cumulative Impacts

**Impact C-BIO-1: Implementation of the CAP, in combination with other foreseeable development in the surrounding area, could have a significant cumulative impact on biological resources (less than considerable contribution with mitigation).**

The cumulative context for the biological resources analysis for the proposed project is Sonoma County. As development in the County continues, habitat for plant and wildlife species native to the region is lost through conversion to urban development. Although more mobile species may be able to survive these changes in their environment by moving to new areas, less mobile species would simply be extirpated. With continued conversion of natural habitat to human use, the availability and accessibility of remaining foraging and natural habitats in this ecosystem would be reduced, and those remaining natural areas may not always be able to support additional plant or animal populations above their current carrying capacities through increased competition for resources, displacement, and development-induced introduction of nonnative species.

There are substantial local city and County policies and requirements that seek to reduce the effect of new development on biological resources in addition to state and federal laws protecting listed and non-listed special-status species, sensitive natural communities, wetlands and waters, and other biological resources.

The CAP promotes and supports city-centered development as called for in local land use plans, which helps to reduce impacts on more outlying areas of species habitat by promoting more compact urban development in areas that have been substantially altered previously. Furthermore, the CAP promotes reduction of vehicle miles traveled (VMT) overall, which helps to reduce air pollution and water pollution associated with vehicle emissions as well as reduces electricity and natural gas demand, which also helps to improve habitat conditions. Certain transportation and solid waste facilities supported by the CAP may result in limited impacts on biological resources, but, as discussed above, application of mitigation and local, state, and federal requirements would limit these impacts.

Although the conversion of plant and wildlife habitat and loss of protected species on a regional level could result in a cumulatively significant impact on biological resources, the CAP, with the implementation of recommended Mitigation Measures BIO-1a, BIO-1b, and BIO-1c, as well the application of local, state, and federal regulatory requirements, is not expected to contribute considerably to any such cumulative impacts.