APPENDIX C:
BIOLOGICAL RESOURCES DATA

5. BIOLOGICAL RESOURCES

This chapter describes the existing biological resources in the General Plan Planning Area.

5.1 REGULATORY FRAMEWORK

Biological resources within the General Plan Planning Area are subject to agency jurisdiction and regulations, as described below.

5.1.1 FEDERAL AND STATE REGULATIONS

5.1.1.1 Endangered Species Act

The USFWS has jurisdiction over federally listed threatened and endangered plant and animal species. The federal Endangered Species Act (ESA) and its implementing regulations prohibit the take of any fish or wildlife species that is federally listed as threatened or endangered without prior approval pursuant to either Section 7 or Section 10 of the ESA. ESA defines "take" as "*harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct*." Federal regulation 50CFR17.3 defines the term "harass" as an intentional or negligent act that creates the likelihood of injuring wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, or sheltering (50CFR§17.3). Furthermore, federal regulation 50CFR17.3 defines "harm" as an act that either kills or injures a listed species. By definition, "harm" includes habitat modification or degradation that actually kills or injures a listed species by significantly impairing essential behavior patterns such as breeding, spawning, rearing, migrating, feeding, or sheltering (50CFR217.12).

Section10(a) of the ESA establishes a process for obtaining an incidental take permit that authorizes nonfederal entities to incidentally take federally listed wildlife or fish. Incidental take is defined by ESA as take that is *"incidental to, and not the purpose of, the carrying out of another wise lawful activity*." Preparation of a habitat conservation plan, generally referred to as a HCP, is required for all Section 10(a) permit applications. The USFWS and National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) have joint authority under the ESA for administering the incidental take program. NOAA Fisheries Service has jurisdiction over anadromous fish species and USFWS has jurisdiction over all other fish and wildlife species.

Section 7 of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any species listed under the ESA, or result in the destruction or adverse modification of its habitat. Federal agencies are also required to minimize impacts to all listed species resulting from their actions, including issuance of permits or funding. Section 7 requires consideration of the indirect effects of a project, effects on federally listed plants, and effects on critical habitat (ESA requires that the USFWS identify critical habitat to the maximum extent that it is prudent and determinable when a species is listed as threatened or endangered). This consultation results in a Biological Opinion prepared by the USFWS stating whether implementation of the proposed activity would result in jeopardy to any federally-listed species or will adversely modify designated critical habitat, and identifies measures necessary to avoid or minimize effects to listed species.

Although federally listed animals are legally protected from harm no matter where they occur, Section 9 of the ESA provides protection for endangered plants by prohibiting the malicious destruction on federal land and other "take" that violates State law. Protection for plants not occurring on federal lands is provided by the California Endangered Species Act.

5.1.1.2 Clean Water Act

The U.S. Army Corps of Engineers (Corps) is responsible under Section 404 of the Clean Water Act to regulate the discharge of fill material into waters of the U.S. These waters, and their lateral limit, are defined in 33 CFR Part 328.3(a) and include streams that are tributaries to navigable waters and their adjacent wetlands. The lateral limits of jurisdiction for a non-tidal stream are measured at the line of the Ordinary High Water Mark (33 CFR Part 328.3[e]) or the limit of adjacent wetlands (33 CFR Part 328.3[b]). Any permanent extension of the limits of an existing water of the U.S., whether natural or man-made, results in a similar extension of Corps jurisdiction (33 CFR Part 328.5).

Waters of the U.S. fall into two broad categories: wetlands and other waters. Other waters include waterbodies and watercourses generally lacking plant cover such as rivers, streams, lakes, springs, ponds, coastal waters, and estuaries. Wetlands are aquatic habitats that support hydrophytic wetland plants and include marshes, wet meadows, seeps, floodplains, basins, and other areas experiencing extended seasonal soil saturation. Seasonally or intermittently inundated features, such as seasonal ponds, ephemeral streams, and tidal marshes, are categorized as wetlands if they have hydric soils and support wetland plant communities. Seasonally inundated waterbodies or watercourses that do not exhibit wetland characteristics are classified as other waters of the U.S.

Waters and wetlands that cannot trace a continuous hydrologic connection to a navigable water of the U.S. are not tributary to waters of the U.S. These are termed "isolated wetlands". Isolated wetlands are jurisdictional when their destruction or degradation can affect interstate or foreign commerce (33 CFR Part 328.3[a]). The Corps may or may not take jurisdiction over isolated wetlands depending on the specific circumstances.

The Navigable Waters Protection Rule issued on April 21, 2020 identifies four categories of waters that are considered "waters of the United States" by the Corps. These include territorial seas and traditional navigable waters, tributaries with perennial and intermittent flows, lakes and other impoundments of jurisdictional waters, and adjacent wetlands. The rule also outlines features that are not considered "waters of the United States" and are not under federal jurisdiction. These include ephemeral drainages, groundwater, artificial lakes and ponds, waste treatment systems, prior converted cropland, and other features. [1]

In general, a project proponent must obtain a Section 404 permit from the Corps before grading or placing fill into wetlands or other waters of the U.S. Prior to issuing the permit, the Corps is required to consult with the USFWS under Section 7 of the ESA if the project may affect federally listed species.

[1] US Environmental Protection Agency, 2020, Navigable Waters Protection Rule, Final Rule: The Navigable Waters Protection Rule, available online at https://www.epa.gov/nwpr/final-rule-navigable-waters-protection-rule, accessed March 24, 2020.

All Corps permits require water quality certification under Section 401 of the Clean Water Act as administered by the Regional Water Quality Control Board (RWQCB). Project proponents who propose to fill wetlands or other waters of the U.S. must apply for water quality certification from the RWQCB. The RWQCB has adopted a policy requiring mitigation for any loss of wetland, streambed, or other jurisdictional area.

5.1.1.3 Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, or their eggs and nests. As used in the MBTA, the term "take" is defined as "to pursue, hunt, shoot, capture, collect, kill, or attempt to pursue, hunt, shoot, capture, collect, or kill, unless the context otherwise requires." Most bird species native to North America are covered by this act. In December 2017, the Department of the Interior (DOI) issued a memorandum reversing the incidental take interpretation of the MBTA. Under the latest determination of the DOI, the take of a migratory bird or its active nest (i.e., with eggs or young) that is incidental to a lawful activity does not violate the MBTA. However, this opinion from the DOI is only the latest interpretation from the current Administration of the MBTA.

5.1.1.4 California Endangered Species Act

The CDFW has jurisdiction over State-listed endangered, threatened, and rare plant and animal species under the California Endangered Species Act (CESA). CESA is similar to the federal ESA both in process and substance; it is intended to provide additional protection to threatened and endangered species in California. Species may be listed as threatened or endangered under both acts (in which case the provisions of both State and federal laws apply) or under only one act. A candidate species is one that the Fish and Game Commission has formally noticed as being under review by CDFW for addition to the State list. Candidate species are protected by the provisions of CESA.

5.1.1.5 California Environmental Quality Act

The California Environmental Quality Act (CEQA) applies to "projects" proposed to be undertaken or requiring approval by State and local government agencies. Projects are defined as having the potential to have physical impact on the environment. Under Section 15380 of CEQA, a species not included on any formal list "shall nevertheless be considered rare or endangered if the species can be shown by a local agency to meet the criteria" for listing. With sufficient documentation, a species could be shown to meet the definition of rare or endangered under CEQA and be considered a "de facto" rare or endangered species.

5.1.1.6 California Fish and Game Code

The CDFW is also responsible for enforcing the California Fish and Game Code, which contains several provisions potentially relevant to construction projects. For example, Section 1602 of the Fish and Game Code governs the issuance of Lake and Streambed Alteration Agreements by the CDFW. Lake or Streambed Alteration Agreements are required whenever project activities substantially divert or obstruct

the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated as such by the CDFW.

The Fish and Game Code also lists animal species designated as Fully Protected or Protected, which may not be taken or possessed at any time. The CDFW does not issue licenses or permits for take of these species except for necessary scientific research, habitat restoration/species recovery actions, or live capture and relocation pursuant to a permit for the protection of livestock. Fully protected species are listed in Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the Fish and Game Code, while Protected amphibians and reptiles are listed in Chapter 5, Sections 41 and 42.

Several provisions in the California Fish and Game code provide for the protection of birds and bird nests in active use. Unless the Fish and Game Code (FGC) or its implementing regulations provide otherwise, under California law it is unlawful to:

- Take a bird, mammal, fish, reptile, or amphibian (FGC Section 2000).
- Take, possess, or needlessly destroy the nest or eggs of any bird (FGC Section 3503).
- Take, possess, or destroy any bird of prey in the orders Strigiformes (owls) and Falconiformes (such as falcons, hawks and eagles) or the nests or eggs of such bird (FGC Section 3503.5).
- Take or possess any of the thirteen fully protected bird species listed in FGC Section 3511.
- Take any non-game bird (i.e., bird that is naturally occurring in California that is not a game bird, migratory game bird, or fully protected bird) (FGC Section 3800).
- Take or possess any migratory non-game bird as designated in the MBTA or any part of such bird, except as provided by rules or regulations adopted by the DOI under the MBTA (FGC Section 3513).
- Take, import, export, possess, purchase, or sell any bird (or products of a bird), listed as an endangered or threatened species under the CESA unless the person or entity possesses an Incidental Take Permit or equivalent authorization from CDFW (FGC Section 2050 et seq.).

Non-native species, including European starling, house sparrow, and rock pigeon, are not afforded any protection under the MBTA or California Fish and Game Code.

5.1.1.7 Porter-Cologne Water Quality Control Act

Under this Act (California Water Code Sections 13000–14920), the RWQCB is authorized to regulate the discharge of waste that could affect the quality of the State's waters. The RWQCB asserts jurisdiction over isolated waters and wetlands, as well as waters and wetlands that are regulated by the Corps. Therefore, even if a project does not require a federal permit, it still requires review and approval by the RWQCB. When reviewing applications, the RWQCB focuses on ensuring that projects do not adversely affect the "beneficial uses" associated with waters of the State. In most cases, the RWQCB seeks to protect these beneficial uses by requiring the integration of waste discharge requirements (WDRs) into projects that will require discharge into waters of the State. For most construction projects, the RWQCB requires the use of construction and post-construction Best Management Practices (BMPs).

5.1.1.8 Other Statutes, Codes, and Policies Affording Species Protection

The CDFW maintains an administrative list of Species of Special Concern (SSC), defined as a "species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- Is extirpated from the State, or, in the case of birds, in its primary seasonal or breeding role.
- Is listed as federally, but not State-, threatened or endangered.
- Meets the State definition of threatened or endangered but has not formally been listed.
- Is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status.
- Has naturally small populations exhibiting high susceptibility to risk from any factor(s) that, if realized, could lead to declines that would qualify it for State threatened or endangered status."

The CDFW's Nongame Wildlife Program is responsible for producing and updating SSC publications for mammals, birds, and reptiles and amphibians. Section 15380 of the *CEQA Guidelines* clearly indicates that SSC should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outline therein. In contrast to species listed under the federal ESA or CESA, however, SSC have no formal legal status.

The CNPS is a non-profit conservation organization dedicated to the preservation of native flora in California. The CNPS has been involved in assembling, evaluating, and distributing information on special-status plant species in the state, as listed in the *Inventory of Rare and Endangered Plants of California*. CNPS has recently updated their rating system for the rarity of special-status plants, and now include both a California Rare Plant Rank and a Threat Rank. CEQA requires government agencies to consider environmental impacts of discretionary projects and to avoid or mitigate them where possible. Under Section 15380, CEQA provides protection for both State-listed species and for any other species which can be shown to meet the criteria for State listing. The CDFW recognizes that special-status plants with a California Rare Plant Rank of 1A (Presumed extinct in California), 1B (Rare, threatened, or endangered in California and elsewhere), and 2 (Rare and endangered in California, but are more common elsewhere) in the CNPS Inventory consist of plants that, in a majority of cases, would qualify for listing and these species should be addressed under CEQA review. In addition, the CDFW recommends, and local governments may require, protection of species which are regionally significant, such as locally rare species, disjunct populations, essential nesting and roosting habitat for more common wildlife species, or plants with a CNPS California Rare Plant Rank of 3 (Plant species for which additional data is needed – a review list) and 4 (Plant species of limited distribution- a watch list).

5.1.2 LOCAL REGULATIONS

5.1.2.1 County of San Benito General Plan

The *San Benito 2035 General Plan* provides a template for land use, development, and environmental quality in unincorporated areas of San Benito County. The Natural and Cultural Resources Element defines policies for management and conservation of open space, wildlife habitat, mineral, water and other resources in San Benito County. Relevant goals from the Natural and Cultural Resources Element include the following:

- Goal NCR-1: To preserve and enhance valuable open space lands that provide wildlife habitat and conserve natural, historical, archaeological, paleontological, tribal, and visual resources of San Benito County.
- Goal NCR-2: To protect and enhance wildlife communities through a comprehensive approach that conserves, maintains, and restores important habitat areas.

5.1.2.2 2005 Hollister General Plan

The Natural Resources and Conservation Element of the *2005 Hollister General Plan* contains goals, policies, and implementing measures related to biological and wetland resources. These are listed in Table 5-1 by Element.

TABLE 5-1 2005 GENERAL PLAN BIOLOGICAL RESOURCES GOALS AND POLICIES

GOAL No.	GOAL
GOAL NRC1.	Assure enhanced habitat for native plants and animals, and special protection for threatened or endangered species.
GOAL NRC3	Conserve and manage natural resources.
Policy No.	**Policy**
NRC 1.1.	Protection of Environmental Resources. Protect or enhance environmental resources, such as wetlands, creeks and drainageways, and habitat for threatened and endangered species.
NRC 1.2.	Protection of Endangered Species Habitat. Identify and protect the habitats of endangered species which may found within the Hollister Planning Area, in cooperation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, through the review all development proposals for compliance with regulations established by the U.S. Fish and Wildlife Service and the California Department of Fish and Game as they apply to the protection of endangered species and their habitats.
NRC 1.3.	Compensatory Habitat, Habitat Enhancement or Habitat Protection Require developers to assure the provision of compensatory habitat, habitat enhancement or habitat protection if impacts to sensitive species that could result from proposed development cannot be avoided.
NRC 1.4.	Other Habitat Planning Measures. Utilize regional planning and the use of concepts such as mitigation banking to offset the cumulative effects of piecemeal development on the habitat of special status species.
NRC 1.5.	Wetlands Preservation. Maintain existing riparian areas in their natural state to provide for wildlife habitat, groundwater percolation, water quality, aesthetic relief and recreational uses that are environmentally compatible with wetland preservation. Require appropriate public and private wetlands preservation, restoration and/or rehabilitation through compensatory mitigation in the development process for unavoidable impacts. Support and promote acquisition from willing property owners, and require those development projects, which may result in the disturbance of delineated seasonal wetlands to be redesigned to avoid such disturbance.

TABLE 5-1 2005 GENERAL PLAN BIOLOGICAL RESOURCES GOALS AND POLICIES

Policy No.	Policy
NRC 1.6.	Enhancement of Creeks and Drainageways. Explore enhancement of, and support continuous upgrades to, drainageways to serve as wildlife habitat corridors for wildlife movement and to serve as flood control facilities to accommodate storm drainage and groundwater recharge. Require setbacks, creek enhancement and associated riparian habitat restoration/creation for projects adjacent to creeks to maintain storm flows, reduce erosion and maintenance and improve habitat values, where feasible. Generally, all new structures and paved surfaces should be set back 100 feet from wetlands and creeks.
NRC 1.7.	Specialized Surveys for Special Status Species. Require specialized surveys for special status species for those projects that have been proposed in areas that contain suitable habitat for such species. All surveys should take place during appropriate seasons to determine nesting or breeding occurrences.
Implementation Measures	**Measure**
Implementation Measures - 2-Year Time Frame:	
NRC.B	Explore regional planning opportunities to preserve habitats. Explore opportunities for regional planning and the use of concepts such as mitigation banking to offset the cumulative effects of piecemeal development on the habitat of special status species.
Implementation Measures - 3-Year Time Frame:	
NRC.F	Establish and update the list of species. Maintain a current list of threatened and endangered and special status species.
NRC.G	Establish mitigation for the burrowing owl colony in the Fairview Road/Santa Ana Road area. Require project applicants in the Fairview Road/Santa Ana Road area to develop and implement a mitigation plan to avoid or otherwise compensate for any disturbance to the burrowing owl colony in that area. This plan should be developed in coordination with the California Department of Fish and Game.
Implementation Measures - On-going Time Frame:	
NRC.K:	Conduct surveys for burrowing owls. Require project applicants with proposed projects on grazing or fallow agricultural land to conduct a spring survey for the presence of burrowing owls.
NRC.U:	Require pre-construction surveys for nesting raptors. Require preconstruction surveys for nesting raptors, to be conducted by a qualified ornithologist, for those projects that would affect on-site oaks or orchards, or which would involve construction during the nesting season (March to July). Hollister shall allow no construction activities that would result in the disturbance of an active raptor nest (including tree removal) to proceed until after it has been determined by a qualified ornithologist that the nest has been abandoned.
NRC.V:	Require project mitigation for habitat. Continue the City's practice of requiring mitigation for projects that would affect wetlands, in conjunction with recommendations of State and Federal agencies.
NRC.X:	Require wetlands delineation. Require a delineation of jurisdictional waters by a qualified biologist at the outset of the project planning stage of any proposed development that contains or is immediately adjacent to wetlands. This delineation shall be verified and approved by the U.S. Army Corps of Engineers.
NRC.Y:	Require wetlands replacement plans. Require those development projects that involve the unavoidable loss of riparian areas to replace any such loss onsite or in immediately adjacent off-site areas along the river/stream corridor, and require project sponsors to develop re-vegetation plans which offset losses of biotic values, in coordination with the California Department of Fish and Game and the U.S. Army Corps of Engineers.

Source: City of Hollister, *2005 General Plan*.

5.1.2.3 Hollister Municipal Code

Chapter 12.24 of the City of Hollister Municipal Code outlines a Street Tree ordinance for trees along publicly maintained streets, paved or unpaved, for the purpose of vehicle travel. Section 12.24.050 states: "No person shall plant, root-trim, cut, prune, trim, brace, spray, remove or replace any street tree without prior written authority therefore issued by the director." There are no regulations regarding trees on private property.

5.2 EXISTING CONDITIONS

This assessment of the biological existing conditions within the General Plan Planning Area is based on available information on biological and wetland resources in the Hollister vicinity. This includes the 2005 *City of Hollister General Plan* and Environmental Impact Report (EIR);[2] San Benito County *2035 General Plan*;[3] environmental documents for recent development applications within the City of Hollister; a resource list of federally-listed species, critical habitat and other resources generated for the General Plan Planning Area as part of the Information for Planning and Consultation (IPac) from the U.S. Fish and Wildlife (USFWS) for the General Plan Planning Area;[4] the California Native Plant Species (CNPS) *Inventory of Rare and Endangered Plants;*[5] and available Geographic Information System (GIS) data. The GIS data was used to map the existing vegetative cover and associated wildlife habitats, the known distribution of special-status species and sensitive natural communities, and the known distribution of wetlands in the General Plan Planning Area. GIS data on vegetation cover was obtained from the National Land Cover Database mapping program by the Earth Resources Observation and Science (EROS) Center overseen by the U.S. Geologic Survey (USGS). GIS data on special-status species was obtained from the California Natural Diversity Data Base (CNDDB) of the California Department of Fish and Wildlife (CDFW). Designated critical habitat for federally-listed special-status species was obtained from the USFWS. GIS data on wetlands was obtained from the National Wetland Inventory (NWI) mapping program maintained by the USFWS. This data was used in preparing maps contained in this chapter, consisting of the following:

- Figure 5-1 shows the various vegetation cover types in the General Plan Planning Area vicinity according to the National Land Cover Database.
- Figure 5-2 shows the distribution of known occurrences of special-status plant species in the General Plan Planning Area vicinity as reported by the CNDDB.
- Figure 5-3 shows the distribution of known occurrences of special-status animals reported by the CNDDB and designated critical habitat as mapped by the USFWS in the General Plan Planning Area vicinity.
- Figure 5-4 shows the extent of wetlands mapped as part of the NWI program.

[2] City of Hollister, 2005, *City of Hollister General Plan – Final Program EIR*, October 2005.
[3] San Benito County, 2015, *San Benito County 2035 General Plan*, July 21.
[4] U.S. Fish and Wildlife Service, 2020, *IPac Resource List for Hollister General Plan 2040*, May 21.
[5] California Native Plant Society, 2020. *Inventory of rare and endangered plants in California* (online edition). Website: www.cnps.org/inventory (accessed February 10, 2020).

5.2.1 Biological Resources within the General Plan Planning Area

The following section provides a description of vegetation types and associated wildlife, known distribution of special-status species, and sensitive habitats.

5.2.1.1 Habitat Types

The Hollister General Plan Planning Area is characterized by the broad alluvial plains of the San Benito River and Santa Ana Creek, surrounded by rolling grassland covered hills to the east, south, and southwest. Beginning in the early 1880's, the San Benito River Valley has been altered by grazing and agriculture, replacing the original riparian wetlands and grasslands. Scattered native riparian woodlands and scrub remain along segments of the San Benito River and Santa Ana Creek, and extensive grasslands occupy the surrounding hillside on the western slopes of Santa Ana Mountain and the northeast slopes Fremont Peak and the Gabilan mountain range.

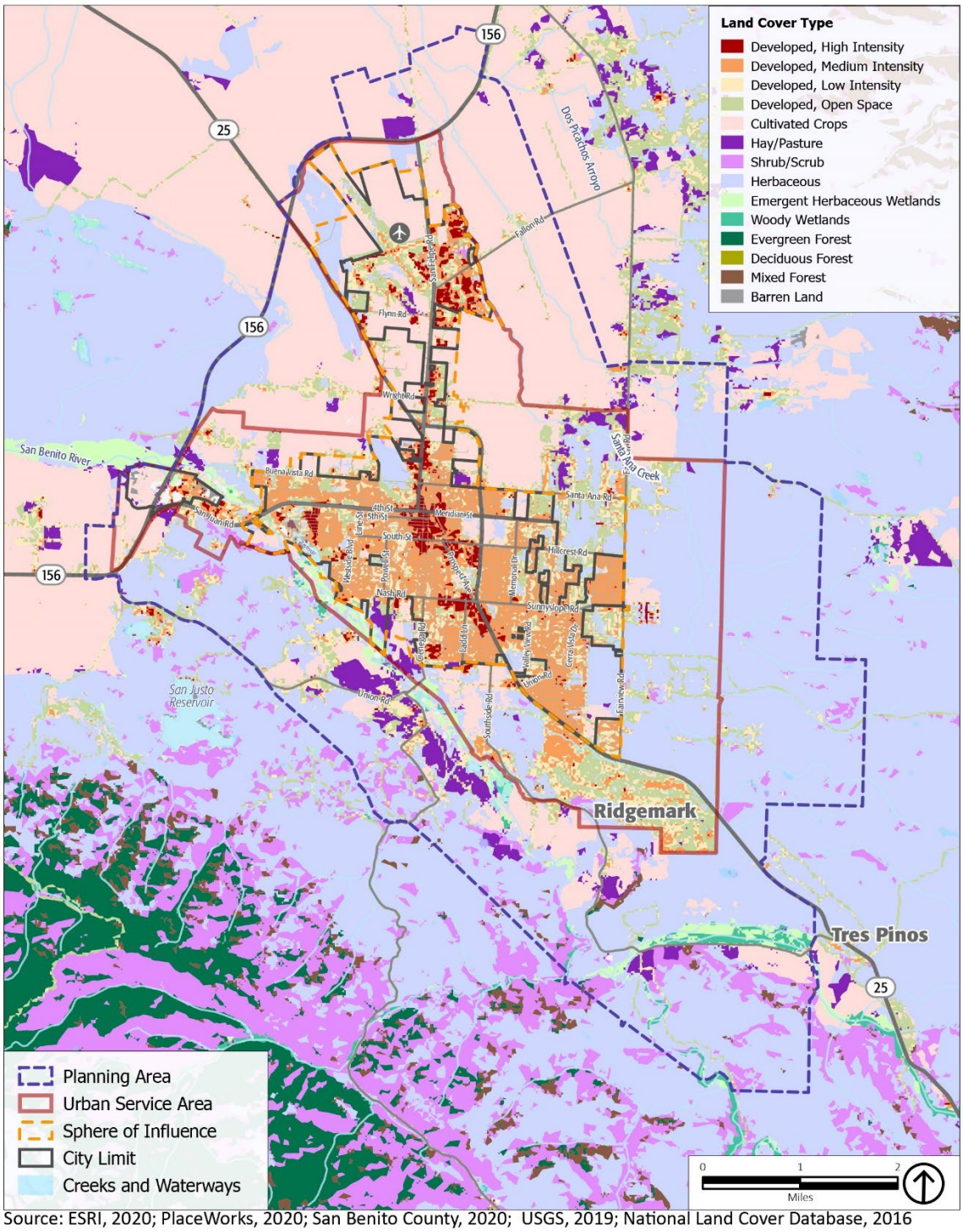
Today, most of the SOI has been highly modified for agricultural and urban uses. Development on unincorporated land within the SOI and the Planning Area has increased rapidly since the adoption of the 2005 Hollister General Plan. This land, as discussed in greater detail in the sections below, contains sensitive habitats that could be home to special status plant and animal species. As the County of San Benito processes development applications within these areas, the County requires mitigation measures to protect the special status plant and animal species such as requiring site surveys, establishing development buffers, and avoiding construction during migration periods.

Figure 5-1 shows the extent of urbanization, agricultural crops, and remaining vegetative cover around the perimeter of the General Plan Planning Area, based on the National Land Cover Database of the USGS. Estimates of various vegetation cover types within the General Plan Planning Area are summarized in Table 5-2, based on the National Land Cover Database. In general, each cover type differs in its relative value as wildlife habitat and can be characterized by both vegetative cover and associated animal species that are dependent on that habitat, although some wildlife species may utilize more than one habitat type. The characteristic plant and wildlife species typically associated with each of these habitat types is summarized below.

Urban Development/Ornamental Landscaping

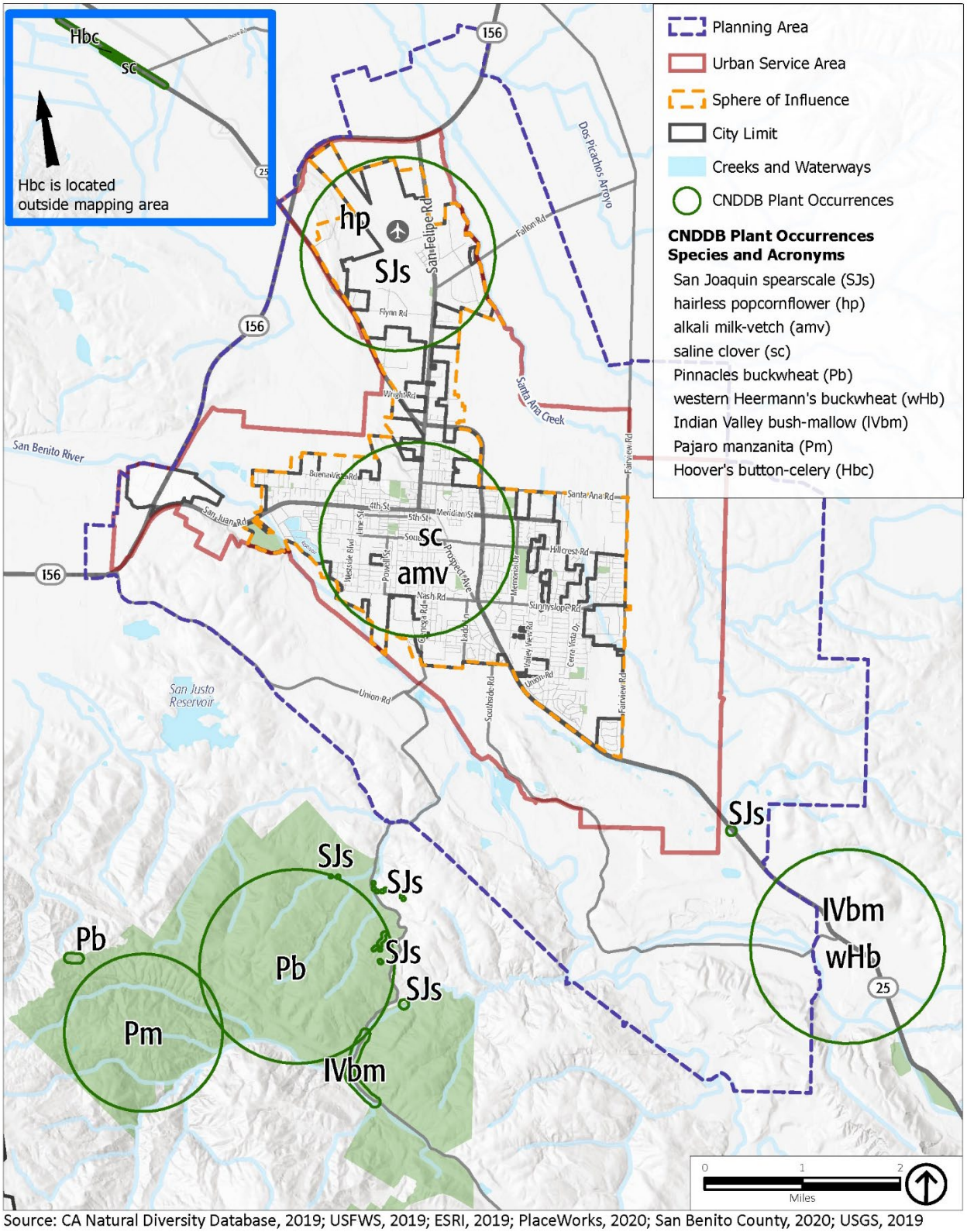
Urban development, ornamental landscaping and barren areas occupy most of the valley floor in the General Plan Planning Area. As indicated in Table 5-2 and mapped in Figure 5-1, an estimated 3,789 acres, or roughly 58 percent, of the land cover types in the SOI are mapped as developed, with an additional 826 acres devoted to golf courses, parklands and other open space. Developed areas include structures, impervious surfaces, ornamental landscaping, with some locations supporting remnant native vegetation, such as specimen oaks. Most plant species used in landscaping are non-native ornamentals, consisting of a wide variety of tree, shrub, groundcover, and turf species. Native trees are scattered throughout the established residential neighborhoods and urbanized areas, including specimen coast live oaks (*Quercus agrifolia*), black cottonwood (*Populus trichocarpa*), valley oaks (*Q. lobata*), and California buckeye (*Aesculus californica*). Larger ornamental and non-indigenous native species include: Monterey pine (*Pinus radiata*), Monterey cypress (*Cupressus macrocarpa*), coast redwood (*Sequoia sempervirens*),

Figure 5-1 Land Cover



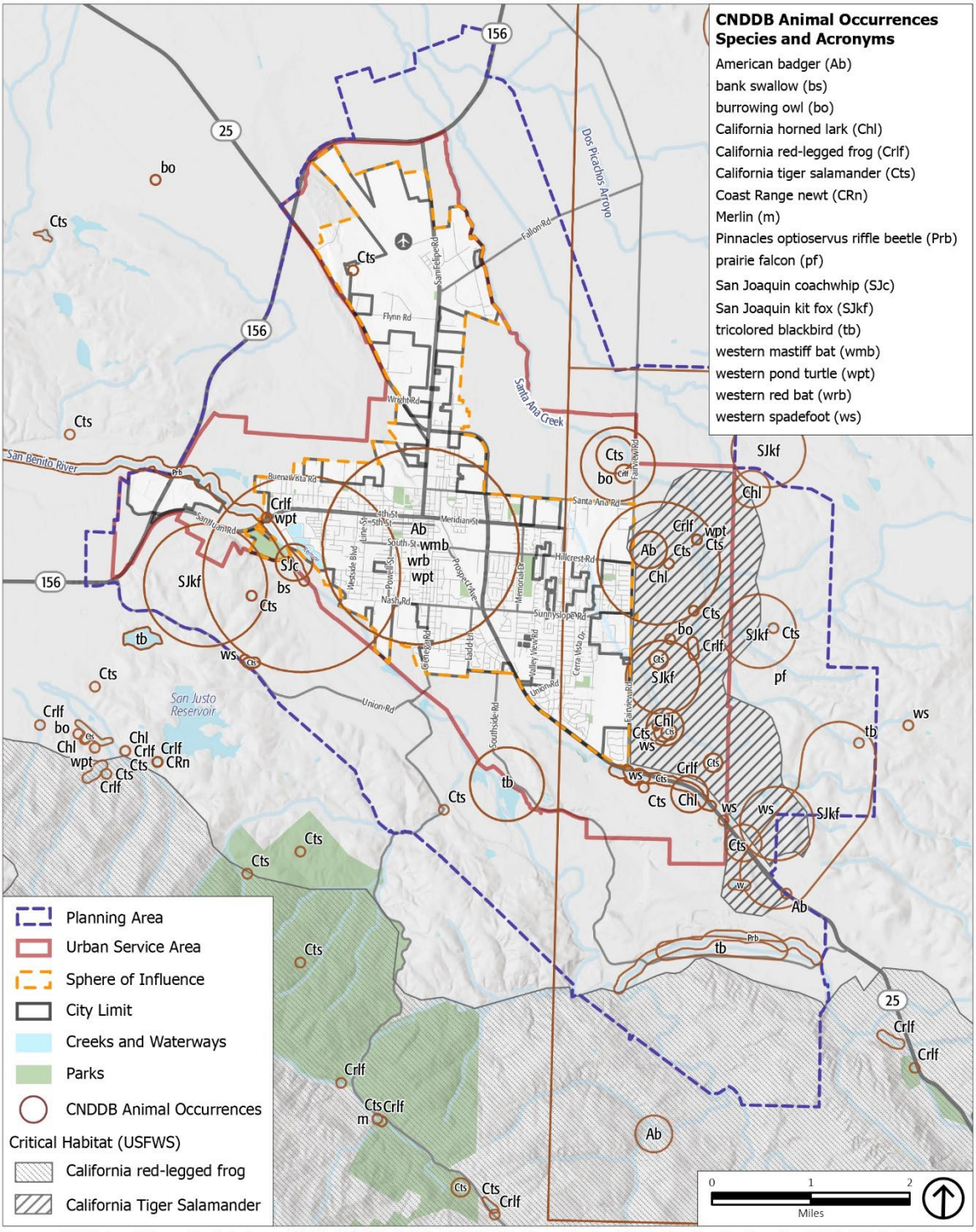
Source: ESRI, 2020; PlaceWorks, 2020; San Benito County, 2020; USGS, 2019; National Land Cover Database, 2016

Figure 5-2 Special Status Plant Species



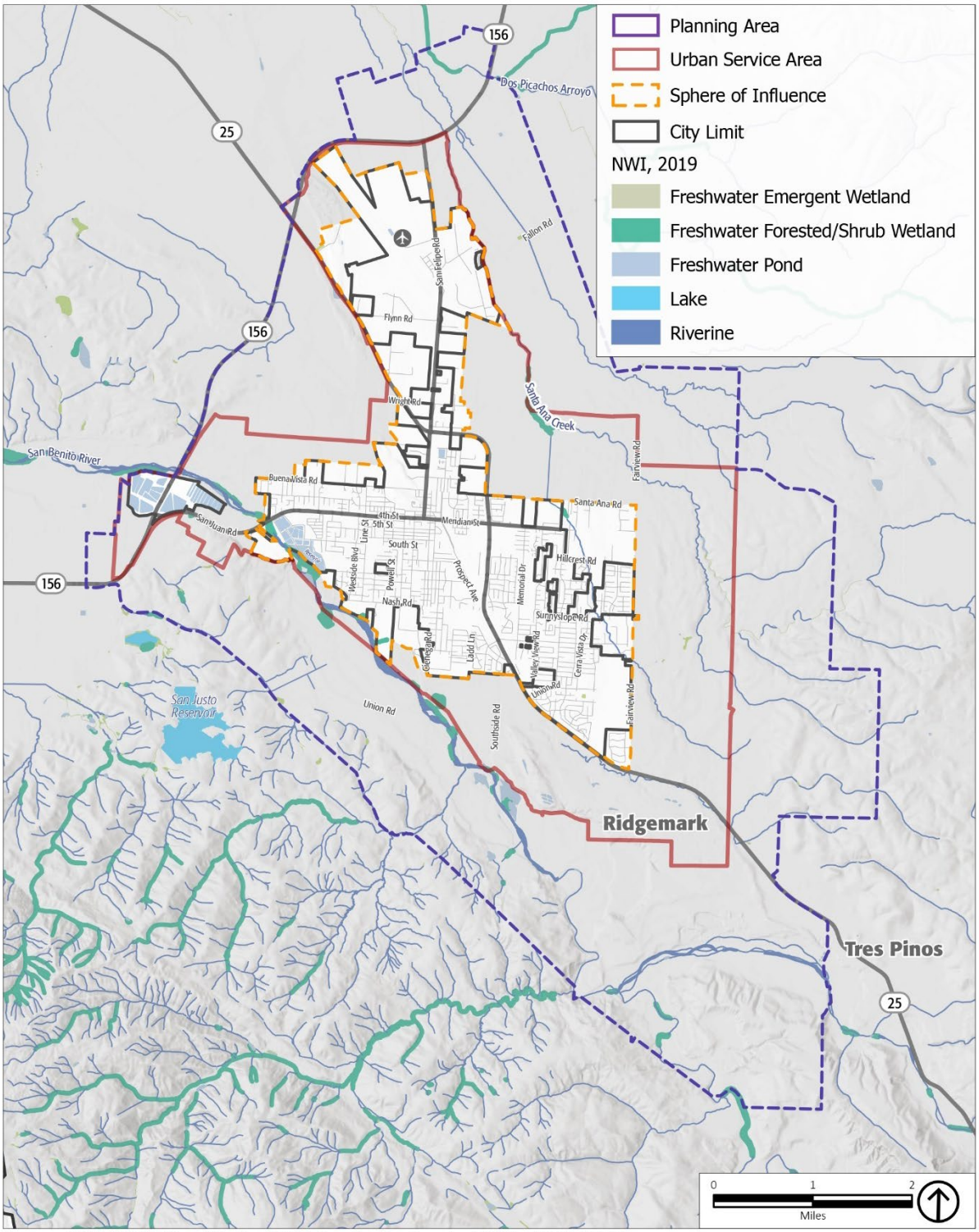
Source: CA Natural Diversity Database, 2019; USFWS, 2019; ESRI, 2019; PlaceWorks, 2020; San Benito County, 2020; USGS, 2019

Figure 5-3 Special-Status Animal Species and Critical Habitat



Source: CA Natural Diversity Database, 2019; USFWS, 2019; ESRI, 2019; PlaceWorks, 2020; San Benito County, 2020; USGS, 2019

Figure 5-4 National Wetland Inventory



Source: ESRI, 2020; PlaceWorks, 2020; San Benito County, 2020; USGS, 2019

TABLE 5-2 ESTIMATES OF LAND COVER TYPES IN GENERAL PLAN PLANNING AREA

Land Cover Type	SOI (acres)	Planning Area (acres)
Barren Land	1	21
Cultivated Crops	1,172	7,304
Hay Crops/Pasture	71	772
Developed - High Intensity	444	4943
Developed - Low Intensity	906	1,958
Developed - Medium Intensity	2,439	2,964
Developed - Open Space	826	2,456
Forest - Evergreen	0	9
Forest – Mixed	1	84
Grassland/Herbaceous	644	10,416
Scrub/Scrub	11	908
Open Water	22	92
Wetlands – Emergent Herbaceous	16	409
Woody Wetlands (Riparian Woodland and Scrub)	1	168
Urban/Barren	0	7,548
Total	**6,554**	**28,054**

Source: USGS, 2020.

incense cedar (*Calocedrus decurrens*), deodar cedar (*Cedrus deodara*), American elm (*Ulmus americana*), Mexican fan palm (*Washingtonia robusta*), and Tasmanian blue gum (*Eucalyptus globulus*), among many others.

Some non-native ornamental species are considered highly invasive because of their ability to spread and eventually dominate natural areas if unmanaged. Many of these are common in developed areas, along riparian corridors, and in hillside open space and remaining undeveloped private lands. These include: silver wattle (*Acacia dealbata*), blackwood acacia (*Acacia melanoxylon*), several species of broom (*Genista monspessulana*; *G. juncea*; and *Cytisus scoparius*), cotoneaster (*Cotoneaster* spp.), bermudagrass (*Cynodon dactylon*), Germany ivy (*Delairea odorata*), English ivy (*Hedera helix*), giant reed (*Arundo donax*), Himalaya blackberry (*Rubus armeniacus*), periwinkle (*Vinca major*), and Tasmanian blue gum. The California Invasive Plant Council (Cal-IPC) has developed a comprehensive data base, the *Invasive Plant Inventory*,[6] which ranks invasive species based on the threat they pose to natural habitat. All of the above species and others known to exist in the vicinity of Hollister are considered to have a high to moderate ranking by Cal-IPC because of their invasive properties and the threat they pose to natural areas.

In general, urbanized areas tend to have low to poor wildlife habitat values due to replacement of natural communities, fragmentation of remaining open space areas and parks, and intensive human disturbance. The diversity of urban wildlife depends on the extent and type of landscaping and remaining open space, as well as the proximity to natural habitat. Trees and shrubs used for landscaping provide nest sites and

[6] Cal-IPC, 2006, *California Invasive Plant Inventory*, electronic update in 2017.

cover for wildlife adapted to developed areas. Typical native bird species include: mourning dove, scrub jay, northern mockingbird, American robin, northern flicker, California towhee, and American kestrel. Introduced species include: rock dove, European starling, house finch, and house sparrow. Urban areas also provide habitat for several species of native mammals such as black-tailed deer, California ground squirrel, raccoon, gray fox, striped skunk, and coyote, as well as the introduced eastern fox squirrel and eastern red fox. Introduced pest species such as Norway rat, house mouse, and Virginia opossum are also abundant in developed areas.

Agricultural Croplands

As indicated in Table 5-2 an estimated 1,172 acres of the SOI and 7,304 acres of the Planning Area are occupied by cultivated crops and pastureland. Irrigated row crops occupy a majority of the agricultural lands in the Planning Area, comprised of monocultures of alfalfa, garlic, tomatoes, and sugar beets. Orchard crops include English walnut, cherry and apricot tree plantings. Weedy species often grow between rows and along field margins and irrigation ditches. These include field knotweed (*Polygonum aviculare*), bull mallow (*Malva nicaeensis*), cheeseweed (*M. parviflora*), field bindweed (*Convolvulus arvensis*), rabbitsfoot grass (*Polypogon monspelliensis*), and Farmer's foxtail (*Hordeum leporinum*). The drainage ditches that are physically part of the agricultural fields and orchards support hydrophytic (i.e. water loving) plants, such as cattail (*Typha* spp.), Baltic rush (*Juncus balticus*), alkali bulrush (*Bolboschoenus maritimus*), and tall umbrella plant (*Cyperus eragrostis*). The upper banks of these ditches tend to be covered with non-native weedy species, and a few opportunistic native perennials such as salt grass (*Distichlis spicata*), alkali heath (*Frankenia grandiflora*), and fat hen (*Atriplex patula*).

The value of agricultural crops to wildlife depends on a number of factors, including intensity and frequency of maintenance activities, available cover, and proximity to surface water. Numerous species of small mammals and birds frequent many of the crop types, especially where field margins and drainage ditches provide retreat habitat. These include ring-necked pheasant, red-winged blackbird, California ground squirrel, Botta's pocket gopher, and black-tailed jackrabbit. The abundant prey attracts predatory birds and mammals such as northern harrier, American kestrel, red-tailed hawk, and western burrowing owl, and coyote.

Grasslands

Grasslands occupy most of the undeveloped hillsides to the east, south and southwest of the General Plan Planning Area outside the largely developed valley floor. The grasslands are generally composed of introduced grasses and broadleaf species. In locations where the ground surface has been disturbed, ruderal (weedy) species, which quickly recolonize disturbed areas, tend to dominate. As indicated in Table 5-2, an estimated 10,416 acres of the Planning Area supports grassland (herbaceous) cover. However, only 644 acres of grassland cover remain within the SOI that haven't been converted to urban development, agricultural crops or pasture.

Intensive grazing and other disturbance factors have eliminated most of the native grasslands throughout California over the past 100 years, including the historic rangelands of the Hollister vicinity. Common species in the remaining grasslands today are dominated by non-native grasses and forbs such as wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus mollis*), foxtail barley (*Hordeum*

leporinum), field mustard (*Brassica campestris*), wild radish (*Rhaphanus sativus*), field bindweed, cheeseweed, bur clover (*Medicago polymorpha*), and yellow-star thistle (*Centaurea solstitialis*). Native species include common perennials, such as California poppy (*Eschscholzia californica*), Douglas' lupine (*Lupinus nanus*), and soap plant (*Chlorogalum pomeridianum*).

Remnant native grasslands may still occur in some locations of herbaceous cover, forming stands of needlegrass grassland. This natural community is characterized by several species of native grasses such as purple needlegrass (*Stipa pulchra*), California melic (*Melica californica*), blue wildrye (*Elymus glaucus*), and beardless wildrye (*Elymus triticoides*), together with common wildflowers such as California poppy, lupines, soap plant, and wild hyacinth (*Dichelostemma pulchellum*), and other native forbs. Most of the native grasslands throughout the state have been eliminated, which has led the CNDDB to now recognize native grasslands as a sensitive resource with a high inventory priority. The CNDDB typically considers grasslands containing 10 percent or greater cover by native grass species to represent a natural grassland community. This 10 percent threshold is a loosely applied standard that has been used by the state for many years. As most of the remaining native grassland communities have been highly modified by past and on-going disturbance, the remaining native grassland communities generally form a mosaic of different cover classes, sometimes interspersed with areas dominated by non-native species.

Nonnative and native grasslands support a variety of mammals, birds, and reptiles, and provide foraging habitat for raptors. Many species use the grassland for only part of their habitat requirements, foraging in the grassland and seeking cover in the limited tree and scrub cover. Grassland cover provides foraging, nesting, and denning opportunities for resident species such as western fence lizard, northern alligator lizard, gopher snake, western rattlesnake, western meadowlark, goldfinch, ring-necked pheasant, red-winged blackbird, California ground squirrel, California vole, Botta's pocket gopher, and black-tailed jackrabbit. The rodent, bird, and reptile populations offer foraging opportunities for avian predators such as white-tailed kite, American kestrel, red-tailed hawk, golden eagle, barn owl, and great horned owl, as well as mammalian predators such as striped skunk, grey fox, American badger, and coyote.

Forest and Woodlands

Forest and woodlands occupy an estimated 93 acres of the land cover types in the Planning Area, occurring in scattered stands along the San Benito River corridor and southern slopes above the river plain. Dominant tree species varies and includes coast live oak, valley oak, and California buckeye. Shrub species found in the forest and woodland habitats include: toyon (*Heteromeles arbutifolia*), poison oak (*Toxicodendron diversilobum*), and California blackberry, among others. Understory cover varies depending on the amount of available sunlight and other factors. In areas with higher light levels, the understory consists of non-native grassland species, miner's lettuce (*Claytonia perfoliata*), bedstraw (*Galium aparine*) and other herbaceous species.

The forest and woodland cover provide nesting and foraging opportunities for numerous species of birds, including raptors. They also provide essential food resources for acorn woodpeckers, scrub jay, and other birds. Wildlife commonly associated with well-developed forest and woodland habitats include: dusky-footed woodrat, deer mouse, western flycatcher, chestnut-backed chickadee, plain titmouse, Hutton vireo, orange-crowned kinglet, rufous-sided towhee, fox sparrow, bushtit, ringneck snake, Coast Range newt, and California slender salamander.

Riparian Woodland and Scrub

Riparian vegetation occurs along San Benito River, segments of Santa Ana Creek, and some reaches of tributary drainages in the General Plan Planning Area. The riparian tree and shrub cover occupies an estimated 168 acres in the Planning Area as indicated in Table 5-2. Dominant cover includes willows (*Salix* spp.), black cottonwood, coast live oak and California buckeye, together with shrub and vine species such as mule fat (*Baccharis salicifolia*), California blackberry (*Rubus ursinus*) and wild rose (*Rosa californica*). Stands of highly invasive non-native species such as Himalaya blackberry, ivy, giant reed, periwinkle, and broom have become particularly problematic in some reaches of the San Benito River corridor in the General Plan Planning Area, outcompeting and replacing native shrub and groundcover species, and severely limiting wildlife habitat values. Well-developed stands of riparian woodland and scrub are considered a sensitive natural community type by the CNDDB.

While fragmented, riparian habitat supports a large number of terrestrial and aquatic wildlife species, and tend to have high wildlife habitat values. Surface water along riparian corridors is available for aquatic-dependent organisms, and as a source of drinking water for terrestrial mammals and birds. The San Benito River and major creek channels serve as movement corridors for aquatic and terrestrial species which use the protective cover found along the creeks. Water diversion now limits the aquatic habitat value of the San Benito River through the General Plan Planning Area but reaches with perennial flows continue to support native fish such as roach, minnow, and sucker. Wildlife dependent on the cover provided by the riparian woodland and scrub include black-tailed deer, black-tailed jackrabbit, brush rabbit, red and grey fox, rufous-sided towhee, scrub jay, flycatchers, and warblers. Mammals and birds typically found in the remaining adjacent grasslands most likely use areas of dense riparian growth as protective cover and refuge from summer heat and drought.

Freshwater Marsh

Freshwater marsh habitat is also associated with the San Benito River and tributary drainage channels, ponds and other waterbodies, mapped as emergent herbaceous wetlands in Figure 5-1. Marshlands are typically dominated by emergent monocots such as cattail, but as salinity levels increase brackish hydrophytes tend to dominate, including bulrush and saltgrass. Seasonal wetlands found in open fields and margins or drainages also support wetland indicator species characteristic of poorly developed freshwater marsh habitat such as curly dock (*Rumex crispus*), bristly ox-tongue (*Picris echioides*), and wild celery (*Apium graveolens*). Segments of the larger creeks in the General Plan Planning Area that do not support a canopy of woody riparian vegetation generally support some type of freshwater marsh cover along the margins of the active channel. Freshwater marsh species also dominate the ground cover at freshwater seeps and springs in the General Plan Planning Area.

Freshwater aquatic habitats and the associated marsh vegetation are of high value to wildlife, providing a source of drinking water, protective cover, nesting substrate, and serving as movement corridors. Species found in freshwater marsh habitats include Wilson's snipe, marsh wren, and red-winged blackbird, among others. Channels supporting marsh vegetation within the General Plan Planning Area provide foraging habitat for egrets and great blue herons, as well as mammalian predators such as northern river otter, muskrat, raccoon, striped skunk, and coyote. Aquatic species found in freshwater ponds and waterbodies include: Pacific chorus frog, western toad, western pond turtle, western mosquito fish, green sunfish, blue gill, and largemouth bass.

Scrub Cover Types

A number of native and non-native vegetative cover types occur along the margins or just outside the General Plan Planning Area, such as mixed chaparral and coastal scrub. Areas of chaparral and scrub are dominated by woody shrubs such as coyote brush (*Baccharis pilularis*), yerba santa (*Eriodictyon californicum*), toyon, chamise (*Adonostoma fasciculatum*), poison oak, manzanita (*Arctostaphylos* spp.), (*Ceanothus* sp.), interior live oak (*Quercus wislizenii*), and California sagebrush (*Artemisia californica*). Coyote brush, mule fat and other indicator species of scrub cover occupy an estimated 11 acres within the SOI and 908 acres of the Planning Area, as indicated in Table 5-2.

Chaparral and scrub cover provide habitat for a wide variety of wildlife adapted to shrub-dominated communities. Numerous rodent species inhabit chaparral, and deer and other herbivores make extensive use of it for browse and protective cover. Some small herbivores use chaparral species in fall and winter when grasses are not abundant. Brush rabbits eat twigs, evergreen leaves, and bark from chaparral plants. Shrubs are important to many other mammals such as bobcat and gray fox as shade during hot weather. Reptiles frequently observed in chaparral include western rattle snake, western fence lizard, alligator lizard, and gopher snake. Representative bird species include: California quail, common poorwill, Anna's hummingbird, western scrub-jay, bushtit, Bewick's wren, California thrasher, rufous-crowned sparrow, and sage sparrow.

5.2.1.2 Special-Status Species

This section outlines special-status species and sensitive habitats within the General Plan Planning Area. Special-status species are plants and animals that are legally protected under the State and/or federal Endangered Species Acts or other regulations, as well as other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat (see Regulatory Setting discussion above). Species with legal protection under the federal and State Endangered Species Acts often represent major constraints to development, particularly when they are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a "take" of these species.[7]

The primary information source on the distribution of special-status species in California is the CNDDB inventory, which is maintained by the Biogeographic Data Branch of the CDFW. The CNDDB inventory provides the most comprehensive statewide information on the location and distribution of special-status species and sensitive natural communities. Occurrence data is obtained from a variety of scientific, academic, and professional organizations, private consulting firms, and knowledgeable individuals, and entered into the inventory as expeditiously as possible. 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

[7]"Take" as defined by the federal Endangered Species Act (ESA) means "to harass, harm, pursue, hunt, shoot, would, kill, trap, capture, or collect" a threatened or endangered species. "Harm" is further defined by the USFWS to include the killing or harming of wildlife due to significant obstruction of essential behavior patterns (i.e. breeding, feeding, or sheltering) through significant habitat modifications or degradation. The CDFW also considers the loss of listed species habitat as "take", although this policy lacks statutory authority and case law support under the California Endangered Species Act (CESA).

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 CNDDB 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.

For the purposes of this background report, special-status species are defined as follows:

- Species that are listed, formally proposed, or designated as candidates for listing as threatened or endangered under the federal Endangered Species Act (ESA).
- Species that are listed, or designated as candidates for listing, as rare, threatened, or endangered under the California Endangered Species Act (CESA).
- Plant species with a Rank of 1A, 1B and 2 in the CNPS *Inventory of Rare and Endangered Plants*.
- Animal species designated as "Species of Special Concern" or "Fully Protected" by the CDFW.
- Species that meet the definition of rare, threatened, or endangered under Section 15380 of the CEQA guidelines; or
- Species considered to be a taxon of special concern by the relevant local agencies.

Special-Status Plants

Review of the CNDDB, IPac resource list, and CNPS occurrence records indicate a total of 23 special-status plant species that have been reported from or in the vicinity of the General Plan Planning Area. These special- status plant species are listed in Table 5-3, together with information on their status, description of typical habitat characteristics, and normal flowering season. Of these 23 species, a total of nine have actually been reported by the CNDDB in or near the General Plan Planning Area, as indicated in Figure 5-2. These consist of San Joaquin spearscale (*Atriplex joaquiniana*),Hairless popcorn flower (*plagiobothrys glaber*), Alkali milk-vetch (*astragalus tener*), saline clover (*trifolium hydrophilum*), Pinnacles buckwheat (*Eriogonum nortonii*), western Heermann's buckwheat (*Eriogonum heermannii* var. *occidentale*), Indian valley bush-mallow (malacothamnus aborignum), Pajaro manzanita (*Arctostaphylos pajaroensis*), and Hoover's button-celery (*Eryngium aristulatum* var.

TABLE 5-3 SPECIAL-STATUS SPECIES KNOWN OR SUSPECTED FROM THE PLANNING AREA

Scientific Name	Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Habitat
Plants					
Arctostaphylos gabilanensis	Gabilan Mountains manzanita	—	—	1B.2	Granitic substrate in chaparral and cismontane woodland. Elev: 984–2,297 feet (300–700 m). Blooms: January.
Arctostaphylos pajaroensis	Pajaro manzanita	—	—	1B.1	Sandy soils in chaparral. Elev: 98–2,493 feet (30–760 m). Blooms: December–March.
Arenaria paludicola	Marsh sandwort	FE	SE	1B.1	Sandy openings in freshwater or brackish marshes and swamps. Elev: 10–558 feet (3–170 m). Blooms: May–August.
Astragalus tener var. tener	Alkali milk-vetch	—	—	1B.2	Alkaline soils. Playas, valley & foothill grassland (adobe clay), and vernal pools. Elev: 3–197 feet (1–60 m). Blooms: March–June.
Atriplex joaquiniana	San Joaquin spearscale	—	—	1B.2	Alkaline chenopod scrub, meadows, seeps, playas, and valley and foothill grasslands. Elev: 3–2,739 feet (1–835 m). Blooms: April–October.
California macrophylla	Round-leaved filaree	—	—	1B.1	Clay soils in cismontane woodland and valley and foothill grasslands. Elev: 49 – 3,937 feet (15–1,200 m). Blooms: March–May.
Castilleja rubicundula var. rubicundula	Pink creamsacs	—	—	1B.1	Serpentinite soils of chaparral opening, cismontane woodlands, meadows, seeps, and valley and foothill grasslands. Elev: 66–2,986 feet (20–910 m). Blooms: April–June.
Centromadia parryi ssp. congdonii	Congdon's tarplant	—	—	1B.1	Alkaline valley and foothill grasslands. Elev: 0–755 feet (0–230 m). Blooms: May–November.
Chorizanthe biloba var. immemora	Hernandez spineflower	—	—	1B.2	Chaparral and cismontane woodland. Elev: 1,969–2,625 feet (600–800 m). Blooms: May–September.
Chorizanthe pungens var. pungens	Monterey spineflower	FT	—	1B.2	Sandy soils in maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley/foothill grasslands. Elev: 10–1,476 feet (3–450 m). Blooms: April–August.
Eriogonum heermannii var. occidentale	Western Heermann's buckwheat	—	—	1B.2	Often serpentine soils. Typically roadsides, alluvium floodplains; more rarely, clay or shale slopes. Found in openings in cismontane woodlands. Elev: 345–2,608 feet (105–795 m). Blooms: July–October.
Eriogonum nortonii	Pinnacles buckwheat	—	—	1B.3	Sandy soils, often on recent burns, in chaparral, and valley and foothill grasslands. Elev: 984–3,199 feet (300– 975 m). Blooms: April–September.
Eryngium aristulatum var. hooveri	Hoover's button-celery	—	—	1B.1	Vernal pools. Elev: 10–148 feet (3–45 m). Blooms: July–August.
Extriplex joaquinana	San Joaquin spearscale	—	—	1B.2	Alkaline soils. Chenopod scrub, meadows and seeps, playas, valley and foothill grasslands. Elev: 3–2,740 feet (1–835 m). Blooms: April–October.
Fritillaria liliaceae	Fragrant fritillary	—	—	1B.2	Serpentinite soils in cismontane woodland, coastal prairie, coastal scrub, valley & foothill grassland. Elev: 10– 1,345 feet (3–410 m). Blooms: February– April.

KEY

Federal & State Status
(FC) FEDERAL CANDIDATE
(FD) FEDERALLY DELISTED
(FE) FEDERAL ENDANGERED
(FP) FULLY PROTECTED
(FT) FEDERAL THREATENED
(PT) PROPOSED THREATENED
(SCT) STATE CANDIDATE THREATENED
(SE) STATE ENDANGERED
(SR) STATE RARE
(SSC) STATE SPECIES OF SPECIAL CONCERN
(ST) STATE THREATENED
(X) FEDERALLY DESIGNATED CRITICAL HABITAT

CNPS Rare Plant Rank
RARENESS RANKS
(1A) PRESUMED EXTINCT IN CALIFORNIA
(1B) RARE, THREATENED, OR ENDANGERED IN CALIFORNIA AND ELSEWHERE
(2B) RARE, THREATENED, OR ENDANGERED IN CALIFORNIA, BUT MORE COMMON ELSEWHERE
THREAT RANKS
(0.1) SERIOUSLY THREATENED IN CALIFORNIA
(0.2) FAIRLY THREATENED IN CALIFORNIA
(0.3) NOT VERY THREATENED IN CALIFORNIA

(SCE) STATE CANDIDATE ENDANGERED

The exact locations of most of these occurrences are unknown because of the vague descriptions and date of the historic records, so these are mapped as relatively broad occurrences within the General Plan Planning Area in Figure 5-2. Existing development limits the likelihood of continued occurrences of any populations of special-status plant species on the valley floor within the SOI, with the possible exception of riparian and wetland-dependent species that may occur along San Benito River corridor and other major drainages, or species associated with seasonal wetlands and native grasslands where suitable habitat remains. Many of the special-status plant occurrences in the General Plan Planning Area are vulnerable to off-road vehicle use, disturbance associated with fire and fuel reduction activities, competition with invasive species, and other threats. There remains a possibility that additional populations of one or more species occurs on the remaining undeveloped lands in the General Plan Planning Area. Detailed surveys would be required to provide confirmation on presence or absence from undeveloped portions of the General Plan Planning Area where thorough studies have not been conducted.

Special-Status Animals

Based on a review of the CNDDB, the IPac resource list, and other sources, a total of 40 special-status animal species are known or suspected to potentially occur in the vicinity of Hollister. These special-status animal species are listed in Table 5-4, together with information on their status, and description of typical habitat characteristics. As indicated in Figure 5-3, a total of 17 of these special-status animal species have been reported by the CNDDB within or near the General Plan Planning Area. Critical habitat has been designed by the USFWS for California tiger salamander (*Ambystoma californiense*) in the eastern foothills and for California red-legged frog (*Rana draytonii*) in the southern and southwestern foothills, as indicated in Figure 5-3.

Many of the special-status animal species listed in Table 5-4 may occasionally pass through or forage in the Hollister vicinity, but are not known or believe to breed in the General Plan Planning Area. These include: steelhead (*Oncorhynchus mykiss irideus*), golden eagle (*Aquila chrysaetos*), Swainson's hawk (*Buteo swainsoni*), prairie falcon (*Falco mexicanus*), American peregrine falcon (*Falco peregrinus anatum*), merlin (*Falco columbarius*), California condor (*Gymnogyps californianus*), mountain plover (*Charadrius montanus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), bald eagle (*Haliaeetus leucocephalus*), and western red bat (*Lasiurus blossevillii*). It should also be noted that most of the species listed in Table 5-4 without State and/or federal listing status are not closely monitored by the CNDDB and therefore occurrence records are typically not included in the data base. These include most of the numerous species identified as "Species of Special Concern" by the CDFW.

TABLE 5-4 SPECIAL-STATUS ANIMAL SPECIES KNOWN OR SUSPECTED FROM THE PLANNING AREA

Scientific Name	Common Name	Federal Status	State Status	Habitat
Invertebrates				
Branchinecta lynchi	Vernal pool fairy shrimp	FT	—	Found in vernal pools and ephemeral wetlands. Distributed throughout the Central Valley and suitable habitat in Bay Area and Coast ranges.
Optioservus canus	Pinnacles optioservus riffle beetle	—	—	Small beetle occurring in flowing streams and rivers. Endemic to Pinnacles and surrounding areas.
Fish				
Lavinia exilicauda	Sacramento hitch	—	SSC	Found in warm lowland waters with side pools and riffles. Spawning occurs in gravel riffles of streams which are tributaries to larger waters such as lakes, rivers, and sloughs.
Oncorhynchus mykiss irideus	Steelhead, south/central California coast	FT	—	Anadromous species found in accessible rivers and streams of central coast for spawning and returns to ocean as young adult.
Amphibians				
Ambystoma californiense	California tiger salamander, central population	FT/X	ST	Occurs in grasslands of the Central Valley and oak savannah communities in the Central Valley, the Sierra Nevada and Coast ranges, and the San Francisco Bay area. Needs seasonal or semi-permanent wetlands to reproduce, and terrestrial habitat with active ground squirrel or gopher burrows.
Rana draytonii	California red-legged frog	FT/X	SSC	Found mainly near ponds in riparian woodlands, grasslands, coastal scrub, and streamsides with emergent vegetation. Most common in lowlands or foothills. Frequently found in woodlands adjacent to streams. Breeding habitat is in permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Ephemeral wetland habitats require animal burrows or other moist refuges for estivation when the wetlands are dry.
Spea hammondii	Western spadefoot	—	SSC	Occurs in open areas with sandy or gravelly soils, in a variety of habitats ranging from grasslands and woodlands to floodplains, alluvial fans, and alkali flats. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.
Taricha torosa	Coast Range newt	—	SSC	Found in wet forests, oak forests, chaparral, and rolling grasslands. In Southern California, drier chaparral, oak woodland, and grassland are used.
Reptiles				
Anniella pulchra	Silvery legless lizard	—	SSC	Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodland, desert scrub, sandy washes, and stream terraces.
Emys marmorata	Western pond turtle	—	SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking.
Gambelia sila	Blunt-nosed leopard lizard	FE	SE	Occurs in grasslands, alkali flats, and washes. Flat areas with open space for running, avoids densely vegetated areas. Uses mammal dens and burrows for cover.
Masticophis flagellum ruddocki	San Joaquin coachwhip	—	SSC	Occurs in open, dry, treeless areas, including grassland and saltbush scrub. Takes refuge in rodent burrows, under shaded vegetation, and under surface objects.

TABLE 5-4 SPECIAL-STATUS ANIMAL SPECIES KNOWN OR SUSPECTED FROM THE PLANNING AREA

Scientific Name	Common Name	Federal Status	State Status	Habitat
Phrynosoma blainvilli	Coast horned lizard	—	SSC	Occurs in valley-foothill hardwood, conifer, and riparian habitats, as well as in pine- cypress, juniper, and annual grassland habitats.
Birds				
Agelaius tricolor	Tricolored blackbird	—	ST,SSC	Nests in wetlands or in dense vegetation near open water. Dominant nesting substrates: cattails, bulrushes, blackberry, agricultural silage. Nesting substrate must either be flooded, spinous, or in some way defended against predators.
Aquila chrysaetos	Golden eagle	—	FP, WL	Uncommon resident and migrant throughout California, except center of Central Valley. Habitat typically rolling foothills, mountains, sage-juniper flats, and desert.
Athene cunicularia	Western burrowing owl	—	SSC	Occurs in grasslands, open scrub, desert, agricultural fields and vacant land with open, flat expanses, short/sparse vegetation and few shrubs, level to gentle topography and well-drained soils. Requires underground burrows or cavities for nesting and roosting, but also uses rock cavities, debris piles, pipes and culverts.
Accipiter cooperii	Cooper's hawk	—	WL	Forages in habitat fringes and patchy woodlands. Occurs in dense stands of oak, riparian, and other forested areas near water. Breeds in dense stands of oak woodland or riparian.
Buteo swainsoni	Swainson's hawk	—	ST	Nests in stands with few trees in riparian areas, juniper-sage flats, and oak savannah in the Central Valley. Forages in adjacent grasslands, agricultural fields, and pastures.
Charadrius montanus	Mountain plover	—	SSC	Frequents open plains with low, herbaceous or scattered shrub vegetation.
Circus hudsonius	Northern harrier	—	SSC	Widespread in open grasslands, marshes and agricultural fields with low, thick vegetation. During winter uses a range of habitats with low vegetation, including deserts, pasturelands, croplands, grasslands, and ruderal fields.
Coccyzus americanus occidentalis	Western yellow-billed cuckoo	PT	SE	Requires large, dense tracts of riparian woodland with well-developed understories. Occurs in deciduous trees or shrubs. Restricted to moist habitats along slow-moving waterways during breeding season.
Elanus leucurus	White-tailed kite	—	FP	Found in wide variety of open habitats, including open oak savanna, grasslands, desert grassland, agricultural fields and marshes. Requires trees for perching and nesting, and open ground with high prey populations.
Empidonax traillii extimus	Southwestern willow flycatcher	FE	SE	Dense riparian forest and scrub habitats associated with rivers, swamps, wetlands, lakes, and reservoirs.
Eremophilia alpestris actia	California horned lark	—	WL	Found often in treeless areas such as grasslands and sparsely vegetated open areas. Sea level to alpine dwarf-scrub habitat. Forages along the ground for small prey and forbs.
Falco columbarius	Merlin	—	WL	Occurs in California during winter from September to May. Found along coastlines, grasslands, savannahs, woodlands, lakes, wetlands, and habitat fringes. Often in open habitats at low elevations near water and tree. Does not breed in California.
Falco mexicanus	Prairie falcon	—	WL	Ranges from Central Valley, Sierra Nevada, and Coast Ranges to southeastern deserts. Most commonly found in perennial grasslands, savannahs, rangeland, agricultural fields, and desert scrub. Forages in open areas and uses nearby cliff ledges, canyons or outcrops for cover and nesting.
Gymnogyps californianus	California condor	FE	SE, FP	Chaparral, coniferous forest and oak savannah in Southern and Central California. Nests in cliff cavities, large rock outcrops, or large trees. Roosts on large cliffs or trees near feeding areas.

TABLE 5-4 SPECIAL-STATUS ANIMAL SPECIES KNOWN OR SUSPECTED FROM THE PLANNING AREA

Scientific Name	Common Name	Federal Status	State Status	Habitat
Haliaeetus leucocephalus	Bald eagle	FD	SE/FP	Requires large bodies of water or rivers with abundant fish, and adjacent snags and trees with open branch structure for nesting.
Icteria virens	Yellow-breasted chat	—	SSC	Nests in early-successional riparian habitats with a well-developed shrub layer and an open canopy. Restricted to narrow border of streams, creeks, sloughs, and rivers. Often nest in dense thicket plants such as blackberry and willow.
Lanius ludovicianus	Loggerhead shrike	—	SSC	Breeds in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground.
Riparia riparia	Bank swallow	—	ST	Found along riparian areas with sandy, vertical bluffs or riverbanks for nesting burrows. Also nests on banks and stockpiles in sand and gravel pits.
Setophaga petechia	Yellow warbler	—	SSC	Occurs in riparian vegetation along streams and in wet meadows. Willow cover and Oregon ash important predictors of abundance in Northern California.
Vireo bellii pusillus	Least Bell's vireo	FE	SE	Obligate riparian breeder found along watercourses with cottonwood, willow, oak woodlands, and scrub cover.
Mammals				
Antrozous pallidus	Pallid bat	—	SSC	Day roosts in caves, crevices, mines, and occasionally in hollow trees and buildings.
Corynorhinus townsendii	Townsend's big-eared bat	—	SCT/SCC	Typically roosts in caves but also in old mine tunnels and occasionally found in buildings.
Eumops perotis californicus	Western mastiff bat	—	SSC	Found in open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, desert scrub, and urban areas. Roosts in crevices on vertical cliff faces, high buildings, trees, and tunnels.
Lasiurus blossevillii	Western red bat	—	SSC	Roosting habitat includes forests and woodlands, often in edge habitats adjacent to streams, fields, or urban areas.
Neotoma fuscipes annectens	San Francisco dusky- footed woodrat	—	SSC	Found in grassland, scrub, and wooded areas with evergreen or live oaks and other thick-leaved trees and shrubs.
Taxidea taxus	American badger	—	SSC	Occurs in grasslands, open shrub, and forests cover with friable soils. Associated with treeless regions, prairies, parklands, and cold desert areas.
Vulpes macrotis mutica	San Joaquin kit fox	FE	ST	Occurs in grasslands and desert-like habitats characterized by sparse or absent shrub cover, sparse ground cover, and short vegetative structure. Areas having open, level, sandy ground necessary for dens.

KEY

Federal & State Status

(FC) FEDERAL CANDIDATE
(FD) FEDERALLY DELISTED
(FE) FEDERAL ENDANGERED
(FP) FULLY PROTECTED
(FT) FEDERAL THREATENED
(PT) PROPOSED THREATENED
(SCE) STATE CANDIDATE ENDANGERED
(SCT) STATE CANDIDATE THREATENED
(SE) STATE ENDANGERED
(SR) STATE RARE
(SSC) STATE SPECIES OF SPECIAL CONCERN
(ST) STATE THREATENED
(WL) CDFW WATCH LIST
(X) FEDERALLY DESIGNATED CRITICAL HABITAT

Special-status animal species known from the General Plan Planning Area and of greatest concern from a planning standpoint because of their status or distribution are discussed in further detail below.

California Tiger Salamander (State and Federally Threatened). California tiger salamander occurs in grassland and savanna habitat, breeding in vernal pools and swales, seasonal drainages, and man-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. The migratory behavior of this species presents challenges when attempting to define occupied habitat for known populations or the effects of proposed development.

California tiger salamander have been reported from the periphery of the development core of Hollister, including the eastern hills, the plains along the San Benito River corridor, and even the vicinity of the Hollister airport. The USFWS has designated the hillsides in the eastern hills, generally east of Fairview Road, as Critical Habitat, as indicated in Figure 5-3.

California Red-Legged Frog (Federally Threatened). California red-legged frog has been extirpated or nearly extirpated from 70 percent of its former range. Population declines of this species have been attributed to a variety of factors, with habitat loss and predation by non-native Aquatic predators (e.g., bullfrogs, crayfish, other non-native fishes) typically implicated as the primary factors. California red-legged frogs occur in and along freshwater marshes, streams, ponds, and other semi-permanent water sources. Optimal habitat contains dense emergent or shoreline riparian vegetation closely associated with deep (i.e., greater than 2.3 feet), still, or slow-moving water. Cattails, bulrushes, and willows provide the habitat structure that seems to be most suitable for California red-legged frogs. Although the species can occur in intermittent streams and ponds, they are unlikely to persist in streams in which all surface water disappears. Suitable breeding ponds and pools usually have a minimum depth of 20 inches, but California red-legged frogs do sometimes breed successfully in pools as shallow as 10 inches.[8] Regardless of water depth, suitable breeding habitat must contain water during the entire development period for eggs and tadpoles. Reproduction for red-legged frogs is also sensitive to salinity levels in the water.

According to the CNDDB records, occurrences of California red-legged frogs have been reported within the General Plan Planning Area along the San Benito River, Santa Ana Creek, and drainages with suitable habitat in the eastern and southwestern hills. Suitable habitat remains in other locations with freshwater bodies where predatory species haven't precluded their occupation. Designated critical habitat for this species occurs in the southern and southwestern portion of the General Plan Planning Area, extending south of Tres Pinos through the Gabilan Mountains, as indicated in Figure 5-3.

[8] Fellers, G.M., 2005. *California red-legged frog*. *In* M. Lannoo, editor. Amphibian Declines: The Conservation Status of Unites States Species.

Western Pond Turtle (California Species of Special Concern). Western pond turtles occur in a wide variety of aquatic habitats, including ponds, lakes, marshes, rivers, streams, and canals that typically have a rocky or muddy bottom and contain stands of aquatic vegetation. The presence or absence of pond turtles at a given aquatic site is largely dependent on the availability of suitable basking sites and adjacent upland habitat for egg-laying (e.g., sandy banks or grassy open fields) and over-wintering. Nests are typically dug in dry substrate with a high clay or silt fraction since the female moistens the site where she will excavate the nest prior to egg-laying. Hatchlings require shallow water habitat with relatively dense submergent or short emergent vegetation in which to forage. Western pond turtles have been reported from scattered locations with suitable habitat in the General Plan Planning Area, as indicated in Figure 5-3. Other freshwater bodies and drainages with deep pools may provide suitable habitat for this species.

Western Spadefoot Toad (California Species of Special Concern). This nocturnally active toad is generally associated with seasonal pools in grasslands or open mixed woodlands where temporary pools form, or in washes or temporary streams with sandy or gravelly substrate. For most of the year, they live in burrows that they dig with their hind feet. They depend on heavy rainfall during the winter and early spring where water ponds and creates suitable habitat conditions for breeding and metamorphosis of young. As indicated in Figure 5-3, numerous occurrences of this species are found in the eastern hills of the General Plan Planning Area, in similar habitat known to support California tiger salamander.

Bank Swallow (State Threatened). Bank swallow is a migrant species found primarily in riparian and other lowland habitat of California, arriving from South America in early April and leaving by mid-September. Typically a colonial breeder, this species requires vertical banks and cliffs with fine-textured or sandy soils along stream banks, rivers, ponds, and other bodies of water for nesting, where it excavates a hole for breeding. Although it generally nests along exposed channel banks, stockpiled or exposed topsoil in gravel mines and even trenches have been used for nesting. It is known to colonize the vertical faces of trenches within one day of excavation. This species was once believed to be more common as a breeder in California, but now only a few larger colonies remain. As indicated in Figure 5-3, the CNDDB reports an occurrence of this species along San Benito River in the western portion of the General Plan Planning Area.

Northern Harrier (California Species of Special Concern). Northern harriers are widespread in California, although they have become uncommon in the southern part of the State. Their preferred habitats are freshwater wetlands and saltmarshes, although they are also commonly found over grasslands and agricultural fields. Harriers breed from mid-March to September, building their nests on the ground and in low vegetation. Suitable foraging habitat for northern harriers are present in the remaining grasslands and open croplands in the General Plan Planning Area, although nesting opportunities are limited because of the presence of humans and generally limited nesting areas along field margins.

Tricolored Blackbird (State Threatened and California Species of Special Concern). Tricolored blackbirds were once widespread in marshes and agricultural fields in the Central Valley and valleys of the inner Coast Range, but numbers have diminished in recent years. They usually nest in cattails or tules, sometimes in thickets of willow, blackberry and other riparian habitat near available surface water. Due to the absence of well-developed marshland vegetation, suitable nesting habitat is generally absent in most of the General Plan Planning Area. However, several occurrences of tricolored blackbird have been reported by the CNDDB along the San Benito River corridor, as indicated in Figure 5-3.

Western Burrowing Owl (California Species of Special Concern). Western burrowing owl inhabits open grasslands and shrublands that have perches and burrows. These owls eat mainly insects, with small mammals and birds also making up a portion of their diet. The owls use old rodent burrows, particularly California ground squirrel burrows, for cover and breeding. They are also known to utilize pipes, debris piles and other man-made structures for retreat and nesting. As indicated in Figure 5-3, this species has been reported by the CNDDB from the open grasslands in the eastern hillsides and agricultural fields in the General Plan Planning Area.

White-tailed Kite (California Fully Protected Species). Most white-tailed kites in California occur west of the Sierra Nevada in lowlands and foothills, where they are often seen year-round. This species tends to nest in solitary trees and large shrubs located near suitable foraging habitat such as grasslands, marshes, and agricultural fields. Preferred prey items include California voles and mice.

The grasslands and open croplands in the General Plan Planning Area provide foraging habitat for white-tailed kites, where scattered trees and large shrubs are present in the vicinity to provide suitable perching and nesting locations. Nests of white-tailed kite in active use are fully-protected by the CDFW from any disturbance. Nests of native birds, including raptors such as white-tailed kite, are protected under the federal Migratory Bird Treaty Act and State Fish and Game code (see Regulatory Framework below).

American Badger (California Special Status Species). American badger is usually found in open, dry country of western North America. This predator species relies on ground dwelling rodents such as California ground squirrel, voles and pocket gopher as its primary prey source, and will excavate burrows to capture prey. The rolling grasslands in the eastern, southern and southwestern portions of the General Plan Planning Area provide suitable habitat for this species, and several occurrences have been reported by the CNDDB from these locals as indicated in Figure 5-3.

San Joaquin Kit Fox (State Threatened and Federally Endangered). San Joaquin kit fox occurs in annual grasslands and alkali scrub communities with suitable prey base and loose-textured sandy soils where dens can be enlarged from California ground squirrel burrows. This species was once widely distributed throughout the native grasslands that formerly occupied the low rolling hills around the San Joaquin, Salinas, Santa Clara and San Benito Valleys. Agricultural operations and more recently, urban development, have eliminated or fragmented their habitat, resulting in a substantial decline in numbers.

Suitable foraging habitat occurs in the hillsides around the perimeter of the General Plan Planning Area, particularly where ground squirrels are abundant. As indicated in Figure 5-3, the CNDDB records include occurrences of this subspecies in the southwestern, southeastern, and eastern margins of the General Plan Planning Area where development remains sparse. Ground squirrel burrows with openings of at least four inches are typically considered potential dens for kit fox by the USFWS in areas occupied by San Joaquin kit fox.

5.2.1.3 Sensitive Habitats

Sensitive natural communities and jurisdictional waters are described below.

Sensitive Natural Communities

The CDFW tracks the occurrences of "special" plant communities that are either known or believed to be of high priority for inventory in the CNDDB. These plant communities are listed in the CDFW publication *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database*.[9] These communities are sometimes addressed by lead or trustee agencies in CEQA documents, but generally are not afforded the same protection as CNPS Rank 1B and 2 plant species. Many sensitive natural community types support special-status plants and animals and are addressed under CEQA as essential habitat for those species.

Sensitive natural community types in the General Plan Planning Area include remnant native grasslands, wetlands, and possibly some areas with forest and scrub cover. The vegetated wetland types (Emergent and Forested/Scrub) shown in Figure 5-4 are most likely considered sensitive natural community types associated with waters regulated by State and federal agencies (see Regulatory Setting below). These include emergent marshland, willow scrub, and well-developed stands or riparian woodland along the San Benito River, segments of Santa Ana Creek, and some reaches of tributary drainages.

Based on the *Manual of California Vegetation*[10] classification system and latest list of terrestrial natural communities prepared by CDFW, sensitive natural community types known from or suspected to occur in the General Plan Planning Area include several associations of Black Oak Forests and Woodlands, California Bay Forests and Woodlands, California Buckeye Woodlands, several associations of Coyote Brush Scrub, freshwater marsh, freshwater seeps and springs, and numerous alliances of native grasslands. Occurrences of these sensitive natural community types may be present within the remaining woodland, forest, and grasslands in the General Plan Planning Area, but have not been mapped as part of the Vegetation Classification and Mapping Program (VegCAMP) of the CDFW or other regional mapping efforts. Detailed surveys would be required to provide confirmation on presence or absence of any sensitive natural community types from undeveloped portions of the General Plan Planning Area where thorough studies have not been conducted.

Jurisdictional Waters

Although definitions vary to some degree, in general, wetlands are considered 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 floodwaters, and water recharge, filtration, and purification functions. The U.S. Army Corps of Engineers (Corps) and the USFWS developed

[9] California Department of Fish and Game, 2003. *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Data Base*. Wildlife and Habitat Data Analysis Branch, Vegetation Classification and Mapping Program, California Department of Fish and Game, Sacramento, last updated in November 2019.

[10] Sawyer, J.O. and T. Keeler-Wolf. 1995. *A Manual of California Vegetation*. California Native Plant Society, Sacramento.

technical standards for delineating wetlands that generally define wetlands through consideration of three criteria: hydrology, soils, and vegetation.

A formal jurisdictional delineation of wetlands and other waters of the U.S. and State was not conducted for the General Plan Planning Area as part of this Background Report. However, based on information available from the NWI, numerous features can be assumed to fall under jurisdiction of the Corps and the Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to Sections 401 and 404 of the federal Clean Water Act and as state waters regulated by the RWQCB under the Porter-Cologne Water Quality Control Act. Creeks and lakes are also regulated by the CDFW pursuant to Section 1600 of the California Fish and Wildlife Code, with jurisdiction extending to the top of bank or the outer dripline of riparian vegetation along these features, whichever is greater.

As indicated in Figure 5-4, features within the General Plan Planning Area that would be considered wetlands or other waters of the U.S. by the Corps include: the San Benito River corridor, Santa Ana Creek, and numerous smaller tributary drainages. Additional jurisdictional other waters of the U.S. and wetlands maybe be present elsewhere in the General Plan Planning Area, but detailed site-specific assessments would be required to confirm presence or absence from undeveloped lands. As discussed under the Regulatory Setting below, the Corps, RWQCB and CDFW generally exercise authority over these various wetland habitat types.

A detailed wetland delineation and verification by the Corps would be required to determine the extent of jurisdictional wetlands on sites where modifications are proposed. Federally regulated waters along the San Benito River and tributary drainages in the General Plan Planning Area (see Figure 5-4) are generally defined by the "Ordinary High Water Mark" rather than the band of any adjacent riparian vegetation, limiting Corps jurisdiction where dense willow riparian scrub and forest extend a considerable distance from the channel bank. However, the limits of State waters regulated by CDFW and RWQCB typically encompass both the bed and bank of a drainageway, as well as the limits of the associated riparian vegetation where it extends beyond the top of bank, and both agencies typically request that an adequate setback be provided to avoid both direct and indirect impacts on riparian corridors as part of environmental review for specific development plans.

5.3 IMPLICATIONS FOR THE GENERAL PLAN UPDATE

The 2005 Hollister General Plan serves as the principal planning document regulating development and providing for conservation of important resources on a local level. The Hollister General Plan Update provides an opportunity to reevaluate the current policies and associated programs and determine any additional goals and policies necessary to provide a framework to adequately identify, protect, and manage natural resources within the General Plan Planning Area. Based on information contained in this chapter, the General Plan Update process should address the following issues:

- Protect mature trees and other native vegetation, particularly along riparian corridors and in stands of native woodlands.
- Further control the eradication of non-native invasive species where they compromise native habitat values.

- Require site-specific assessments or sensitive habitats and species on development sites before development is approved.
- Limit development in areas designated as Critical Habitat for California tiger salamander and California red-legged frog.

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