

8.0

BIOLOGICAL RESOURCES

This chapter provides an evaluation of the potential biological effects of implementing the proposed 2035 San Benito County General Plan (2035 General Plan). As established in the Notice of Preparation for the proposed 2035 General Plan (see [Appendix A, Notice of Preparation](#)), urban development and other activities resulting from implementation of the 2035 General Plan may result in degradation of the biological environment. The following environmental assessment includes a review of biological resources potentially affected by the implementation of the 2035 General Plan, including sensitive habitats, special-status species, and wildlife corridors. Potential impacts related to biological resources were determined by comparing potential project scenarios to the existing environment using thresholds adopted by local and other agencies. These were then compiled and analyzed based on California Environmental Quality Act (CEQA) assessment criteria.

In this chapter, the County's biological resources and potential impacts on them from development under the 2035 General Plan are described at a program level. The impact analysis is quantitative where data is reasonably available and (otherwise) qualitative. It is not site-specific because of the wide geographical area covered. This impact analysis assumes that biological resources would be affected directly or indirectly by development under the 2035 General Plan. In addition to the programmatic level of review provided for herein, it is anticipated that as part of subsequent, project-specific environmental analysis, the County shall analyze impacts to biological resources at an appropriate level of detail, as required under Public Resources Code § 21000 *et seq.* and the CEQA Guidelines.

8.1 SETTING

The County's environmental and regulatory settings for biological resources described below are based on the General Plan Background Report (San Benito County 2010b). Pursuant to State

CEQA Guidelines §15150, this document is incorporated into the Revised Draft EIR (RDEIR) by reference as though fully set forth herein. Where necessary, information originating from the Report has been updated with the best available and most current data, as previously discussed in Section 4.3. The Report is available for download at: www.sanbenitogpu.com/docs.html. Copies of the Report may be viewed during standard business hours (8:00 a.m. to 12:00 p.m. and 1:00 p.m. to 5:00 p.m.), Monday through Thursday, at the San Benito County Planning and Building Department, 2301 Technology Parkway, Hollister, California 95023. County offices are closed to the public on Fridays.

8.1.1 Environmental Setting

Regional Setting

The County is topographically diverse, with mountains, rich agricultural valleys, and urban areas. Located in the Coastal Range, the westernmost tip of the County is within ten miles of the Monterey Bay, while its easternmost tip is approximately the same distance from the San Joaquin Valley. The San Andreas and Calaveras earthquake faults traverse the County from northwest to southeast and have helped define the valleys between the mountain ranges. Elevations range from 80 feet near Aromas in the northern part of the County to 5,241 feet at the Peak of San Benito Mountain (within the Diablo Range) in the south.

Approximately 98 percent of the County is unincorporated land, with 95 percent of that land designated as agricultural. Included in this designation are farmland, rangeland, forest, and protected open space. Approximately 79 percent of unincorporated land is in some form of public or private open space. The majority of the open space lands are in private ownership under Williamson Act Contract (64.5 percent), with the remainder in government ownership (13.2 percent). About 91 percent of government land in the County is federally-owned, the majority of which is located in the south and held by the Bureau of Land Management (BLM) or Pinnacles National Park. Major parks and open space within the County include, among others, Pinnacles National Park, which is managed by the National Park Service, Clear Creek Recreation Area, which is managed by the BLM, and Hollister Hills State Vehicular Recreation Area, which is managed by California State Parks. In addition, as of 2010, the San Benito Agricultural Land Trust ensures the permanent protection of approximately 5,454 acres of working ranches and farms. The Land Trust achieves this objective by entering into conservation easements to landowners to protect the agricultural and open space uses of the land.

Unique within the County is the Panoche Valley, which contains habitat characteristic of the San Joaquin Valley and supports the suite of special-status species associated with the San Joaquin Valley, including San Joaquin kit fox (*Vulpes macrotis mutica*), giant kangaroo rat

(*Dipodomys ingens*), blunt-nosed leopard lizard (*Gambelia silus*), and San Joaquin woolly-threads (*Monolopia congdonii*). The Panoche Valley lacks urban services (water, sewer) and development is minimal.

Wildlife Habitats

Wildlife habitats provide food, shelter, movement corridors, and breeding opportunities for wildlife species. They are classified in general terms, with an emphasis on vegetation structure, vegetation species composition, soil structure, and water availability. The County contains mostly natural habitats with limited urban areas. The majority of the County is annual grassland, which includes rangeland and pasture, or tree-dominated habitats such as blue oak-foothill pine and coastal oak woodland. Other habitats include shrub-dominated habitats such as chaparral and coastal scrub, and aquatic habitats (see [Figure 8-1](#) and [Table 8-1](#)).

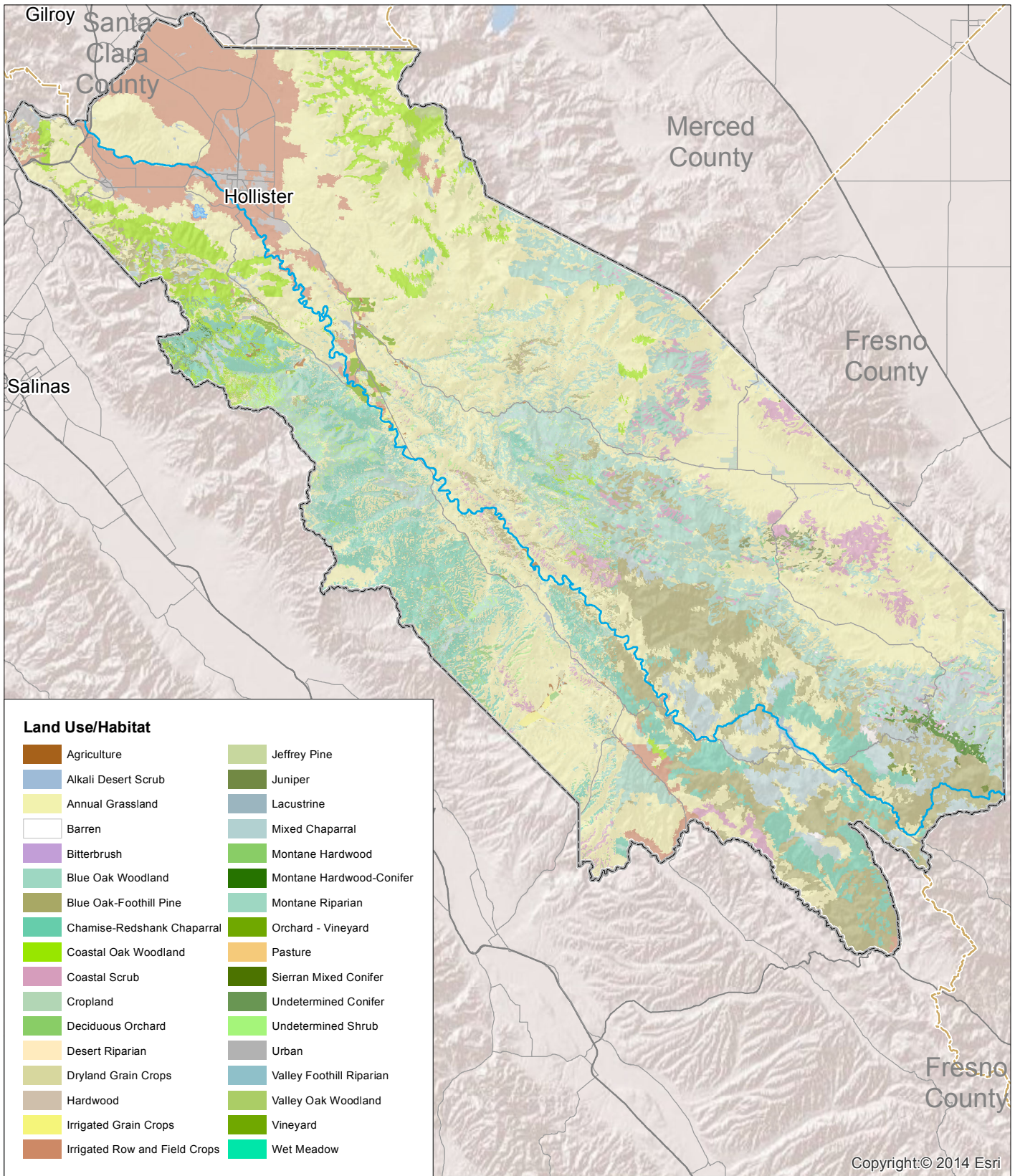
Table 8-1 Habitats Found in San Benito County

Land Use/Habitat	Unincorporated Acres (Approx.)	Incorporated Acres (Approx.)	Total County Acres (Approx.)	Percent of Total (Approx.)
Agriculture	1,135	0	1,135	0.13%
Annual Grassland	416,536	1	416,537	46.84%
Alkali Desert Scrub	238	0	238	0.03%
Barren	1,742	0	1,742	0.20%
Bitterbrush	45	0	45	0.01%
Blue Oak-Foothill Pine	84,583	0	84,583	9.51%
Blue Oak Woodland	116,413	0	116,413	13.09%
Coastal Oak Woodland	39,317	0	39,317	4.42%
Chamise-Redshank Chaparral	70,809	0	70,809	7.96%
Coastal Scrub	22,214	0	22,214	2.50%
Cropland	528	0	528	0.06%
Deciduous Orchard	371	0	371	0.04%
Desert Riparian	66	0	66	0.01%
Dryland Grain Crops	911	0	911	0.10%
Hardwood	25	0	25	0.00%

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Land Use/Habitat	Unincorporated Acres (Approx.)	Incorporated Acres (Approx.)	Total County Acres (Approx.)	Percent of Total (Approx.)
Irrigated Grain Crops	1,873	0	1,873	0.21%
Irrigated Row and Field Crops	61,071	2,161	63,232	7.11%
Jeffrey Pine	9	0	9	0.00%
Juniper	1,400	0	1,400	0.16%
Lacustrine	1653	19	1,672	0.19%
Mixed Chaparral	39,351	0	39,351	4.42%
Montane Hardwood-Conifer	2,098	0	2,098	0.24%
Montane Hardwood	1,995	0	1,995	0.22%
Montane Riparian	214	0	214	0.02%
Orchard - Vineyard	146	0	146	0.02%
Sierran Mixed Conifer	682	0	682	0.08%
Urban	4045	2934	6,979	0.78%
Valley Oak Woodland	3,197	0	3,197	0.36%
Valley Foothill Riparian	81	0	81	0.01%
Water	145	0	145	0.02%
Vineyard	3,105	0	3,105	0.35%
Unknown Shrub Type	6,874	0	6,874	0.77%
Unknown Conifer Type	1,322	0	1,322	0.15%
Pasture	32	0	32	0.00%
Wet Meadow	16	0	16	0.00%
Total	884,242	5,115	889,357	100.00%

Source: CALFIRE 2014, CALVEG 2006.



Source: CALFIRE 2014, CALVEG 2006

Figure 8-1

Habitats in San Benito County

2035 San Benito County General Plan Revised DEIR



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Habitat for many wildlife species includes a mosaic of habitat types. More common wildlife species, such as red-shouldered hawk (*Buteo lineatus*), great-horned owl (*Bubo virginianus*), northern flicker (*Colaptes auratus*), raccoon (*Procyon lotor*), and western toad (*Bufo boreas*) frequently use more than one habitat type. They may use riparian habitat for breeding sites, resting sites, cover while moving from one area to another, or thermal cover, and range into open upland grasslands, scrub, or over open water to forage.

All of the habitat types found within the County, as classified in California Wildlife Habitats, are listed and briefly described below. The habitat spatial data are from the California Department of Forestry and Fire Protection's Multi-source Land Cover Data v2.

Tree-Dominated Habitats

Blue Oak-Foothill Pine. Blue oak (*Quercus douglasii*) and foothill pine (*Pinus sabiniana*) comprise the majority of the overstory along with coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), and California buckeye (*Aesculus californica*). Annual grasses and forbs typically comprise the understory. The blue oak-foothill pine woodland community is characteristic of sheltered valleys and north-facing sides of canyons and is found predominantly in the western and southern regions of the County. With temperatures lower than in the surrounding grasslands and chaparral, a wide variety of plant and animal species find shelter under this community's canopy. Shrubs commonly associated with this habitat are poison oak (*Toxicodendron diversilobum*), California laurel (*Umbellularia californica*), Pacific madrone (*Arbutus menziesii*), Ceanothus spp., and manzanita (*Arctostaphylos* spp.). Blue oak-foothill pine woodlands provide breeding habitats for a large variety of wildlife species. Many birds, including bewick's wren (*Thryomanes bewickii*), acorn woodpecker (*Melanerpes formicivorus*), American kestrel (*Falco sparverius*), California quail (*Callipepla californica*), red-shouldered hawk, and red-tailed hawk (*Buteo jamaicensis*) use oak communities for nesting, foraging, and shelter.

Other wildlife species that depend on oak woodlands for food and shelter include common gartersnake (*Thamnophis sirtalis*), western fence lizard (*Sceloporus occidentalis*), Virginia opossum (*Didelphis virginiana*), coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), and mountain lion (*Puma concolor*) among many others.

Coastal Oak Woodland. Typically, the overstory consists of deciduous and evergreen hardwoods mixed with scattered conifers. Coast live oak dominates the overstory with understory shrubs in the County such as California blackberry (*Rubus ursinus*), common snowberry (*Symphoricarpos albus*), toyon (*Heteromeles arbutifolia*), and herbaceous plants such as California polypody (*Polypodium californicum*), bracken fern (*Pteridium aquilinum* var. *pubescens*), and miner's lettuce (*Claytonia perfoliata*). In drier areas with the oaks more widely spaced, the understory may consist entirely of grassland species with a few shrubs. Where coast live oak woodlands intergrade with chaparral, species such as chamise (*Adenostoma fasciculatum*), chaparral currant (*Ribes malvaceum*), and ceanothus form the understory. When coast live oak intergrades with coastal scrub, sticky

monkeyflower (*Mimulus aurantiacus*), coyote brush (*Baccharis pilularis*), and California sagebrush (*Artemisia californica*), among other species, forms the understory. A wide variety of birds, including Western scrub-jay (*Aphelocoma californica*), oak titmouse (*Baeolophus inornatus*), white-breasted nuthatch (*Sitta carolinensis*), western bluebird (*Sialia mexicana*) and black-headed grosbeak (*Pheucticus melanocephalus*) use oak communities for nesting, foraging, and shelter. Other wildlife species that use oak woodlands include common garter snake, big brown bat (*Eptesicus fuscus*), deer mouse (*Peromyscus maniculatus*), striped skunk (*Mephitis mephitis*), bobcat (*Lynx rufus*), coyote, and mule deer, among many others.

Valley Oak Woodland. The overstory is made up of almost exclusively valley oaks. Other trees associated with valley oak woodland include California sycamore (*Platanus racemosa*), coast live oak, foothill pine, and blue oak. Typical shrubs found in this habitat include poison oak, blue elderberry (*Sambucus mexicana*), toyon, California coffeeberry, and California blackberry. The ground cover consists typically of wild oats, bromes, barley (*Hordeum spp.*), perennial ryegrass (*Lolium perenne*), and needlegrasses. Valley oak woodlands provide breeding habitat for a large variety of wildlife species, with common species similar to that described for coastal oak woodland habitat.

Blue Oak Woodland. Within these woodlands, blue oak is the dominant species, making up 85 to 100 percent of the trees present. Coast live oak is a common associate in the canopy. Typically, blue oak woodlands are made up of scattered trees although sometimes the canopy may be closed. The understory habitat generally is associated with California juniper (*Juniperus californica*), poison oak, California coffeeberry (*Rhamnus californica*), California buckeye, and manzanita species.

Ground cover is made up mainly of annuals, including bromes (*Bromus spp.*), wild oats (*Avena spp.*), purple needlegrass (*Nassella pulchra*), filaree (*Erodium spp.*), and others associated. Wildlife is similar to that found in coastal oak woodland habitat.

Montane Hardwood. Common associates found in the County include coast live oak, big leaf maple (*Acer macrophyllum*), Pacific madrone, tanoak (*Lithocarpus densiflorus*), canyon live oak (*Quercus chrysolepis*), foothill pine, coastal redwood (*Sequoia sempervirens*), and eucalyptus (*Eucalyptus globulus*). Characteristic species of montane hardwood and montane hardwood-conifer habitats include western scrub and Steller's (*Cyanocitta stelleri*) jays, acorn woodpecker, wild turkey (*Meleagris gallopavo*), dusky-footed woodrat (*Neotoma fuscipes*), mule deer, and California ground squirrel. Eucalyptus forms almost pure stands with little native overstory associates. Characteristic species of eucalyptus stands include American crow (*Corvus brachyrynchos*), common raven (*Corvus corax*), barn owl (*Tyto alba*), and red-tailed and red-shouldered hawks. Small vertebrate species found within these habitats include gopher snake (*Pituophis catenifer*) and dusky-footed woodrat.

Conifer. Conifer groups include Jeffrey pine, juniper, and sierran mixed conifer habitats. A portion of the conifer habitat is unique in the County as it contains the only known coexistence of the Coulter pine (*Pinus coulteri*), Jeffrey pine (*Pinus jeffreyi*), and incense cedar (*Calocedrus decurrens*) in the world. Typical conifers found in these habitats include these species as well as coastal redwood and ponderosa pine (*Pinus ponderosa*). Associated with these habitats are California black oak (*Quercus kelloggii*), black cottonwood (*Populus balsamifera ssp. trichocarpa*), manzanita, tanoak, big sagebrush (*Artemisia tridentata*), California buckwheat (*Eriogonum fasciculatum*), California wild rose (*Rosa californica*), ceanothus, lupines (*Lupinus spp.*), and needlegrass. The variety in plant species composition provides diversity in food and cover for a large number of species. Jeffrey pine seeds are included in the diet of more wildlife species than any other tree genus excluding oaks. The bark and foliage are important food sources for squirrels and mule deer.

Valley Foothill Riparian. Dominant species in the canopy layer are cottonwood, California sycamore, and valley oak. Subcanopy trees include white alder (*Alnus rhombifolia*), boxelder (*Acer negundo*), and red willow (*Salix laevigata*). Typical understory shrubs include wild rose, California blackberry, blue elderberry, poison oak, and willows (*Salix spp.*). The herbaceous layer, typically comprising only one percent of the overall cover, primarily consists of sedges (*Carex spp.*), rushes (*Juncus spp.*), miner's lettuce, poison hemlock (*Conium maculatum*), and stinging nettle (*Urtica dioica*). Valley foothill riparian habitats provide food, water, migration and dispersal corridors, and escape, nesting, and thermal cover for an abundance of wildlife. Several rare frog species including California red-legged frog (*Rana draytonii*) and foothill yellow-legged frog (*Rana boylei*) use this habitat.

Shrub-Dominated Habitats

Chamise-Redshank Chaparral. This habitat is dominated by nearly pure stands of chamise or red shank (*Adenostoma sparsifolium*), or a mixture of both. Common associates include toyon, sugar sumac (*Rhus ovate*), ceanothus, and California buckthorn (*Frangula californica*). This habitat is generally surrounded by mixed chaparral, annual grassland, blue oak-foothill pine, or ponderosa pine habitats. Wildlife species found in this habitat type also frequently occur in mixed chaparral and montane chaparral habitats. These species include black-tailed jackrabbit (*Lepus californicus*), California thrasher (*Toxostoma redivivum*), California towhee (*Pipilo crissalis*), and gopher snake.

Mixed Chaparral. This habitat type supports a wide variety of plant species. Composition changes with precipitation, aspect, and soil type. Species that are common in this habitat include several species of ceanothus and manzanita, chamise, ashy silk tassel (*Garrya flavescens*), toyon, yerba santa (*Eriodictyon californicum*), sumac, hollyleaf cherry (*Prunus ilicifolia*), and California fremontia (*Fremontodendron californicum*). Mixed chaparral habitats are formed in a matrix with chamise-redshank chaparral, annual grassland, and blue oak-foothill pine. Many wildlife species use this habitat including Anna's hummingbird (*Calypte anna*), California quail, ring-necked

snake (*Diadophis punctatus*), sage sparrow (*Amphispiza belli*), spotted towhee (*Pipilo maculatus*), and wrentit (*Chamaea fasciata*). The habitat type designated as undetermined shrub type typically intergrades between mixed chaparral and chamise-redshank chaparral.

Coastal Scrub. Coyote brush tends to dominate the overstory and is commonly associated with ceanothus, coffeeberry, sticky monkeyflower, blackberry, California sagebrush, California buckwheat, and poison-oak. Bracken fern and sword fern (*Polystichum munitum*) are dominant in the understory alongside common parsnip (*Heracleum maximum*), paintbrush (*Castilleja spp.*), yerba buena (*Saturja douglasii*), and California oatgrass (*Danthonia californica*). Although vegetation productivity is lower in coastal scrub than in adjacent chaparral habitats, coastal scrub supports a wide variety of vertebrate species.

Desert Scrub. Creosote bush (*Larrea tridentata*) is often considered a dominant species within desert scrub communities. Alkali desert scrub is typically dominated by shrubby saltbushes. Sagebrush stands are typically large, open, discontinuous stands of big sagebrush of fairly uniform height. Species that can be found within desert scrub habitats include a variety of lizards and snakes including rare blunt-nosed leopard lizard (*Gambelia silus*) and San Joaquin whipsnake (*Masticophis flagellum ruddocki*), various pocket mice and kangaroo rats, San Joaquin kit fox (*Vulpes macrotis mutica*), coyote, and bobcat (*Lynx rufus*).

Herbaceous-Dominated Habitats

Agriculture (including pasture). Vegetation composition and structure in agricultural habitats are variable, depending on the type of crops grown and the time of year. For these reasons habitat value for wildlife is also variable. In addition, the types and timing of operational activities of agricultural lands affects habitat suitability for wildlife. Tall and maintained crops such as vineyards provide different habitat value and likely support different wildlife species than short crops with a lot of exposed bare ground between rows or pasture land. Refer to the “Agricultural Resources” section for more information regarding agricultural land. Typical wildlife species that use agricultural habitat include a variety of rodents, such as California ground squirrel and California vole (*Microtus californicus*), and birds, such as red-winged blackbird (*Agelaius phoeniceus*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), and yellowbilled magpie (*Pica nuttalli*). Croplands provide food and water for these species, but do not generally provide long-term shelter due to the frequency of disturbance.

Annual Grassland (including vernal pools). Annual grassland habitats are open grasslands composed primarily of annual plant species and which occupy what was once pristine native grassland. This habitat type occurs mostly on flat plains to gently rolling foothills. Many grassland species also occur as understory plants in oak woodland and other habitats. Structure in annual grassland depends largely on weather patterns and livestock grazing. Dramatic differences in physiognomy, both between seasons and between years, are characteristic of this habitat. Introduced annual grasses are the dominant plant species in this habitat. These include wild

oats, soft chess, ripgut brome, red brome, wild barley, and foxtail fescue. Common forbs include broadleaf filaree, redstem filaree, turkey mullein, true clovers, bur clover, popcorn flower, and many others. Perennial grasses, found in moist, lightly grazed, or relic prairie areas, include purple needlegrass and Idaho fescue. Vernal pools, found in small depressions with a hardpan soil layer, support downingia, meadowfoam, and other species. Many wildlife species use annual grasslands for foraging, but some require special habitat features such as cliffs, caves, ponds, or habitats with woody plants for breeding, resting, and escape cover. Characteristic reptiles that breed in grassland habitats include the western fence lizard, common garter snake, and western rattlesnake. Mammals typically found in this habitat include the black-tailed jackrabbit, California ground squirrel, Botta's pocket gopher, western harvest mouse, California vole, badger, and coyote. The endangered San Joaquin kit fox and threatened California tiger salamander are also found in and adjacent to this habitat. Common birds known to breed in annual grasslands include the burrowing owl, short-eared owl, horned lark, and western meadowlark. This habitat also provides important foraging habitat for the turkey vulture, American kestrel, black-shouldered kite, and prairie falcon.

Aquatic Habitats

Water and Wetlands. Water habitat includes both lacustrine and riverine habitats. Lacustrine includes lakes, reservoirs, ponds, and ponded areas along streams, while riverine includes rivers, canals, and streams. They typically support fish species and also provide foraging, cover, and breeding habitat for other aquatic species such as pond turtle (*Actinemys marmorata*), amphibians, various waterfowl and fish-eating species such as belted kingfisher (*Ceryle alcyon*) and great blue heron (*Ardea herodias*). Wetland areas are important resources for the County. These areas include freshwater sloughs, swamps, vernal pools, wet meadows, wet pastures, springs and seeps, portions of lakes, ponds, rivers and streams, and all other areas which are periodically or permanently covered by shallow water, or dominated by hydrophilic vegetation, or in which the soils are predominantly hydric in nature. Notable lakes and reservoirs in the County are San Felipe (Soap) and Anzar Lakes, Tequisquita Slough, and San Justo, Paicines, and Hernandez Reservoirs.

Developed Habitats

Urban. The urban landscape consists of developed land, quarries, strip mines, and gravel pits. This classification also includes golf courses, urban parks, and landfills. Wildlife species that use urban habitat vary depending on the density of development, the surrounding land use, and the types and availability of vegetation and other habitat features available for foraging, nesting, and cover. In general, however, wildlife habitat in urban areas consists of landscaped areas with a mix of both native and exotic ornamental plant species. Species using these areas are conditioned to a greater level of human activity than those in natural and less developed areas. Generally, the more developed an urban area is (e.g., downtown), the less diverse the species

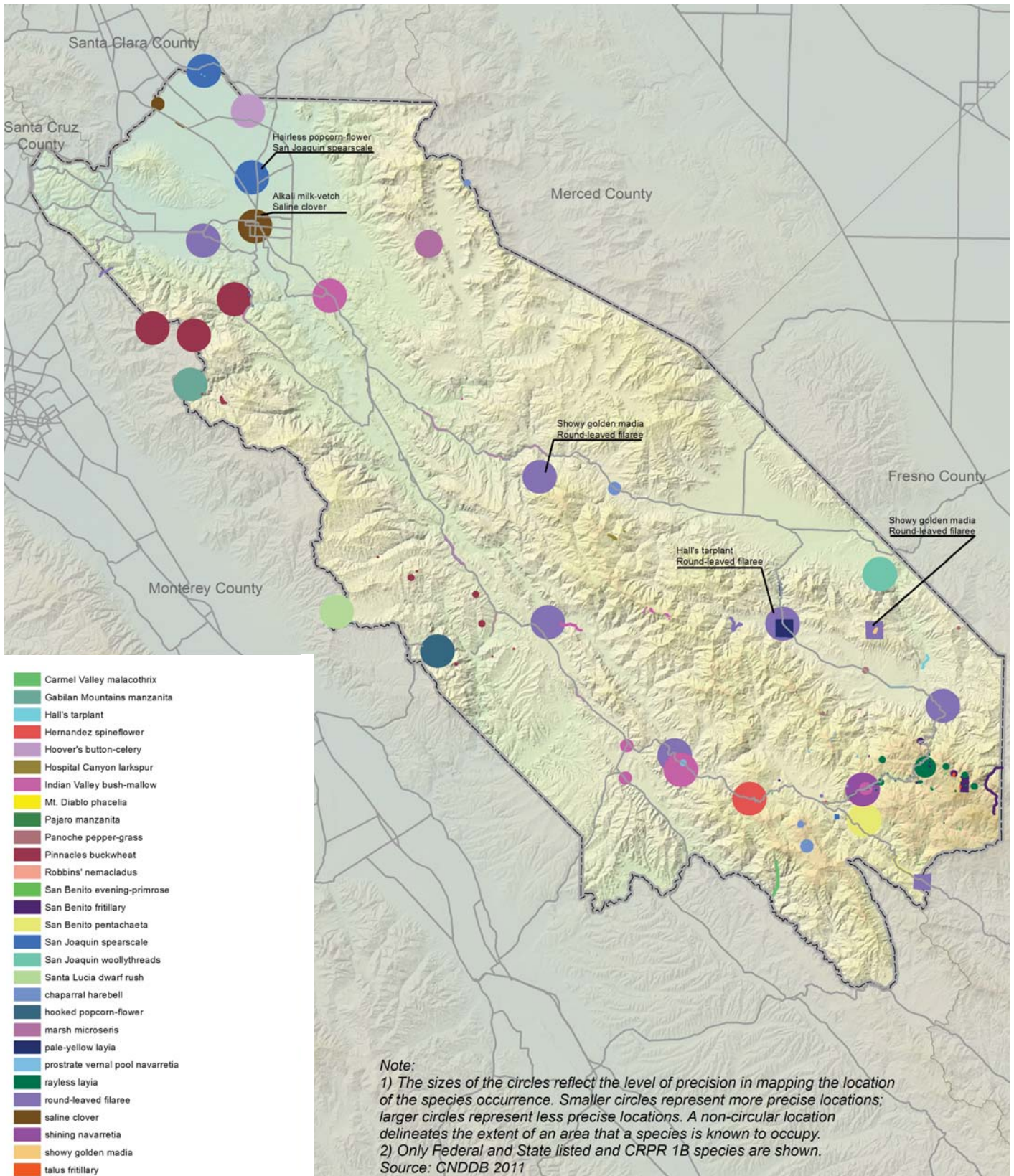
will be. Wildlife species typically found in urban habitat include American crow, rock dove (*Columba livia*), American robin (*Turdus americana*), Brewer's blackbird (*Euphagus cyanocephalus*), house finch (*Carpodacus mexicanus*), house sparrow (*Passer domesticus*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), raccoon, Virginia opossum, and striped skunk.

Non-Vegetated Habitats

Barren. Barren habitat is defined by the absence of vegetation. Any habitat with <2 percent total vegetation cover by herbaceous, desert, or non-wildland species and <10 percent cover by tree or shrub species is defined this way. The physical settings for permanently barren habitat represent extreme environments for vegetation. An extremely hot or cold climate, a near-vertical slope, an impermeable substrate, constant disturbance by either human or natural forces, or a soil either lacking in organic matter or excessively saline can each contribute to a habitat being inhospitable to plants. This habitat typically includes areas of exposed rock, talus slopes, and bare ground/dirt that do not support vegetation. Barren habitat does have value for wildlife. Many hawks and falcons nest on rock ledges. Numerous shorebirds rely on open ground covered with sand or gravel for constructing small scrape nests. Bank swallows use barren vertical cliffs of friable soils along river corridors to dig holes for nesting and cover. Rocky river canyon walls above open water are preferred foraging habitat for many bats. In the desert open sandy soil is critical as burrowing and egg-laying substrate for horned lizards and fringe-toed lizards.

Special-Status Species

Special-status species are plants and animals that are legally protected under the federal and state Endangered Species Acts or other laws and regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. Grasslands, riparian woodlands, and aquatic habitats are home to most of the County's special-status plant and animal species. [Table 8-2](#) lists special-status species with potential to occur in the County organized by their federal, state, CDFW, and California Rare Plant Rank (CRPR) designation known occurrence in the County, and landscape group association. (Acronyms used for listing status or landscape cover group are explained at the bottom of [Table 8-2](#).) This list is comprehensive and includes all species from existing federal and state lists, although some species may be of very low distribution or abundance within the County. Special-status species in this analysis are those listed as Endangered, Threatened, or Rare, or as Candidates for listing by the USFWS and/or CDFW; CDFW-designated Species of Special Concern; Fully Protected species under the California Fish and Game Code; or as Rare Plant Rank 1B or 2B species by the California Native Plant Society (CNPS). Special-status species are generally rare, restricted in distribution, declining throughout their range, or have a critical, vulnerable stage in their life cycle that warrants monitoring. Known occurrences of special-status plant and animal species within the County are mapped in [Figures 8-2](#) and [8-3](#), respectively. USFWS designated Critical Habitat within San Benito County is mapped in [Figure 8-4](#).



Not to scale

Source: CNDDDB 2011

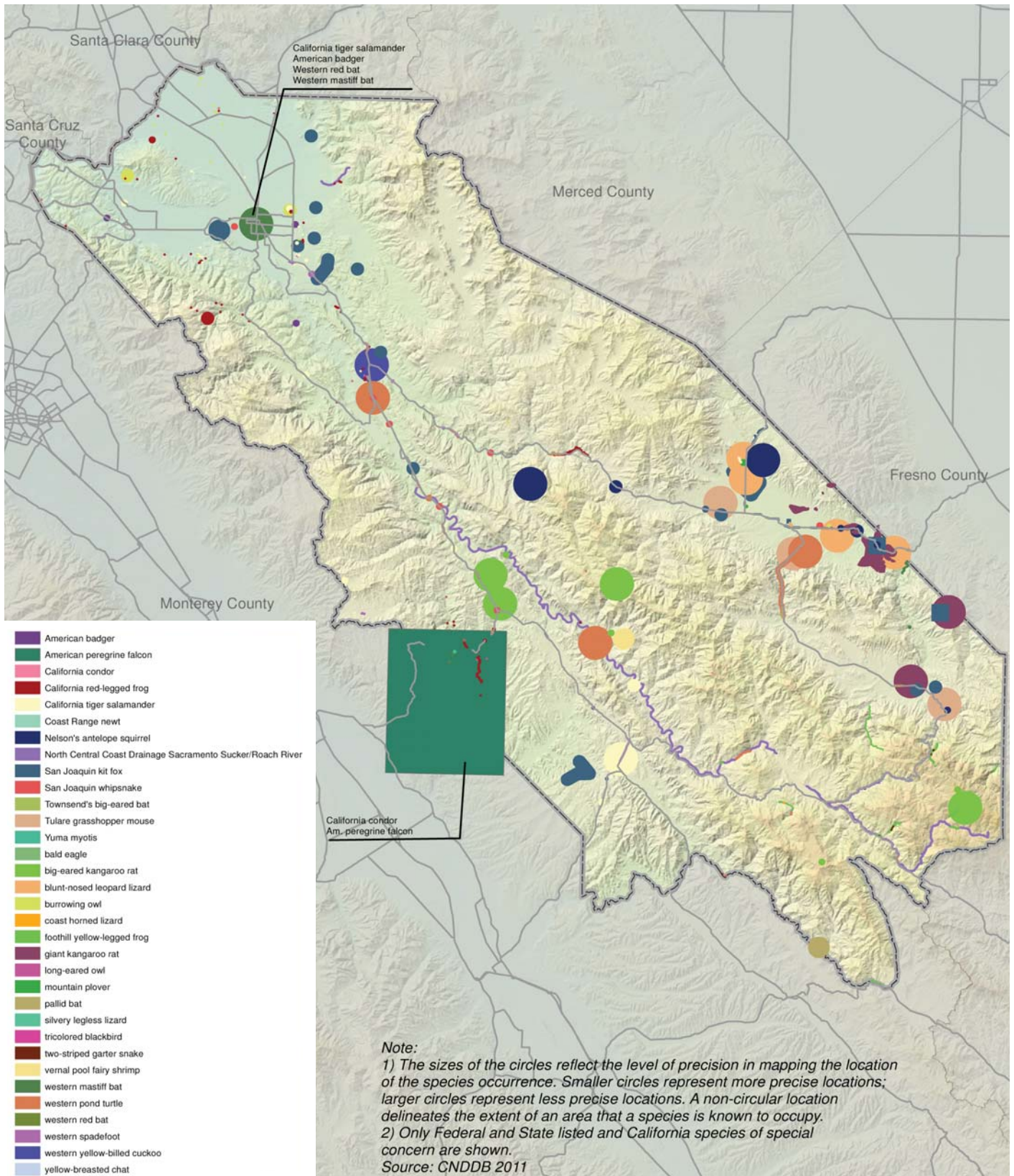
Figure 8-2



CNDDDB Plant Occurrences within San Benito County

2035 San Benito County General Plan Revised DEIR

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Not to scale

Source: CNDDDB 2011

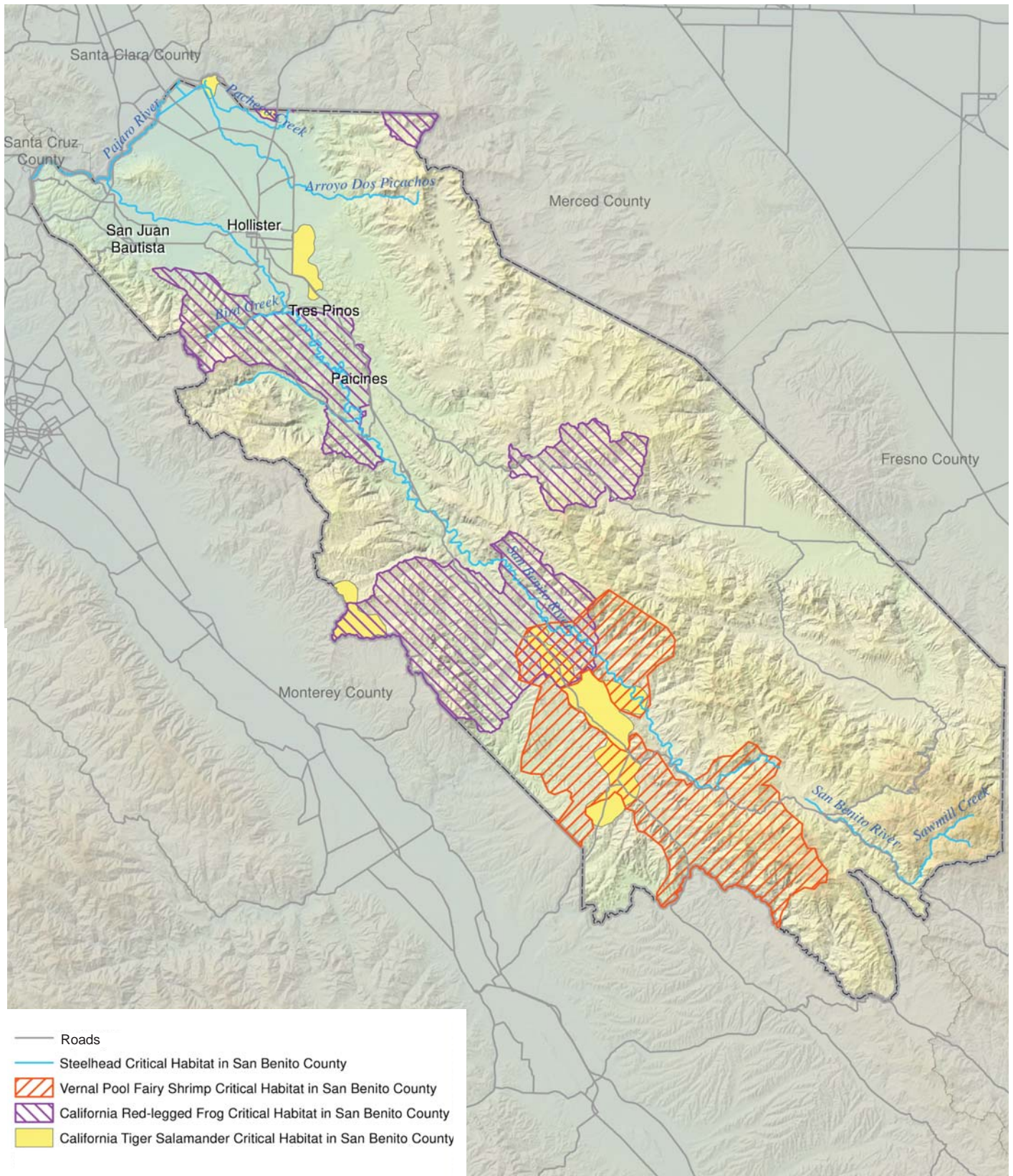
Figure 8-3

CNDDDB Wildlife Occurrences within San Benito County

2035 San Benito County General Plan Revised DEIR



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 Not to scale

Source: California red-legged frog, USFWS 2010; California tiger salamander, USFWS 2005; Vernal pool fairy shrimp, USFWS 2006; Steelhead, NOAA Fisheries 2005

Figure 8-4

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Table 8-2 Special-Status Species Potentially Found in San Benito County

Species	Listing		
	Federal	State	CNPS
Invertebrates			
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT		
Amphibians			
California red-legged frog (<i>Rana draytonii</i>)	FT	SSC	
California tiger salamander (<i>Ambystoma californiense</i>)	FT	ST/SSC	
Coast Range newt (<i>Taricha torosa torosa</i>)		SSC	
Foothill yellow-legged frog (<i>Rana boylei</i>)		SSC	
Western spadefoot (<i>Spea hammondi</i>)		SSC	
Reptiles			
Blunt-nosed leopard lizard (<i>Gambelia sila</i>)	FE	SE/FP	
Coast horned lizard (<i>Phrynosoma blainvillii</i>)		SSC	
San Joaquin whipsnake (<i>Masticophis flagellum ruddocki</i>)		SSC	
Silvery legless lizard (<i>Anniella pulchra pulchra</i>)		SSC	
Two-striped garter snake (<i>Thamnophis hammondi</i>)		SSC	
Western pond turtle (<i>Emys marmorata</i>)		SSC	
Birds			
American peregrine falcon (<i>Falco peregrinus anatum</i>)		FP	
Bald eagle (<i>Haliaeetus leucocephalus</i>)		SE/FP	
Bank swallow (<i>Riparia riparia</i>)		ST	

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Species	Listing		
	Federal	State	CNPS
Burrowing owl (<i>Athene cunicularia</i>)		SSC	
California condor <i>Gymnogyps californianus</i>	FE	SE	
Least Bell's vireo (<i>Vireo bellii pusilus</i>)	FE	SE	
Long-eared owl (<i>Asio otus</i>)		SSC	
Mountain plover (<i>Charadrius montanus</i>)		SSC	
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE	SE	
Swainson's hawk (<i>Buteo swainsoni</i>)		ST	
Tricolored blackbird (<i>Agelaius tricolor</i>)		SE*/SSC	
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FC	SE	
Yellow-breasted chat (<i>Icteria virens</i>)		SSC	
White-tailed kite (<i>Elanus leucurus</i>)		FP	
Mammals			
American badger (<i>Taxidea taxus</i>)		SSC	
Big-eared kangaroo rat (<i>Dipodomys venustus elephantinus</i>)		SSC	
Giant kangaroo rat (<i>Dipodomys ingens</i>)	FE	SE	
Monterey dusky-footed woodrat (<i>Neotoma macrotis Luciana</i>)		SSC	
Nelson's antelope squirrel (<i>Ammospermophilus nelsoni</i>)		ST	
Pallid bat (<i>Antrozous pallidus</i>)		SSC	

Species	Listing		
	Federal	State	CNPS
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	FE	ST	
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)		SC/SSC	
Tulare grasshopper mouse (<i>Onychomys torridus tularensis</i>)		SSC	
Western mastiff bat (<i>Eumops perotis californicus</i>)		SSC	
Western red bat (<i>Lasiurus blossevillii</i>)		SSC	
Plants			
Alkali milk-vetch (<i>Astragalus tener var. tener</i>)			1B.2
Bent-flowered fiddleneck (<i>Amsinckia lunaris</i>)			1B.2
Big Bear Valley woollypod (<i>Astragalus leucolobus</i>)			1B.2
Carmel Valley malacothrix (<i>Malacothrix saxatilis var. arachnoidea</i>)			1B.2
Chaparral harebell (<i>Campanula exigua</i>)			1B.2
Chaparral ragwort (<i>Senecio aphanactis</i>)			2B.2
Diablo Range hare-leaf (<i>Lagophylla diabolensis</i>)			1B.2
Gabilan Mountains manzanita (<i>Arctostaphylos gabilanensis</i>)			1B.2
Forked hare-leaf (<i>Lagophylla dichotoma</i>)			1B.1
Fragrant fritillary (<i>Fritillaria liliacea</i>)			1B.2
Hall's tarplant (<i>Deinandra halliana</i>)			1B.1
Hernandez spineflower (<i>Chorizanthe biloba var. immemora</i>)			1B.2

8.0 BIOLOGICAL RESOURCES

Species	Listing		
	Federal	State	CNPS
Hooked popcornflower (<i>Plagiobothrys uncinatus</i>)			1B.2
Hoover's button-celery (<i>Eryngium aristulatum</i> var. <i>hooveri</i>)			1B.1
Hospital Canyon larkspur (<i>Delphinium californicum</i> ssp. <i>interius</i>)			1B.2
Indian Valley bush-mallow (<i>Malacothamnus aboriginum</i>)			1B.2
Jepson's milk-vetch (<i>Astragalus rattanii</i> var. <i>jepsonianus</i>)			1B.2
Lemmon's jewelflower (<i>Caulanthus lemmonii</i>)			1B.2
Marsh microseris (<i>Microseris paludosa</i>)			1B.2
Mt. Diablo phacelia (<i>Phacelia phacelioides</i>)			1B.2
Munz's tidy-tips (<i>Layia munzii</i>)			1B.2
Norris' beard moss (<i>Didymodon norrisii</i>)			2B.2
Pajaro manzanita (<i>Arctostaphylos pajaroensis</i>)			1B.1
Pale-yellow layia (<i>Layia heterotricha</i>)			1B.1
Panoche pepper-grass (<i>Lepidium jaredii</i> ssp. <i>album</i>)			1B.2
Pinnacles buckwheat (<i>Eriogonum nortonii</i>)			1B.3
Prostrate vernal pool navarretia (<i>Navarretia prostrata</i>)			1B.1
Rayless layia (<i>Layia discoidea</i>)			1B.1
Recurved larkspur (<i>Delphinium recurvatum</i>)			1B.2

Species	Listing		
	Federal	State	CNPS
Robbins' nemacladus (<i>Nemacladus secundiflorus</i> var. <i>robbinsii</i>)			1B.2
Round-leaved filaree (<i>California macrophylla</i>)			1B.1
Saline clover (<i>Trifolium hydrophilum</i>)			1B.2
San Benito evening primrose (<i>Camissonia benitensis</i>)	FT		1B.1
San Benito fritillary (<i>Fritillaria viridea</i>)			1B.2
San Benito pentachaeta (<i>Pentachaeta exilis</i> ssp. <i>aeolica</i>)			1B.2
San Joaquin spearscale (<i>Atriplex joaquinana</i>)			1B.2
San Joaquin woolly-threads (<i>Monolopia congdonii</i>)	FE		1B.2
Santa Lucia dwarf rush (<i>Juncus luciensis</i>)			1B.2
Showy golden madia (<i>Madia radiata</i>)			1B.1
Shining navarretia (<i>Navarretia nigelliformis</i> ssp. <i>radians</i>)			1B.2
Talus fritillary (<i>Fritillaria falcata</i>)			1B.2
Woodland woollythreads (<i>Monolopia gracilens</i>)			1B.2

Listing Status Codes:

Federal (USFWS)

- FE Listed as Endangered under the Federal Endangered Species Act
- FT Listed as Threatened under the Federal Endangered Species Act
- FC Candidate for listing under the Federal Endangered Species Act

State (CDFW)

- SE Listed as Endangered under the California Endangered Species Act (* denotes Emergency Listing in place as of Dec. 3, 2014)
- ST Listed as Threatened under the California Endangered Species Act
- SR Listed as Rare under the California Endangered Species Act
- SC Candidate for listing under the California Endangered Species Act
- FP CDFW Fully Protected species under California Fish and Wildlife Code
- SSC CDFW Species of Special Concern

CNPS Rare Plant Ranks and Threat Code Extensions

1B	Plants that are considered Rare, Threatened, or Endangered in California and elsewhere
2B	Plants that are considered Rare, Threatened, or Endangered in California, but more common elsewhere
.1	Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2	Fairly endangered in California (20-80% occurrences threatened)
.3	Not very threatened in California (less than 20% of occurrences threatened low degree and immediacy of threat or no current threats known)

Sources: CDFW 2014; USFWS 2014; CNPS 2014.

Of the species in [Table 8-2](#), those that are of greater conservation concern to the wildlife agencies and whose habitat usage tends to overlap with areas of development pressure in the County as mapped on [Figure 8-3](#) include:

- **California red-legged frog.** Found in the numerous ponds (stock and others) and waterways in the northern part of the County.
- **California tiger salamander.** Found in the numerous ponds (stock and others) and waterways in the northern part of the County.
- **San Joaquin kit fox.** Found in the Panoche Valley and near Bitterwater on the west side of the County, and rarely observed in the northern part of the County.
- **Burrowing owl.** Found in agricultural fields and grasslands at the lower elevations.
- **Steelhead.** Designated critical habitat exists along the Pajaro and San Benito Rivers.
- **Western pond turtle.** Found near ponds and slow-moving streams with uplands suitable for nesting.

Grasslands, riparian woodlands, and aquatic habitats are home to most of the County's special-status plant and animal species. Special-status species that are restricted to the Panoche Valley include blunt-nosed leopard lizard, Nelson's antelope squirrel, giant kangaroo rat, and San Joaquin woolly threads. No records of conservancy fairy shrimp, longhorn fairy shrimp, and vernal pool tadpole shrimp, and only one record of fairy shrimp have been found in the County.

Critical Habitat and Recovery Plans

Critical habitat is a designation made by the U.S. Fish and Wildlife Service (USFWS) or by the National Marine Fisheries Service (NOAA Fisheries) pursuant to the Federal Endangered Species Act (FESA). Critical habitat areas are specific geographic areas that may or may not be occupied by specific listed species, but have been determined to be essential for the conservation and management of the listed species, and have been formally described and designated in the Federal Register. For example, the USFWS finalized and formally designated critical habitat for the California red-legged frog in the Federal Register in 2010 (USFWS 2010a).

The FESA requires that federal agencies ensure that actions they fund, authorize, or carry out do not destroy or adversely modify critical habitat. Individuals, organizations, states, local governments, and other non-federal entities are affected by the designation of critical habitat only if their actions occur on federal lands, require a federal permit, license or other authorization, or involve federal funding. If these conditions apply, the federal agency must consult with the USFWS or NOAA Fisheries on any action that may affect a listed species or designated critical habitat and take steps to avoid jeopardizing the continued existence of the species and destroying or adversely modifying any designated critical habitat.

The USFWS has designated critical habitat for the California red-legged frog, California tiger salamander, and vernal pool fairy shrimp in the County (see [Figure 8-4](#)). NOAA Fisheries has designated several rivers and stream in the County as critical habitat for the South-Central California Coast Evolutionary Significant Unit (ESU) of steelhead. These streams and rivers include those found in the Pajaro River and the San Benito River watersheds (see [Figure 8-4](#)).

USFWS and NOAA Fisheries prepare recovery plans for listed species under Section 4 of the FESA. Recovery plans are guidance documents and do not have regulatory effect. The Recovery Plan for Upland Species of the San Joaquin Valley covers 34 species, including those listed species found within the Panoche Valley. In addition, the historic range of the Least Bell's vireo as presented in the Draft Recovery Plan for the Least Bell's Vireo (USFWS 1998a) and the planning area for the Recovery Plan for Upland Species of the San Joaquin Valley (USFWS 1998b) both fall within the County.

Habitat Connectivity/Wildlife Movement

Habitat corridors facilitate wildlife migration and movement within landscapes, and are essential to the viability and persistence of many wildlife populations. Wildlife movement includes migration (i.e., usually one-way per season), inter-population movement (i.e., long-term genetic flow), and small travel pathways (i.e., daily movement corridors within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main corridor, permitting an increase in gene flow among populations. These linkages among habitats can extend for miles, and occur on a large scale throughout California. Reduction and fragmentation of habitat are among the principal causes of species decline; consequently, identifying and preserving key corridors is important to retaining native populations in the County.

Habitat connectivity can be assessed at many levels. On a landscape or regional scale, connectivity typically refers to how mobile mammals (e.g., deer) are able to move between prominent landscape features such as mountain ranges. The types of natural habitats between

those features, combined with the distance between features, are used to determine the connectedness or permeability of the landscape. At a smaller scale, habitat connectivity is often important for seasonal migrations (e.g., steelhead) or local (daily) movements by some wildlife species between nesting and foraging habitat (e.g., golden eagles). The modern, built environment can alter the connectivity of a landscape by removing natural habitat and restricting the opportunities for species movement. Habitat corridors that are integrated with the built environment are recognized as a means to retain some connectivity across a landscape.

The Missing Linkages assessment conducted by California Wilderness Coalition in 2001 identified connectivity between habitats in key areas within the County. The habitat linkages considered to be critical to retaining the viability of local wildlife populations include:

- Santa Cruz to Gabilan Range
- Gabilan Range to Diablo Range
- Hollister to San Luis Reservoir and Panoche Hills
- Panoche Valley to State Route 25 Corridor.

The San Benito and Pajaro Rivers are migration corridors for fisheries from Monterey Bay to spawning and nursery habitat in the upper watershed reaches in Santa Clara County and the County and back. Other wildlife moves along these rivers and associated riparian areas as well.

8.1.2 Regulatory Setting

Federal

- **The Federal Endangered Species Act (FESA).** The U. S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) administer the FESA. The FESA requires each agency to maintain lists of imperiled native species and affords substantial protections to these “listed” species. NMFS’ jurisdiction under the FESA is limited to the protection of marine mammals, marine fishes, and anadromous fishes; all other species are subject to USFWS jurisdiction. The USFWS and NMFS may “list” a species if it is endangered (at risk of extinction throughout all or a significant portion of its range) or threatened (likely to become endangered within the foreseeable future). Section 9 of the FESA prohibits the “take” of any wildlife species listed as endangered and most species listed as threatened. Take, as defined by the FESA, means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Harm is defined as “any act that kills or injures the species, including significant habitat modification or degradation where it actually kills or injures wildlife by

significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering” (50 CFR 17.3). The FESA includes exceptions to this general take prohibition that allow an action to be carried out, despite the fact that the action may result in the take of listed species, where conservation measures are included for the species. Section 7 of the FESA provides an exception for actions authorized (e.g., under a Section 404 permit), funded, or carried out by a Federal agency and Section 10 provides an exception for actions that do not involve a Federal agency.

Under Section 7, federal agencies consult with the USFWS or NMFS if their actions may affect listed species or designated critical habitat. They are prohibited from undertaking actions that would jeopardize the continued existence of a listed species or destroy or adversely modify designated critical habitat.

Non-federal actions require a permit under Section 10. To receive a Section 10(a)(1)(B) incidental take permit (ITP) for a take of Federally-listed fish and wildlife species “that is incidental to, but not the purpose of, otherwise lawful activities,” the permit applicant is required to provide:

- A complete description of the activity sought to be authorized; and
- A Habitat Conservation Plan (HCP) that specifies:
 - The impact that will likely result from such taking;
 - What steps the applicant will take to monitor, minimize, and mitigate such impacts to the maximum extent practicable; the funding that will be available to implement such steps; and the procedures to be used to deal with unforeseen circumstances;
 - What alternative actions to such taking the applicant considered and the reasons why such alternatives are not proposed to be used; and
 - Such other measures that the Interior Secretary or Commerce Secretary may require a being necessary or appropriate for purposes of the plan (16 U.S.C.A. Section 1539(a)(2)(A)).

The USFWS or NMFS will issue an ITP if the Interior Secretary or Commerce Secretary, as the case may be, finds with respect to the ITP application and HCP that:

- The taking will be incidental;
- The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking;

- The applicant will ensure that adequate funding for the plan will be provided;
- The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and
- The measures, if any, required by the Secretary of Interior or Commerce Secretary, will be met (16 U.S.C.A. § 1539(a)(2)(B)).

Section 9 also 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 FESA does not prohibit take of listed plants on non-federal land, other than prohibiting the removal, damage, or destruction of such species in violation of state law. Section 10 prohibits the issuance of an ITP that would appreciably reduce the likelihood of the survival and recovery in the wild (i.e., “jeopardize”) of any endangered or threatened species, including plants.

- **The Federal Clean Water Act (CWA), Sections 404—Dredge or Fill Permit (33 U.S.C.A. § 1344).** CWA is the primary Federal law that protects the quality of the nation’s waters, including wetlands, lakes, rivers, and coastal areas. Section 404 of the CWA regulates the discharge of dredged or fill material into the waters of the United States, including wetlands. The CWA holds that all discharges into the nation’s waters are unlawful unless specifically authorized by a permit; issuance of such permits constitutes its principal regulatory tool. The U.S. Army Corps of Engineers (USACE) is authorized to issue Section 404 permits, which allow the placement of dredged or fill materials into jurisdictional waters of the United States under certain circumstances. The USACE issues two types of permits under Section 404: general permits (either nationwide permits or regional permits) and standard permits (either letters of permission or individual permits). General permits are issued by the USACE to streamline the Section 404 permitting process for nationwide, statewide, or regional activities that have minimal direct or cumulative environmental impacts on the aquatic environment. Standard permits are issued for activities that do not qualify for a general permit (i.e., that may have more than a minimal adverse environmental impact).
- **The Federal CWA, Sections 401—Water Quality Certification (33 U.S.C.A. § 1344).** Under the CWA Section 401, applicants for a Federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the United States must obtain certification from the state in which the discharge would originate. Therefore, all projects that have a Federal component and may affect state water quality (including projects that require Federal agency approval, such as issuance of a Section 404 permit) must also comply with CWA Section 401 and the State’s Porter-Cologne Water Quality Control Act. In California Section 401 certification is handled by the Regional Water

Quality Control Boards. San Benito County falls under the jurisdiction of the Central Coast Regional Water Quality Control Board (CCRWQCB). The CCRWQCB must certify that the discharge will comply with State water quality standards and other requirements of the CWA.

- **The Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C.A. § 703 et seq.).** The Migratory Bird Treaty Act of 1918, as amended MBTA, implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the MBTA, taking, killing, or possessing migratory birds is unlawful, as is taking of any parts, nests, or eggs of such birds (16 U.S. Government Code [USC] 703). Take is defined more narrowly under the MBTA than under FESA and includes only the death or injury of individuals of a migratory bird species or their eggs. As such, “harm” and “harassment” as defined under FESA do not constitute take under the MBTA.
- **The Federal Bald and Golden Eagle Protection Act (16 U.S.C.A. § 668 et seq.).** The Bald and Golden Eagle Protection Act prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions. Under the Act it is a violation to “...take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof...”. Take is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”
- **The National Environmental Policy Act (NEPA) (42 U.S.C.A. § 4321 et seq.).** NEPA requires Federal agencies to include in their decision-making process appropriate and careful consideration of all environmental effects of a proposed action and of possible alternatives. Documentation of the environmental impact analysis and efforts to avoid or minimize the adverse effects of proposed actions must be made available for public notice and review. This analysis is documented in either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). Project proponents must disclose in these documents whether their proposed action will adversely affect the human or natural environment. NEPA’s requirements are primarily procedural rather than substantive in that NEPA requires disclosure of environmental effects and mitigation possibilities, but includes no requirement to mitigate.

State

- **California Endangered Species Act (CESA).** Administered by the California Department of Fish and Wildlife (CDFW), California ESA prohibits the take of listed species and also species formally under consideration for listing (“candidate” species) in California. Under CESA, take means “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” (Fish and Game Code § 86.) Accordingly, take under CESA does not include “harm” or impacts to a listed species’ habitat. The take of a listed species that is incidental to an otherwise lawful activity and not the primary purpose of the activity can be authorized by CDFW under an incidental take permit. CESA does not protect insects, but with certain exceptions prohibits the take of plants on private land.
- **Natural Community Conservation Planning (NCCP) Act.** The NCCP Act was enacted to implement broad-based planning to provide for effective protection and conservation of California’s wildlife heritage while continuing to allow appropriate development and growth. The NCCP Act does not focus only on listed species and is broader in its orientation and objectives than are the FESA or CESA. The NCCP Act encourages local, State, and Federal agencies to prepare comprehensive conservation plans that maintain the continued viability of species and biological communities impacted by human changes to the landscape. The NCCP Act provides for incidental take authorization, such that covered activities resulting in incidental take of listed species may be carried out without violating CESA. Permits issued under the NCCP Act can also be broad and may include both listed species and non-listed species.
- **California Fish and Wildlife Code Sections 1600-1616 (Lake and Streambed Alteration Agreements).** CDFW has jurisdictional authority over streams, lakes, and wetland resources associated with these aquatic systems under California Fish and Game Code Section 1600 et seq. CDFW has the authority to regulate work that will “substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris waste or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake” (Fish and Game Code § 1602.). An entity that proposes to carry out such an activity must first inform CDFW. Where CDFW concludes that the activity will “substantially adversely affect an existing fish or wildlife resource,” the entity proposing the activity must negotiate an agreement with CDFW that specifies terms under which the activity may be carried out in a way that protects the affected wildlife resource. CDFW can enter into programmatic agreements that cover recurring operation and maintenance activities or regional plans. These agreements are sometimes referred to as “master streambed alteration agreements.”

- **California Fish and Wildlife Code Sections 3511, 4700, 5050, 5515 (Fully Protected Species).** In the 1960s, before CESA was enacted, the California Legislature identified specific species for protection under the California Fish and Game Code. These fully protected species 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. Fully protected species are described in Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code. These protections state that “...no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected [bird], [mammal], [reptile or amphibian], fish.”
- **California Fish and Wildlife Code Section 3503 (Bird Nests).** Section 3503 of the California Fish and Game Code makes it “unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” Therefore, CDFW may issue permits authorizing take.
- **California Fish and Wildlife Code Section 3503.5 (Birds of Prey).** Section 3503.5 of the California Fish and Game Code prohibits the take, possession, or destruction of any birds of prey or their nests or eggs “except as otherwise provided by this code or any regulation adopted pursuant thereto.” CDFW may issue permits authorizing take of birds of prey or their nests or eggs pursuant to CESA or the NCCP Act.
- **The California Environmental Quality Act (CEQA) (Public Resources Code § 21000, et seq.).** CEQA is similar to, but more extensive than NEPA in that it requires significant environmental impacts of proposed projects be reduced to a less-than-significant level through adoption of feasible avoidance, minimization, or mitigation measures unless overriding considerations are identified and documented that make the mitigation measures or alternative infeasible. CEQA applies to certain activities in California undertaken by either a public agency or a private entity that must receive some discretionary approval from a California government agency.

County

- **1992 General Plan Open Space and Conservation Element.**
 1. Major subdivisions or intense development shall not be allowed within potential habitat: of federal or State-listed rare, threatened, or endangered plant or animal species until said development(s) prepares habitat plans for the species unless an interim measure has been taken to mitigate the effect of development.

2. Maintain corridors for habitat: In rural areas, road and development sites shall be designed to maintain habitat connectivity with a system of corridors for wildlife or plant species and avoiding fragmentation of open space areas.
 3. Mitigation for wetland development: Development shall be sited to avoid encroachment on wetlands. Mitigation shall be required for any development proposals that have the potential to reduce wetland habitat from primary or secondary effects of the development.
 4. Avoid loss of habitat from other mitigation measures: Mitigation measures to reduce other environmental hazards (e.g., fire hazard, flood hazard, soil erosion) shall not be acceptable if they will significantly degrade existing habitat, riparian areas, or isolate habitat.
 5. Stimulate regeneration of oak woodland communities: Through a combination of the habitat conservation plan, interagency coordination, and development review procedures, the County will promote the restoration, restocking, and protection of oak woodland habitat on public and private lands in the County.
 6. Exotic plants and animals: It is the policy of the County to work with State, Federal, and local agencies and land owners to develop programs to reduce the destruction of plant and animal life and habitat caused by invasive plants and animals.
- **Ordinance No. 541.** In 1988 the County adopted County Code Chapter 19.19 pursuant to Ordinance No. 541 to allow for the collection of “interim mitigation fees” from development projects and rangeland conversion occurring in the unincorporated areas of the County. The purpose of Ordinance No. 541 “is to provide a method for financing development and implementation of a Habitat Conservation Plan and a Section 10(a) permit under the Endangered Species Act of 1973 for the County HCP plan study area.” As stated in Ordinance No. 541, mitigation fees are to be held in a trust for future use in payment of HCP development costs and habitat mitigation as identified in an HCP, once developed.
 - **Ordinance No. 708.** Codified in County Code Chapter 19.17, County Ordinance 708 prohibits grading activity from taking place within 50 feet (measured horizontally) from the top of the bank of a stream, creek, river or within 50 feet of a wetland or body of water.

8.2 ENVIRONMENTAL EFFECTS

The biological resources analysis evaluates whether implementation of the proposed 2035 General Plan could result in significant and adverse effects to biological resources. Biological resources include special-status species and their habitats, sensitive habitats such as riparian and wetland habitats, and wildlife movement corridors.

8.2.1 Significance Criteria

As set forth in Appendix G to the State CEQA Guidelines, Section IV, Biological Resources, the following criteria have been established to quantify the level of significance of an adverse effect being evaluated pursuant to CEQA. The numeration of each criterion below corresponds to the questions in the checklist in Appendix G of the CEQA Guidelines (e.g., IV.a, IV.b). Implementation of the 2035 General Plan would result in a significant biological resources impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (IV.a)
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service. (IV.b)
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (IV.c)
- 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. (IV.d)
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (IV.e)
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. (IV.f)

8.2.2 Analysis Methodology

The analysis of the effects of implementing the proposed 2035 General Plan on biological resources was based on the information collected from the Biological Resources section of the Background Report; documented occurrences of listed and other special-status species in the CDFW California Natural Diversity Database (CNDDDB) for the County (CDFW 2011); the USFWS species list for the County (USFWS 2011); and, a search of the CNPS Inventory of Rare and Endangered Plants of California (CNPS 2011).

The potential effects related to growth occurring at buildout of the proposed 2035 General Plan were compared to environmental baseline conditions (i.e., existing conditions) to determine impacts. As discussed in Section 4.5.7, Potential Growth Scenarios, this analysis takes into account two possible growth scenarios: Scenario 1 and Scenario 2. For this programmatic level of analysis, there would be no material difference in the biological impacts arising from the two growth scenarios because the County will apply the 2035 General Plan policies, including additional policies from mitigation measures contained in the certified EIR, that address biological resources equally when approving development, regardless of location. Site specific analysis of biological impacts would be required for particular development proposals that may be considered in the future.

The significance criteria and the special-status definition noted above were used in combination with the profile of existing biological resources described above to identify the potential impact of both growth scenarios. The effect of the proposed 2035 General Plan policies is taken into account before determining significance. Where significant impacts are identified, mitigation is recommended. A significance conclusion is then made for residual impacts after the application of recommended mitigation. While indirect effects to biological resources from alterations in water quality due to development are considered in the analysis below, the reader is directed to Chapter 13, Hydrology and Water Resources, for a detailed analysis of impacts on water quality, identification of relevant 2035 General Plan policies that reduce impacts and recommended mitigation to further reduce or eliminate impacts.

This biological resources analysis considers how much urban and other development authorized under the 2035 General Plan, if any, should be allowed within certain biologically sensitive areas under the 2035 General Plan. Such areas include those that contain critical habitat of listed species, support known populations of special-status species, or areas that contain sensitive natural communities, such as wetlands. Development in any of these areas may directly or indirectly impact biological resources, including temporarily or permanently removing the resources.

Under the 2035 General Plan, urban and other types of development as provided for therein may occur in any location with urban land use designations as mapped in the 2035 General Plan or in

New Community Study Areas with an approved specific plan and General Plan amendment. As a result, any lands designated for future development may convert existing biological resources by converting underdeveloped land to urban uses. Because it is not known, specifically, where actual development will occur in the future, the impact analysis presented below assumes that any location where development may occur could be impacted. Future development proposals may be studied in areas identified as New Community Study Areas. As noted, while it cannot be known where such development could be considered, the same development policies applicable to land designated for development under the 2035 General Plan would apply in any future study of development in the New Community Study Areas.

The potential effects of the 2035 General Plan on biological resources were determined using a Geographic Information System (GIS) biological data set overlain on a 2035 General Plan future land use GIS data set for both Scenarios 1 and 2. Additionally, development that is allowed in support of, and related to, agriculture land uses is expected to take place on agricultural and open space land outside of the designated urban growth boundaries, and this development may cause additional impacts to biological resources. At buildout of the 2035 General Plan, as described in Chapter 3, Project Description of this RDEIR, these uses could include agricultural industrial activities (e.g., agricultural processing), agricultural commercial activities (e.g., agricultural-tourism, wineries), and new farm dwellings.

8.2.3 Environmental Impacts

The following discussion provides an analysis of the potential impacts of the proposed project based on the impact threshold criteria described above. [Table 8-3](#) summarizes 2035 General Plan policies that would mitigate environmental impacts associated with biological resources, including an explanation of how the policy would avoid or reduce impacts and which impacts are avoided and/or reduced.

Impact BIO-1: 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. (IV.a)

Significant of Impact: Significant and unavoidable.

Development of land uses consistent with the proposed 2035 General Plan, and construction of new infrastructure to support these land uses, has the potential to directly or indirectly impact candidate, sensitive, special-status species, or their habitats. This would be a potentially significant impact.

Table 8-3 2035 General Plan Goals and Policies that Mitigate Biological Resources Impacts

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact BIO-#
Administration Element		
<p>Goal AD-2: Inter-Agency Coordination</p> <p>To cooperate and coordinate with applicable local, regional, State, and Federal jurisdictions and agencies in order to achieve mutually- beneficial development, environmental, and economic goals.</p>	<p>Helps to avoid or reduce impacts to special-status species through cooperation with applicable agencies to achieve environmental goals.</p>	<p>1,2,3</p>
<p>Policy AD-2.3: Federal and State Agency Coordination</p> <p>The County shall continue to coordinate discretionary project review and permitting activities with applicable federal and state regulatory agencies as required by law.</p>	<p>Early consultation with federal and state wildlife agencies will help ensure that agency required minimization and mitigation measures are incorporated early into a project. Early consultation could assist with preventing development in particularly sensitive areas, thus helping to minimize impacts on federal and state listed species and their habitats, riparian areas and sensitive natural communities, and wetlands.</p>	<p>1,2,3</p>
Land Use Element		
<p>Goal LU-1: Countywide Growth and Development</p> <p>To maintain San Benito County’s rural character and natural beauty while providing areas for needed future growth.</p>	<p>Minimizes impacts to special-status species, riparian areas and sensitive natural communities as feasible, and wetlands by balancing the protection of natural areas/features and the designation of areas for future growth.</p>	<p>1,2,3</p>

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact BIO-#
<p>Policy LU-1.1: Countywide Development</p> <p>The County shall focus future development in areas around cities where infrastructure and public services are available, within existing unincorporated communities, and within a limited number of new communities, provided they meet the requirements of goal section LU-7.</p>	<p>This policy will help prevent development that causes fragmentation of habitat and creates high-risk areas for sensitive natural communities through the development of road systems to outlying areas.</p>	<p>2</p>
<p>Policy LU-1.5: Infill Development</p> <p>The County shall encourage infill development on vacant and underutilized parcels to maximize the use of land within existing urban areas, minimize the conversion of productive agricultural land and open spaces, and minimize environmental impacts associated with new development as one way to accommodate growth.</p>	<p>Infill development typically is of lesser quality for wildlife than large open areas, and has less value as habitat. Infill development will significantly reduce impacts on biological resources as it will reduce pressure to build in large tracts of existing open space.</p>	<p>1</p>
<p>Policy LU-1.8: Site Plan Environmental Content Requirements</p> <p>The County shall require all submitted site plans, tentative maps, and parcel maps to depict all environmentally sensitive and hazardous areas, including: 100-year floodplains, fault zones, 30 percent or greater slopes, severe erosion hazards, fire hazards, wetlands, and riparian habitats.</p>	<p>Early identification of sensitive habitat areas and areas where listed and special-status species are known to occur will help in designing development plans that avoid such areas as feasible, and thereby minimize impacts to these resources.</p>	<p>2</p>

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact BIO-#
<p>Policy LU-1.10: Development Site Suitability</p> <p>The County shall encourage specific development sites to avoid natural and manmade hazards, including, but not limited to, active seismic faults, landslides, slopes greater than 30 percent, and floodplains. Development sites shall also be on soil suitable for building and maintaining well and septic systems (i.e., avoid impervious soils, high percolation or high groundwater areas, and provide setbacks from creeks). The County shall require adequate mitigation for any development located on environmentally sensitive lands (e.g., wetlands, erodible soil, archaeological resources, important plant and animal communities).</p>	<p>In assuring that adequate mitigation for loss for important plant and animal communities is offered at the onset of the permitting process, the County is assuring that impacts on such communities will be offset.</p>	<p>1,2,3</p>
<p>Goal LU-4: Residential Development</p> <p>To encourage variety in new unincorporated residential development while also providing incentives for clustered residential as a means to protect valuable agricultural and natural resources.</p>	<p>Self-contained residential development could help avoid impacts on riparian areas, sensitive natural communities, and wetlands by providing incentives for clustering growth away from such resources.</p>	<p>2,3</p>
<p>Policy LU-4.3: Residential Density Reductions</p> <p>The County shall consider reducing the base density of a proposed residential development project if a combination of environmental hazards (e.g., fire, seismic, flooding, greater than 30 percent slope) and/or natural resources (e.g., sensitive habitat, wetlands) exist on the site, after consideration of the mitigations to be implemented to address those hazards, make higher densities less appropriate.</p>	<p>This policy provides an important incentive to developers to cluster development away from sensitive resources, including wetlands, thus minimizing the impacts such development would have on the resources.</p>	<p>2,3</p>

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact BIO-#
<p>Policy LU-4.5: Innovative Site Planning and Residential Design</p> <p>The County shall encourage new residential developments to use innovative site planning techniques and to incorporate design features that increase the design quality, and energy efficiency, and water conservation of structures and landscapes while protecting the surrounding environment.</p>	<p>The use of innovative site planning could help protect the surrounding environment, including riparian areas and sensitive natural communities.</p>	<p>2</p>
<p>Policy LU-4.6: Clustered Residential Program</p> <p>The County shall continue to encourage the clustering of residential uses and the use of creative site planning techniques to maximize preservation of agricultural land and maintain contiguous areas of open space.</p>	<p>Clustering residential development could help avoid riparian habitats and sensitive natural communities.</p>	<p>2</p>
<p>Goal LU-8: New Communities</p> <p>To provide the option for New Communities to be considered as a way of accommodating planned growth in the unincorporated parts of San Benito County.</p>	<p>This goal contains several policies that ensure New Communities are placed in appropriate unincorporated parts of the County to avoid impacts to special-status species and their habitats and important natural wetland areas by focusing development away from sensitive resources.</p>	<p>2,3</p>

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact BIO-#
<p>Policy LU-8.2: New Community Threshold</p> <p>The County shall consider any proposed development project that is a unique, self-contained new development a New Community, and as such, subject to the policies of this goal section. The Director of Planning and Building Inspection Services will have the discretion to determine which projects constitute a New Community, but they would generally be projects that cannot be developed under existing allowed residential densities, even under clustered residential incentives, and contain a variety of proposed uses, including residential, commercial, neighborhood retail, as well as an emphasis on pedestrian and bicycle circulation and recreational opportunities. The County would especially like to further the development of any project that would provide significant connection to and expansion of the County and regional trail network.</p>	<p>Encouraging self-contained new development that provides for infrastructure and services will generally discourage inefficient use of land that may serve as habitat for plant and animal species.</p>	<p>1</p>
<p>Public Facilities and Services Element</p>		
<p>Goal PFS-6: Stormwater Drainage</p> <p>To manage stormwater from existing and future development using methods that reduce potential flooding, maintain natural water quality, enhance percolation for groundwater recharge, and provide opportunities for reuse.</p>	<p>Proper management of stormwater during development activities would help ensure that water quality is maintained and water that supports wetlands is provided.</p>	<p>3</p>
<p>Policy PFS-6.2: Best Management Practices</p> <p>The County shall require best management practices in the development, upgrading, and maintenance of stormwater facilities and services to reduce pollutants from entering natural water bodies while allowing stormwater reuse and groundwater recharge.</p>	<p>The requirement to use best management practices when developing and maintaining public service infrastructure will minimize future impacts on jurisdictional wetlands.</p>	<p>3</p>

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact BIO-#
<p>Policy PFS-6.3: Natural Drainage Systems</p> <p>The County shall encourage the use of natural stormwater drainage systems (e.g., swales, streams) to preserve and enhance the environment and facilitate groundwater recharge.</p>	<p>By maintaining natural stormwater drainage systems, existing functions and values of such systems shall continue, and any impacts from formalizing the drainages will be avoided.</p>	<p>3</p>
<p>Policy PFS-6.4: Development Requirements</p> <p>The County shall require project designs that minimize stormwater drainage concentrations and impervious surfaces, complement groundwater recharge, avoid floodplain areas, and use natural watercourses in ways that maintain natural watershed functions and provide wildlife habitat.</p>	<p>By maintaining natural watercourses, existing functions and values of such systems shall continue, and any impacts on wetlands from formalizing the watercourses will be avoided.</p>	<p>3</p>
<p>Policy PFS-6.8: Reduce Erosion and Sedimentation</p> <p>The County shall ensure that drainage systems are designed and maintained to minimize soil erosion and sedimentation and maintain natural watershed functions.</p>	<p>The loss of soil and vegetation through erosion can be as devastating to wetlands and watercourses as mechanical disturbance. This policy will help reduce risks associated with man-made erosion on wetlands and watercourses.</p>	<p>3</p>
<p>Natural and Cultural Resources Element</p>		
<p>Goal NCR-1: Open Space</p> <p>To preserve and enhance valuable open space lands that provide wildlife habitat and conserve natural and visual resources of San Benito County.</p>	<p>Acts to help preserve wildlife habitat as a form of open space benefiting natural and visual resources.</p>	<p>1,2,4</p>

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact BIO-#
<p>Policy NCR-1.1: Integrated Network of Open Space</p> <p>The County shall maintain an integrated network of open space lands that support natural resources, recreation, tribal resources, wildlife habitat, water management, scenic quality, and other beneficial uses.</p>	<p>Acts to help preserve wildlife habitat as a form of open space benefiting natural and visual resources.</p>	<p>1,2,4</p>
<p>Goal NCR-2: Wildlife Habitat</p> <p>To protect and enhance wildlife communities through a comprehensive approach that conserves, maintains, and restores important habitat areas.</p>	<p>Sets the overall intention to avoid impacts, as feasible, to special-status species, riparian areas and sensitive natural communities, wetlands, and wildlife corridors through a comprehensive approach that conserves and restores important habitat areas. Although no HCP or NCCP currently exists, this policy would protect wildlife communities through a comprehensive approach, similar to a HCP or NCCP to restore and protect important habitat areas.</p>	<p>1-6</p>
<p>Policy NCR-2.1: Coordination for Habitat Preservation</p> <p>The County shall work with property owners and Federal and State agencies to identify feasible and economically-viable methods of protecting and enhancing natural habitats and biological resources in the County.</p>	<p>Helps reduce impacts to special-status species by ensuring the County coordinates with property owners and agencies to identify methods to protect and enhance existing biological resources on their lands.</p>	<p>1,4</p>

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact BIO-#
<p>Policy NCR-2.2: Habitat Protection</p> <p>The County shall require major subdivisions within potential habitat of Federal or State-listed rare, threatened, or endangered plant or animal species to mitigate the effect of development. Mitigation for impacts to species may be accomplished on land preserved for open space, agricultural, or natural resources protection purposes.</p>	<p>This policy helps reduce the impacts that major subdivisions could have on federal and state listed species.</p>	<p>1</p>
<p>Policy NCR-2.3: Habitat Conservation Plan</p> <p>The County shall consider working with federal and state agencies to prepare and adopt a habitat conservation plan (HCP) and a Natural Community Conservation Plan (NCCP) for listed and candidate species in San Benito County in order to manage their habitats and ensure their long-term protection.</p>	<p>If implemented, the HCP would provide a coordinated regional program for the long-term protection of listed and special-status species in the County. It also would provide developers with a formalized permitting process and a programmatic way to mitigate impacts on such species by providing dispersal corridors for them.</p>	<p>1,4,6</p>
<p>Policy NCR-2.4: Maintain Corridors for Habitat</p> <p>The County shall protect and enhance wildlife migration and movement corridors to ensure the health and long-term survival of local animal and plant populations, in particular contiguous habitat areas, in order to increase habitat value and lower land management costs. As part of this effort, the County shall require road and development sites in rural areas to:</p> <ol style="list-style-type: none"> a. Be designed to maintain habitat connectivity with a system of corridors for wildlife or plant species and avoiding fragmentation of open space areas; and 	<p>Helps to protect and maintain wildlife migration corridors to enhance the health of animal and plant populations, also avoiding impacts to special-status species that may depend on corridors for habitat. Establishing and protecting wildlife corridors will be an important tool of a future HCP. If implemented, the HCP would provide a regional and comprehensive</p>	<p>1,4</p>

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact BIO-#
<p>b. Incorporate measures to maintain the long-term health of the plant and animal communities in the area, such as buffers, consolidation of/or rerouting access, transitional landscaping, linking nearby open space areas, and habitat corridors.</p>	<p>approach to minimizing and mitigating impacts on wildlife.</p>	
<p>Policy NCR-2.5: Mitigation for Wetland Disturbance or Removal</p> <p>The County shall require development to avoid encroachment on wetlands to the extent practicable and shall require mitigation for any development proposals that have the potential to reduce wetland habitat.</p>	<p>Requires development to avoid encroachment onto wetlands to the extent practicable, which can provide important habitat for several of the listed and special-status species in the County, and requires mitigation for any development that would reduce wetland habitat, thereby reducing impacts to riparian habitat and sensitive natural communities.</p>	<p>2,3</p>
<p>Policy NCR-2.6: Regeneration of Oak Woodland Communities</p> <p>The County shall promote the restoration, restocking, and protection of oak woodland habitat on public and private lands in the County through a combination of the habitat conservation planning, inter-agency coordination, and updated development review or tree preservation procedures.</p>	<p>This policy provides an important incentive to developers and public agencies to protect and enhance oak woodland plan communities, thus minimizing the impacts of public and private activities on oak woodlands.</p>	<p>2,5</p>

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact BIO-#
<p>Policy NCR-2.7: Mitigation of Oak Woodlands</p> <p>The County shall encourage development near oak woodlands to be clustered to avoid, where technically or economically practical, the loss of heritage oak trees. The County shall require transitional buffers to help maintain viable ecosystems where appropriate. Where removal of trees cannot be avoided, the County shall require project applicants to prepare a mitigation plan that identifies on- or off-site tree replacement.</p>	<p>This policy will significantly reduce impacts on oak woodlands as it requires up-front mitigation for any loss of heritage trees, and also encourages avoidance of oak woodlands during the plan development process, as feasible.</p>	<p>2,5</p>
<p>Goal NCR-4: Water Resources</p> <p>To protect water quantity and quality in natural water bodies and groundwater basins and avoid overdraft of groundwater resources.</p>	<p>Supports providing adequate water supply for habitat purposes, minimizing impacts to special- status species, sensitive natural communities, and wildlife corridors by protecting water resources that support habitat corridors.</p>	<p>1,2,4</p>
<p>Policy NCR-4.1: Mitigation for Wetland Disturbance or Removal</p> <p>The County shall consider implementing Regional Water Quality Control Board Basic Plan Policies to improve areas of low water quality, maintain water quality on all drainage, and protect and enhance habitat for fish and other wildlife on major tributaries to the Pajaro River (San Benito River, Pacheco Creek) and the Silver Creek watershed.</p>	<p>Maintaining good water quality in these rivers, creeks, and streams would provide an overall benefit to the native fish species and other organisms (frogs, turtles, birds, etc.) that use them.</p>	<p>1, 2</p>

Goals and Policies	How the Goal/Policy Avoids or Reduces Impact	Impact BIO-#
<p>Policy NCR-4.4: Open Space Conservation</p> <p>The County shall encourage conservation and, where feasible, creation or restoration of open space areas that serve to protect water quality such as riparian corridors, buffer zones, wetlands, undeveloped open space areas, and drainage canals.</p>	<p>Conserving and restoring open space areas will be an important tool of a future HCP. If implemented, the HCP would provide a regional and comprehensive approach to providing dispersal corridors for wildlife.</p>	<p>4</p>
<p>Policy NCR-4.5: Groundwater Recharge</p> <p>The County shall encourage new development to preserve, where feasible, areas that provide important groundwater recharge and stormwater management benefits such as undeveloped open spaces, natural habitat, riparian corridors, wetlands, and natural drainage areas.</p>	<p>Encouraging the preservation of undeveloped open space, natural habitat, riparian corridors, wetlands, and natural drainage areas would have a positive impact on the biological resources in the County.</p>	<p>4</p>
<p>Health and Safety Element</p>		
<p>Goal HS-8: Noise</p> <p>To protect the health, safety, and welfare of County residents through the elimination of annoying or harmful noise levels.</p>	<p>Minimizing noise impacts may also reduce noise effects on special-status species and wetland species.</p>	<p>1,3</p>
<p>Policy HS-8.4: Off-Road Recreational Vehicle Use</p> <p>The County shall limit the use of off road recreational motor vehicles to those areas specifically designated for that purpose, (i.e. Clear Creek and Hollister Hills State Vehicular Recreational Area) and shall maintain lands surrounding those areas in open space and agricultural use as a means of providing a noise buffer zone.</p>	<p>This policy will reduce impacts to vegetation, soils, water quality, and special-status species individuals and/or populations by directing off-highway vehicle use to established areas, and on designated routes within those areas.</p>	<p>1,3</p>

Source: San Benito County 2011, 2014; EMC Planning Group 2014; Planning Partners 2012.

Potential direct impacts of the 2035 General Plan would include removal of habitat for new development and infrastructure. New development and infrastructure in previously undeveloped areas would have the potential to result in the removal of habitats that support sensitive species and the loss of individuals of special-status plant and wildlife species. New development on existing developed parcels under the 2035 General Plan or new development in currently urbanized areas would likely result in fewer impacts to habitats because they are generally already disturbed and less able to support sensitive species. Depending on location and density, some proposed land uses could result in greater biological impacts than others due to increased development densities.

Table 8-4 provides the total acreage of each habitat/vegetation community that could be lost by new development anticipated by the 2035 General Plan, whether occurring under Scenario 1 or Scenario 2, at build out. The impact estimates present a worst-case scenario, as it is highly unlikely that one hundred percent of planned development would occur. As shown in this table, a total of between 18,166 and 26,064 acres of habitat could be permanently lost if development occurs in all areas where it is permitted under the proposed 2035 General Plan or in areas proposed for future study. It is likely that the greatest loss of habitat would occur in the following community types (rangeland is encompassed by annual grassland and agriculture): annual grassland, oak/montane hardwoods, agriculture, and chaparral/scrub. Loss of these vegetation communities would directly and indirectly impact the sensitive plant and wildlife species that use these areas as habitat.

Table 8-2, above, identifies the typical sensitive species found in these and other vegetation communities in the County. Of the species in Table 8-2, those that provide habitat for special status species, and whose habitat usage tends to overlap with areas of development pressure, are discussed below.

Plants

As indicated above, a search of state and federal databases identified 46 special-status plant species as occurring or potentially occurring in the County. The status and habitat associations for each of these species are provided in Table 8-2. Artificial and unvegetated biological communities in the County (including agricultural land, unvegetated drainages, low-elevation open water [i.e. in agricultural areas and large reservoirs], and barren or urban areas) are unlikely to support special-status plants. However, construction activities within annual grassland, wetland, vernal pool, chaparral and scrub, oak woodland, riparian woodland, or coniferous forest communities could potentially result in significant impacts on special-status plants.

Table 8-4 Habitat Losses Estimated from Implementation of the 2035 General Plan

Habitat Impacted¹	Total Existing Acreage²	Total Acreage Impacted^{2,3}
Agriculture	52,627	3,085–10,486
Annual Grassland/Pasture	446,040	6,487–12,570
Aquatic	1,475	23–121
Barren/Other	537	0–214
Chaparral/Scrub (chamise-redshank chaparral, coastal scrub, mixed chaparral, sagebrush, and other shrub type)	124,156	941–1,857
Conifer Forest (Jeffrey pine, montane hardwood-conifer, Sierran mixed conifer, other conifer type)	3,537	61–65
Conifer Woodland (juniper)	850	0
Desert Scrub	258	0
Hardwood Forest (montane hardwood)	1,547	0
Hardwood Woodland (blue oak-foothill pine; eucalyptus; and blue oak, coastal oak, valley oak woodland)	248,676	3,353–1,132
Urban	9,539	749–3,086
Total	889,224	18,166–26,064

Source: CALFIRE 2002.

Notes: ¹For habitat type descriptions please see the 2010 Background Report.

²Data has been rounded to the nearest whole number.

³Range accounts for different possible growth scenarios.

There are two federally-listed plant species known to occur in the County (San Benito evening primrose and San Joaquin woolly-threads) and four other federally-listed plant species that have the potential to occur (Monterey spineflower, robust spineflower, Santa Cruz tarplant, and Yadon's rein orchid). The federally-threatened San Benito evening primrose occurs on gravelly, serpentine terraces in chaparral, woodlands, and grasslands. The federally-endangered San Joaquin woolly-threads occur on sandy soils within scrub and grasslands. Forty non-listed special-status plant species potentially occur in the County. Although these remaining 40 species listed in [Table 8-2](#) are not federal or state-listed, impacts to these special-status plants could be potentially significant under CEQA. [Figure 8-2](#) shows locations of special-status plant species reported to the CNDDDB.

Wildlife

Sixty-three special-status wildlife species are known to occur or have the potential to occur in the County. [Figure 8-3](#) shows locations of special-status wildlife species reported to the CNDDDB. The status and preferred habitat for each of these species is listed in [Table 8-2](#). Development within or near habitat for special-status wildlife species could result in adverse impacts on these species. Several species are of greater conservation concern because they are listed species and their habitat encompasses vegetation communities used by other sensitive species, or, in the County, their occurrences and habitat usage tends to overlap with areas of development pressure. These species include: California tiger salamander, California red-legged frog, San Joaquin kit fox, burrowing owl, and steelhead. Potential impacts related to these species and others are discussed below:

California Tiger Salamander

The California tiger salamander (CTS) is a federal and state threatened species. Suitable aquatic breeding habitat for the CTS includes large vernal pools and ponds. Annual grassland and oak woodland provide suitable upland habitat for the CTS. As of December 2011, the CNDDDB had 51 occurrence records of CTS scattered throughout the County. Additionally, designated critical habitat for the CTS is located in the northern and southwestern portions of the County (USFWS 2005a). [Figure 8-4](#) shows USFWS designated critical habitat within the County. Construction activities in or near these habitat areas as well as ongoing operations of the developments at issue could result in significant impacts to CTS, including loss of individuals, permanent loss and temporary disturbance of aquatic and upland habitat, and indirect impacts related to increased human presence near habitats.

California Red-legged Frog

The County supports known populations of the California red-legged frog, a federally-threatened species, and provides suitable aquatic breeding habitat for the frog, including numerous ponds and drainages with still or slow-moving water. Riparian woodland, annual grassland, oak woodland, and fallow fields occurring within one mile of suitable California red-legged frog aquatic breeding habitat could be used as upland refuge sites and for dispersing by the frog. As of December 2011, the CNDDDB had 48 occurrence records of California red-legged frog, primarily found in the northern and western portions of the County. Additionally, designated critical habitat (see [Figure 8-4](#)) for the California red-legged frog is located in the northern and central portions of the County (USFWS 2010a). Construction activities in or near these habitat areas as well as ongoing operations of the developments at issue could result in significant impacts to the frog, including loss of individuals, permanent loss and temporary disturbance of aquatic and upland habitat, and indirect impacts related to increased human presence near habitats.

San Joaquin Kit Fox

The San Joaquin kit fox is federally listed as endangered and state listed as threatened. The San Joaquin kit fox typically inhabits desert scrub, arid annual grassland, and oak woodland habitats. Although there are historical occurrences of the kit fox in the northern portions of the County, it now principally occurs in the southern part of the County adjacent to the San Joaquin Valley, and in open foothills to the southwest. Recent records of this species from 17 counties show that the kit fox range extends from Contra Costa County south to Kern County. The San Joaquin kit fox utilizes subsurface dens, which may extend to six feet or more below ground surface, for shelter and for reproduction (USFWS 2010b); consequently, the kit fox has been associated with areas having open, level, sandy ground that is relatively stone-free to depths of about three to 4.5 feet. While no critical habitat has been designated for the San Joaquin kit fox, the fox was included in the *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS 1998a). The recovery plan area includes portions of southeastern County. The CNDDDB had 41 occurrence records scattered throughout the County. Construction activities in or near desert scrub, arid annual grassland, and oak woodland habitats as well as ongoing operations of the developments at issue could result in significant impacts to the kit fox, including loss of individuals, permanent loss and temporary disturbance of occupied kit fox habitat, and indirect impacts related to increased human presence near habitats.

Burrowing Owl

The burrowing owl is a California species of special concern that is commonly found in the northern portion of the County. It is discussed here, separate from other special-status birds (discussed below), due to its relative abundance in the County and because it is of particular concern to wildlife agencies. Burrowing owl habitat can be found in grasslands, deserts, and scrublands characterized by low-growing vegetation (BLM 1974). Burrows are the essential component of burrowing owl habitat: both natural and artificial burrows provide protection, shelter, and nests for burrowing owls (Henny and Blus 1981). Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels or badgers, but also may use man-made structures, such as cement culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement. Burrowing owls may use a burrow site for breeding, wintering, foraging, and/or migration stopovers. The CNDDDB had 14 occurrence records for the owl in the County (CNDDDB 2011), mostly in the northern portion of the County. Construction activities in or near habitat areas as well as ongoing operations of the developments at issue could result in significant impacts to the burrowing owl, including loss of individuals, permanent loss and temporary disturbance of occupied habitat, and indirect impacts related to increased human presence near habitat.

Other Special-Status Birds

The County is within the breeding range for numerous special-status bird species (in addition to burrowing owl), including two federally-listed endangered species (Least Bell's vireo and California condor), five state-listed endangered species (Least Bell's vireo, American peregrine falcon, bald eagle, yellow-billed cuckoo, and California condor), one state-listed threatened species (bank swallow), and 11 California species of special concern, fully protected species, or watch list species (white-tailed kite, golden eagle, long-eared owl, tricolored blackbird, yellow-breasted chat, Cooper's hawk, sharp-shinned hawk, California horned lark, mountain plover, merlin, and prairie falcon). The tricolored blackbird was listed under an emergency action by the California Fish and Game Commission on December 3, 2014. The emergency listing provides the species the same protections afforded to listed species for a 180-day period, and up to a full year with an extension. Additionally, nesting habitat for non-special-status migratory birds occurs throughout the County.

Raptors (e.g., eagles, kites, hawks, and owls) and other migratory birds and their nests are protected under both California Fish and Wildlife Code § 3503 (active bird nests) and the Migratory Bird Treaty Act. Construction activities in or near habitat for special-status birds as well as ongoing operations of the developments at issue could result in nest disturbance or destruction, which could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. This would constitute a significant impact. Construction activities as well as ongoing operations of the developments at issue could also result in the loss of foraging habitat for several bird species. Loss of special-status and non-special-status bird eggs or nests, or any activities resulting in nest abandonment, could constitute a significant impact.

Steelhead

The Pajaro and San Benito Rivers and associated tributaries in the County provide spawning, rearing, and migratory habitat for the South-Central California Coast steelhead. The CNDDDB has no records of steelhead within the County; however, the USFWS designated critical habitat for steelhead occurs in the County within the Pajaro and San Benito Rivers, and tributaries to these rivers (such as Pacheco Creek, Pescadero Creek, Tequisquita Slough, and Arroyo dos Picachos) (USFWS 2005b). Critical habitat includes waterways, substrate, and adjacent riparian zones that provide spawning, rearing, and migrating areas that are essential to the survival of the species. Areas above impassable barriers (e.g., dams) or naturally impassable barriers are not currently included in critical habitat designation.

Impacts on fish from construction-related disturbances as well as ongoing operations of the developments at issue include increased sedimentation and turbidity, release of contaminants into surrounding waterbodies, noise disturbance, and change in fish habitat. A change in fish habitat could result from the removal of terrestrial vegetation from streambanks, removal of

riparian trees and aquatic vegetation, or rip-rapping banks for erosion control. Increases in sedimentation and turbidity have been shown to affect fish physiology, behavior, and habitat. Stress responses are generally higher with increasing turbidity and decreasing particle size. Migrating adult salmonids have been reported to avoid high waterways with silt loads, or cease migration when such loads are unavoidable. Construction activities as well as ongoing operations of the developments at issue may also involve the storage, use, or discharge of toxic and other harmful substances near water bodies, or in areas that drain to these water bodies. Heavy construction equipment often use petroleum products, such as fuels, lubricants, hydraulic fluids, and coolants, all of which may be toxic to fish and other aquatic organisms. An accidental spill or inadvertent discharge of these materials could affect the water quality of the river or water body, and thereby affect fish or fish habitat.

Western Pond Turtle

The western pond turtle is a California species of special concern, and is known to occur throughout the County. Construction-related activities in or near suitable aquatic habitat, including ponds, lakes, marshes, rivers, streams, and irrigation ditches, or suitable nesting habitat, such as riparian woodlands and grasslands, could result in mortality of western pond turtles or destruction of their habitat. Declines in populations of western pond turtles throughout the species range have been documented. Loss of individuals within the County could diminish the local population and reduce reproductive potential, which could contribute to the further decline of this species. The loss of upland nesting sites or eggs also could decrease the local population.

Vernal Pool Crustaceans

The County is within the range of several federally-listed vernal pool crustaceans, including conservancy fairy shrimp (endangered), vernal pool fairy shrimp (threatened), longhorn fairy shrimp (endangered), and vernal pool tadpole shrimp (endangered). However, there is only one known occurrence of vernal pool crustaceans (vernal pool fairy shrimp) within the County. Seasonal wetlands and vernal pools may provide habitat for some or all of these species. Additionally, USFWS has designated areas of critical habitat for vernal pool fairy shrimp in the southwest portion of the County (USFWS 2005c). Construction within or near these habitats as well as ongoing operations of the developments at issue could result in mortality of listed vernal pool crustaceans or destruction of their habitat, which could be considered significant impacts.

Western Spadefoot Toad

The western spadefoot toad is a California species of special concern, and suitable aquatic breeding habitat and upland grassland habitat for this toad are present within the County. Construction activities in or near habitat areas as well as ongoing operations of the developments

at issue could result in significant impacts to the western spadefoot toad, including loss of individuals, permanent loss and temporary disturbance of habitat, and indirect impacts related to increased human presence near habitat.

Foothill Yellow-Legged Frog

The foothill yellow-legged frog is a California species of special concern, and suitable habitat for the foothill yellow-legged frog may be present in perennial and intermittent drainages within the County. Construction activities in or near habitat areas as well as ongoing operations of the developments at issue could result in significant impacts to the foothill yellow-legged frog, including loss of individuals, permanent loss and temporary disturbance of habitat, and indirect impacts related to increased human presence near habitat.

American Badger

The American badger is a California species of special concern. Annual grassland, valley oak woodland, and wet meadows provide suitable habitat for American badgers. Construction activities in or near habitat areas as well as ongoing operations of the developments at issue could result in significant impacts to the American badger, including loss of individuals, permanent loss and temporary disturbance of habitat, and indirect impacts related to increased human presence near habitat.

Special-Status Bats

The County contains potential roosting and foraging habitat for several bat species, including four species of special concern: the western red bat, Townsend's big-eared bat, pallid bat, and western mastiff bat. Potential roosting and foraging habitat can also be found for several bats on the Western Bat Working Group's watch list: hoary bat, western small-footed myotis, long-eared myotis, fringed myotis, and Yuma myotis. Potential impacts to bats could result from construction-related disturbance or destruction of active roosts or the loss of individuals as well as ongoing operations of the developments at issue. These impacts would be considered significant if the subsequent population decline was large and/or affected the viability of the local populations of bats.

South County Species

Several special-status species are restricted to the southern portion and Panoche Valley areas of the County. Given their respective location restrictions, it is not anticipated that these species would be significantly impacted by development activities in the northern portion of the County. Besides the San Joaquin kit fox, discussed above, federally-listed species restricted to Panoche Valley include blunt-nosed leopard lizard, Nelson's antelope squirrel, and giant kangaroo rat. In addition, mountain plover and Tulare grasshopper mouse, California species of special concern,

have been recorded in the Panoche Valley. The *Recovery Plan for Upland Species of San Joaquin Valley* includes a portion of the County in the Panoche Valley. All of the federally-listed species occurring in Panoche Valley are included in that Recovery Plan (USFWS 1998a). The big-eared kangaroo rat, a California species of special concern, is found primarily in chaparral in the southern portion of the County. If construction activities and/or ongoing operations of the developments at issue take place in the southern portion of the County in or near special-status species' habitat, significant impacts to these species could result. These impacts could include loss of individuals, permanent loss and temporary disturbance of habitat, and indirect impacts related to increased human presence near habitat.

Other Reptiles and Amphibians

Within the County, several other California species of special concern reptiles and amphibians are known to occur: San Joaquin whipsnake, coast horned lizard, two-striped garter snake, silvery legless lizard, and Coast Range newt. Of the reptiles, the San Joaquin whipsnake has been observed throughout the County; the other three species are primarily found in the southern and eastern portions of the County. The Coast Range newt has only been observed near San Justo Reservoir, approximately 3.5 miles from Hollister. Construction activities in or near habitat areas as well as ongoing operations of the developments at issue could result in significant impacts to these species. These impacts could include loss of individuals, permanent loss and temporary disturbance of habitat, and indirect impacts related to increased human presence near habitat.

Other Species

Several other species have been reported to the CNDDDB; however, these species have no listing status, and impacts to these species would only be considered significant if the subsequent population decline was very large and/or affected the viability of the population. These include several invertebrates: California linderiella, Idria short-tailed whipscorpion, San Benito harvestman, San Joaquin dune beetle, Pinnacles shieldback katydid, Morrison's blister beetle, Pinnacles optioservus riffle beetle, Wasbauer's protodufourea bee.

In addition, several species that are not found in the County according to the CNDDDB could potentially inhabit portions of the County due to suitable habitats found within the County, and the proximity to known occurrences. These include Santa Cruz long-toed salamander (federal and state endangered), riparian woodrat (federal endangered and California species of special concern), and Monterey dusky-footed woodrat (California species of special concern). The Santa Cruz long-toed salamander has a very limited range, with scattered populations in a reported 11 locations around the coast of Monterey Bay in southern Santa Cruz County and the northern edge of Monterey County. The riparian woodrat is primarily found in Stanislaus and San Joaquin Counties. The Monterey dusky-footed woodrat is known from Monterey and San Luis

Obispo Counties. Construction activities in or near habitat areas as well as ongoing operations of the developments at issue could result in significant impacts to these species. These impacts could include loss of individuals, permanent loss and temporary disturbance of habitat, and indirect impacts related to increased human presence near habitat.

Critical Habitat

Additionally, the 2035 General Plan would have the potential to result in impacts to designated critical habitat (see [Figure 8-4](#)). The amount of designated critical habitat in the County is a total of approximately 235,831 acres (vernal pool fairy shrimp, California red-legged frog, and California tiger salamander) and a total of approximately 162 stream miles (steelhead). All of the vernal pool fairy shrimp critical habitat is located in the southwestern portion of the County, and does not overlap with areas of growth projected in the 2035 General Plan. Approximately 12 percent of this habitat is located in areas that are being designated as national or state park. The 2035 General Plan does not propose land uses within federal and state-owned lands because the County does not have jurisdiction in these areas. However, future development of 2035 General Plan land uses outside of federal and state-owned parks would have the potential to result in direct impacts to designated critical habitat.

Indirect Impacts

The indirect impacts to sensitive species and their habitat that have potential to occur as a result of new development or redevelopment under 2035 General Plan are described below.

- Water quality in riparian areas has the potential to be adversely affected by pollutants in runoff and sedimentation under the 2035 General Plan. Decreased water quality adversely affects the vegetation, aquatic animals, and terrestrial wildlife that depend upon these resources. Refer to Chapter 13, Hydrology and Water Resources, regarding the proposed project's impacts to water quality.
- Fugitive dust produced by construction under the 2035 General Plan has the potential to disperse onto sensitive vegetation adjacent to construction sites. A continual cover of dust has the potential to reduce the overall vigor of individual plants by reducing their photosynthetic capabilities and increasing their susceptibility to pests or disease. In turn, this has the potential to affect animals dependent on these plants. Refer to Chapter 7, Air Quality, regarding the proposed project's impacts related to fugitive dust during construction.
- Non-native, invasive plants have the potential to colonize development and infrastructure sites, and spread into adjacent native habitats. Many non-native plants are highly invasive and tend to displace native vegetation, thereby affecting sensitive species and reducing

native species diversity overall. Non-native, invasive plants may spread through landscaping, agriculture practices, water runoff, or soil disturbance.

- Edge effects would occur if blocks of habitat became fragmented. New construction and new roadways have the potential to fragment habitats. Brush management and trail construction or use can also cause fragmentation, and result in edge effect impacts on special-status species. The increased edge between development and habitat makes it easier for non-native plant species to invade native habitats, and for both native and non-native predators to access prey that would have otherwise been protected within large, contiguous blocks of habitat.
- Increases in human activity in and adjacent to undeveloped areas as a result of new development under the 2035 General Plan have the potential to result in the abandonment of occupied habitat by special-status animals, loss of individuals due to crushing or capture, predation of native species by domesticated animals, and degradation of sensitive vegetation including wetlands and waterways.
- Typically, the indirect impacts associated with noise are associated with construction activity and roadway traffic. To avoid noise impacts, breeding birds and mammals may temporarily or permanently abandon their territories, leading to carrying capacity issues, reduced reproductive success, and increased mortality.
- Outdoor lighting used in the development or redevelopment of residential, commercial, industrial, or public/semi-public uses has the potential to result in a new source of glare and/or lighting. See Chapter ___ (Aesthetics) for additional information in this regard. The introduction of night lighting in areas adjacent to undeveloped open space could provide nocturnal predators with an unnatural advantage over their prey. Artificial light can also disrupt other essential behavioral and ecological processes (e.g., breeding, foraging, migration, etc.).

As identified in Section 8.1.2, Regulatory Setting, there are a number of federal, state, and local regulations in place to protect special-status species. For example, the Federal MBTA prohibits the disturbance of migratory birds, including raptors. In addition, the Bald and Golden Eagle Protection Act prohibits harm to bald eagles and golden eagles. The FESA requires Section 7 or Section 10 authorization for any project that could result in take of a federally-listed species, while the CESA prohibits take of state-listed species without securing Section 2081 authorization. These authorizations may be achieved through consultation between two federal agencies, or through the preparation of a HCP and/or a NCCP.

The 2035 General Plan includes goals and policies that support the protection of sensitive biological resources in the County, including special-status wildlife, wetlands and riparian areas,

wildlife corridors, and other sensitive natural communities. [Table 8-3](#) lists the goals and policies from the 2035 General Plan that most clearly support the County's intention to protect and maintain the viability of the County's sensitive biological resources.

The policies of the 2035 General Plan listed in [Table 8-3](#) work to direct development in new areas of the County for the purpose of conserving sensitive biological resources to the extent feasible. However, the 2035 General Plan does not address the protection of special-status species on a project or landscape level in any detail given the more generalized nature of this planning document. Since the 2035 General Plan is not a project level document, it does not include specific avoidance and minimization, nor does it list any compensatory requirement for impacts to special-status species or loss of their habitats. There are no specific mechanisms identified for mitigating potential impacts to any special-status species from conversion of its habitat due to urban or agricultural development; rather, the more appropriate approach is to develop mitigation to address specific impacts as identified during project-level analysis on a site-specific basis to ensure effectiveness.

While the goals and policies for the protection of sensitive biological resources in general are expected to help reduce impacts, as feasible, on protected species and natural communities as a result of the proposed development under the 2035 General Plan, the County, through its ordinances or its 2035 General Plan, does not provide a site-specific approach to address impacts of development to special-status species and their habitats; this is because the ultimate level and timing development under the 2035 General Plan is not currently known and the 2035 General Plan is not designed to facilitate individual development projects but rather set forth the County's overall land use vision and framework for development through the General Plan horizon year. Furthermore, as noted above, identifying appropriate and adequate mitigation requires a site-specific evaluation of on-site conditions as well as consideration of the specific individual development proposal; this analysis necessarily occurs in connection with the entitlement and project-level environmental review process for individual developments. Nevertheless, the 2035 General Plan sets forth important goals and policies that would be considered in connection with the entitlement process for individual development projects and all such projects would be required to develop in a manner consistent with said goals and policies. For example, Goal AD-2 would help reduce impacts to special-status species through cooperation with applicable agencies to achieve environmental goals. Several goals that support Goal LU-1 and Goal LU-8 would direct urban development away from sensitive habitats, as feasible. Where such development may impact sensitive species, these goals and supporting policies would provide mechanisms to help assure that adequate mitigation is offered at the onset of the County permitting process.

Goal NCR-2 sets the overall intention to avoid impacts to special-status species through a comprehensive approach that conserves important habitat areas. This goal contains various

policies that would identify methods to protect habitat, prohibit subdivision within known habitat, develop a HCP, and protect wildlife corridors. Policy NCR 2.3 provides for the County to consider formulating an HCP. The HCP would provide developers with a formalized permitting process, and the County with a programmatic way to mitigate impacts on special-status species. However, prior to the completion of an HCP, which could take many years, this impact would be potentially significant because development under the 2035 General Plan would result in reduced numbers, range, and habitat quantity and quality for plant, wildlife, and fish species. Another General Plan goal that would reduce impacts to special-status species includes Goal NCR-4, which would protect water quantity and quality in natural water bodies and groundwater basins and avoid overdraft of groundwater resources, also protecting riparian and wetland habitats.

Mitigation Measures:

BIO-1a. Add the following policies to 2035 General Plan Natural and Cultural Resources Element:

NCR-2.8 Pre-Development Biological Resource Assessment

The County shall require the preparation of biological resource assessments for new development proposals as appropriate. The assessment shall include the following: a biological resource inventory based on a reconnaissance-level site survey, and an analysis of anticipated project impacts to: potentially occurring special-status species (which may require focused special-status plant and/or animal surveys); an analysis of sensitive natural communities; wildlife movement corridors and nursery sites on or adjacent to the project site; an analysis of wildlife and/or fish nursery sites potentially jurisdictional wetlands/waterways; and locally protected biological resources such as trees. The assessment shall contain suggested avoidance, minimization, and/or mitigation measures for significant impacts to biological resources.

NCR-2.9: Mitigation Funding and Site Protection

The County shall require that project applicants demonstrate that adequate funding can be provided to implement all required biological mitigation and monitoring activities. Habitat preserved as part of any mitigation and monitoring plan shall be preserved through a conservation easement, deed restriction, or other method to ensure that the habitat remains protected.

BIO-1b. Implement Mitigation Measures BIO-2b through BIO-2c.

Implementation of Mitigation Measure BIO-1a sets forth a systematic framework in which biological assessments are prepared, would not result in any adverse environmental impacts, and would help assure that there is adequate funding for the implementation of mitigation and monitoring plans adopted by the County for a specific project.

Implementation of Mitigation Measure BIO-1a would provide additional assurances that biological resources are adequately evaluated and protective measures are sufficiently funded during the entitlement and development process for individual projects. Implementation of Mitigation Measure BIO-1b would help avoid or reduce adverse effects to riparian or other sensitive natural habitats. However, implementation programs and actions taken by the County as proposed in the 2035 General Plan, together with the mitigation measures identified above would only partially offset impacts of biological resources associated with urban or rural development, and the extent to which said programs, actions and measures would adequately mitigate identified impacts cannot be known at this time given the programmatic nature of the analysis. Further, neither Rangeland nor Agricultural land use designations nor the 2035 General Plan policies would prevent the overall net loss of special status species or individuals within the County associated with future development within natural habitat areas. There is no additional or technically feasible mitigation to reduce the net loss of habitat or individuals. In adopting the General Plan, the County must balance conflicting goals of protecting resources while accommodating growth. The overall approach in the General Plan is to encourage development on less sensitive lands in a more clustered fashion. Consequently, implementation of the General Plan could potentially, substantially convert natural habitats to urban and rural uses, and result in a significant and unavoidable impact.

Impact BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service. (IV.b)

Significance of Impact: Significant and unavoidable.

There are several riparian and other sensitive natural community types within the County that may be lost as a result of development associated with the 2035 General Plan. These are described in detail in the Background Report and include aquatic, riparian, native grasslands, chaparral, oak woodlands, and hardwood and conifer forests. Riparian communities occur along rivers, streams, and other drainages in the unincorporated County. The loss of these habitats would be potentially significant because activities undertaken in implementation of the 2035 General Plan could result in permanent loss of sensitive natural communities.

Development could result in long-term degradation of riparian and other sensitive plant communities, resulting in fragmentation, isolation of an important wildlife habitat, or disruption of natural wildlife movement corridors and/or important rearing habitat for juvenile steelhead. The loss or disruption of riparian habitats would be a significant impact due to the value of such habitat for a wide variety of common and special-status species, and for providing a wildlife movement corridor along creeks in the County. Development has the potential to reduce

biological functions by reducing in-stream flows necessary for the maintenance of fisheries, riparian areas, and other aquatic resources.

Development and construction projects in the County would also have the potential to affect riparian and other sensitive natural communities by spreading or introducing invasive plant species to currently uninfected areas. Invasive species spread aggressively and crowd out native species, potentially altering the species composition of vegetation communities. A predominance of invasive species reduces the overall habitat quality for native plants and wildlife.

Disturbance or alteration of streams, lakes, or other federally-protected (jurisdictional) wetlands, including some riparian areas, would require a U.S. Army Corps of Engineers (Corps) permit. Such a permit would include conditions to minimize and compensate for the loss of these sensitive natural communities (see Impact BIO-3 below). Non-jurisdictional wetlands include wetland features that are not hydrologically connected to navigable waters in rivers and are not under Corps jurisdiction. These wetlands would still be considered waters of the state, and would be regulated according to waste discharge requirements that would be issued by the Regional Water Quality Control Board (RWQCB). A Section 1602 Streambed Alteration Agreement would be needed from the CDFW prior to initiation of project construction activities within the County that would divert, obstruct, or change the natural flow of a river, stream, or lake, or that would use material from a streambed.

In addition to a Section 1602 Streambed Alteration Agreement, a Section 401 water quality certification or waste discharge requirements from the RWQCB. 2035 General Plan policies discussed in [Table 8-3](#) include those that serve to avoid or reduce, as feasible, several sensitive natural habitats, and the wildlife and plants that depend on those habitats.

These policies, combined with Mitigation Measure BIO-1a would help mitigate impacts to riparian areas, oak woodlands and other sensitive communities. County Ordinance 708 requires protection of riparian ecosystems from the effects of grading. However, there is no specific protection framework for riparian habitat, prevention of invasive plant species, or requiring developers to assess impacts to in-stream flows as a result of the 2035 General Plan. Furthermore, implementation programs and actions taken by the County as proposed in the 2035 General Plan would only partially offset impacts to riparian areas and other sensitive habitats, and the extent of such mitigation cannot be known at this time given the programmatic nature of the analysis. For the above reasons, this is considered a potentially significant impact to biological resources.

Mitigation Measures:

BIO-2a. Implement Mitigation Measure BIO-1a.

BIO-2b. Amend Policy NCR-2.5 as follows:

The County shall encourage the protection of the habitat value and biological functions of oak woodlands, native grasslands, riparian and aquatic resources, and vernal pools and wetlands. The County shall require that development avoid encroachment and require buffers around ~~on wetlands~~ these habitats to the extent practicable ~~and~~. The County shall further require mitigation for any development proposals that have the potential to reduce ~~wetland~~ these habitats. Recreational trails and other features established within natural wetlands and aquatic and riparian buffer areas shall be, as long as such areas are not required to meet the Americans with Disabilities Act, and located along the outside of the sensitive habitat whenever possible to minimize intrusions and maintain the integrity of the habitat. Exceptions to this action include irrigation pumps, roads and bridges, levees, docks, public boat ramps, and similar uses. In all cases where intrusions into these buffers are made, only the minimum amount of vegetation necessary to construct the feature shall be removed.

BIO-2c. Add the following policy to 2035 General Plan Natural and Cultural Resources Element:

NCR- 2.10: Invasive Species

The County shall require that new development avoids the introduction or spread of invasive plant species during construction by minimizing surface disturbance, seeding and mulching disturbed areas with certified weed-free native mixes, and using native or noninvasive species in erosion control plantings.

As discussed in Impact BIO-1, implementation of Mitigation Measure BIO-1a would not cause impacts to sensitive species habitats and no environmental effects would occur. Implementation of Mitigation Measure BIO-2b would require that urban development avoid encroachment into sensitive habitats in the County to the extent practicable. Implementation of Mitigation Measure BIO-2c would result in urban development reducing the introduction of non-native, invasive species to a project site.

Implementation of Mitigation Measure BIO-1a would result in projects reducing impacts by ensuring early analysis of biological resources and assure that there is adequate funding for the implementation of mitigation and monitoring plans adopted by the County for a specific project. Implementation of Mitigation Measure BIO-2b would require that urban development avoid encroachment into sensitive habitats in the County to the extent practicable. Implementation of Mitigation Measure BIO-2c would result in development reducing the introduction of non-native, invasive species to a project site.

However, implementation programs and actions taken by the County as proposed in the 2035 General Plan, together with the mitigation measures identified above would only partially offset impacts to sensitive habitats associated with development, and the extent to which impacts would be reduced or avoided cannot be known with certainty at this time given the programmatic nature of the analysis. Furthermore, while the revised policies would help reduce significant impacts on sensitive habitats, neither the Rangeland nor Agricultural land use designations, nor proposed 2035 General Plan policies would prevent the overall net loss of sensitive habitats within the County associated with future urban and rural development. There is no additional or technically feasible mitigation to reduce the net loss of habitat or individuals. In adopting the General Plan, the County must balance conflicting goals of protecting resources while accommodating growth. The overall approach in the General Plan is to encourage development on less sensitive lands in a more clustered fashion. Consequently, implementation of the 2035 General Plan would substantially convert sensitive habitats to urban and developed rural uses, and result in a significant and unavoidable impact.

Impact BIO-3: Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (IV.c).

Level of Significance: Less than significant with mitigation.

Development activities could potentially result in the loss of wetlands and waters of the United States and/or the state, including named or unnamed streams, vernal pools, salt marshes, freshwater marshes, and other types of seasonal and perennial wetland communities. Wetlands and other waters would be affected through direct removal, filling, hydrological interruption, alteration of bed and bank, and other construction-related activities. This impact would be potentially significant because activities undertaken in implementation of the 2035 General Plan could result in permanent loss of wetlands or waters of the United States and/or the state, or loss of functions or habitats associated with these wetlands or waters.

Seasonal wetlands and vernal pools provide valuable habitat to native plant and wildlife species, and contribute to the maintenance of water quality. Seasonal wetlands occur throughout the County. Vernal pool complexes are concentrated in the southwest portion of the County.

In accordance with the Federal Clean Water Act, a delineation of waters of the United States would need to be conducted prior to the initiation of construction activities in the County where potentially jurisdictional features are present. The results of the delineation, including a report and map, would be submitted to the San Francisco District of the Corps for verification. If the Corps determines that no waters of the United States are present, a Clean Water Act Section 404 permit would not be required, although waste discharge requirements from the RWQCB might be required. If the Corps determines that waters of the United States are present, a Section 404

permit from the Corps for placement of fill within waters of the United States and a Section 401 water quality certification from the RWQCB would be required. Placement of fill materials into waters of the United States would require compensatory mitigation to ensure no net loss of aquatic resources. Required compensation for the loss of degraded habitat could be less than that for undisturbed habitat, but compensation ratios would ultimately be determined by the resource agencies, and would be stated in the permit conditions.

In addition, several policies contained in the 2035 General Plan reduce impacts to wetlands and waters (see [Table 8-3](#)). Implementation of 2035 General Plan policies; conditions associated with Section 404 permits and Section 401 water quality certifications; and additional protection of wetlands before and during construction activities as identified in Mitigation Measures BIO-3 would reduce potential impacts on federally-protected wetlands to a less-than-significant level.

Mitigation Measure:

BIO-3: Implement Mitigation Measures BIO-1a, BIO-2b and BIO-2c.

As discussed in Impact BIO-1, implementation of Mitigation Measure BIO-1a would not cause impacts to riparian and wetland habitats and no environmental effects would occur. As discussed in Impact BIO-2, implementation of Mitigation Measures BIO-2b and BIO-2c would not cause impacts to riparian and wetland habitats and no environmental effects would occur.

Implementation of the proposed 2035 General Plan policies along with Mitigation Measures BIO-1a, BIO-2b, and BIO-2c would result in a reduction in the potential for new development and related infrastructure to result in adverse wetland effects by aligning the County's standards and requirements with those of state and federal resource management agencies. Because policies proposed in the 2035 General Plan and the mitigation measures listed above would require identification and protection of federally protected wetland habitat, consistent with federal no-net loss requirements, the impact would be less than significant.

Impact BIO-4: 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 (IV.d).

Level of Significance: Less than significant with mitigation.

Private and public activities undertaken in implementation of the 2035 General Plan could potentially result in the fragmentation and degradation of wildlife habitat, leading to interference with species movement, wildlife migration corridors, and nursery sites. This would be a potentially significant impact.

Species occurring in the County that are particularly susceptible to disruptions of movement corridors include California tiger salamander and California red-legged frog. These species move between upland habitats and aquatic breeding sites. Isolation of breeding waters from upland habitats can severely reduce the population of salamanders and frogs, and eventually can result in the extirpation of local populations. Barriers to movement in such cases can include moderately to heavily traveled roads, sound walls, and roadside barriers. Curbs and gutters can trap moving salamanders or frogs in roadways where they are crushed by vehicle traffic, or washed into storm drains. Fish species are susceptible to disruption of movement corridors. Activities or structures that block fish passage or that isolate the upper reaches of streams could impact movement corridors and block access to nursery sites where the spawning areas are located in the upper reaches of the stream or river system.

Common wildlife species can be impacted on a local level by disruption of movement corridors and nursery sites. Riparian corridors provide the primary movement corridors between the valley floor and western hills, and may provide cover, food, and water for wide ranging animal species moving through otherwise unsuitable habitats. For example, deer and small mammals may use riparian corridors to move through agricultural areas, or between the western hills and lowlands of the County. These corridors allow wildlife to access food resources and foraging areas that may be unavailable to them without the cover and security provided in the corridor. Corridors that link oak woodlands can make seasonal food resources available to wildlife in oak woodlands in the fall. Mammals and birds make use of these seasonally available resources, and may use corridors to reach such resources.

Development and agricultural activities may disrupt wildlife breeding depending on the time of year. Removal of vegetation, ground disturbance, pond draining, and other intrusions into wildlife breeding or rearing areas can result in mortality of young through abandonment of nests, loss of den sites, or loss of essential habitat. Disruption of riparian corridors by removal of vegetation, or placement of permanent structures or active recreational facilities within the corridors; blockage of rivers and streams temporarily, seasonally, or permanently; or isolation of a species' essential habitat through the construction of impassable barriers would result in a significant impact to wildlife movement corridors or nursery sites.

Growth under the 2035 General Plan could restrict local or long distance movement of native species by further fragmenting habitat. Development in natural landscapes can disconnect or fragment habitat areas, reducing the size of common and migratory special-status species populations that those habitat areas can support. Fragmentation of habitat increases stress, and thereby increases susceptibility to disease, predation, climate changes, etc.

[Table 8-3](#) lists several policies in the proposed 2035 General Plan that reduce or mitigate impacts to wildlife corridors. Implementation of the 2035 General Plan policies that support residential and commercial development could potentially result in significant impacts to wildlife

movement corridors, but the policies would partially minimize some of these effects. Mitigation Measure BIO-1a requires developers to perform a biological resource assessment that includes measures to avoid or minimize impacts to wildlife movement corridors and nursery sites, and to provide compensation for losses.

Mitigation Measure:

BIO-4: Implement Mitigation Measure BIO-1a.

Implementation of the policies and actions taken by the County as proposed in the 2035 General Plan would limit impacts to wildlife corridors associated with urban and agricultural development. As discussed in Impact BIO-1, implementation of Mitigation Measures BIO-1a would provide additional assurances that wildlife movement corridors and natural nurseries are adequately evaluated and protective measures are sufficiently funded during the entitlement and development process for individual projects.

Impact BIO-5: Conflicts with local policies or ordinances protecting biological resources, such as tree preservation policies or ordinances (IV.e).

Level of Significance: Significant and unavoidable.

Private and public activities undertaken in implementation of the 2035 General Plan could potentially conflict with local policies protecting oak woodlands. This would be a potentially significant impact. Oak woodlands support a diversity of animal species as a result of the many resources that oaks in particular provide, including nesting sites and abundant food (such as large acorn crops). Regeneration of oak woodlands throughout California has been reduced by disturbance from grazing by livestock, and increased seedling mortality from competition with nonnative grasses. Development activities, infrastructure improvements, mining activities, agricultural improvements, water diversions, and park and recreation development may lead to direct and indirect impacts on oak woodland habitats. Except for the protection of oak woodlands, implementation of the 2035 General Plan would not conflict with any other local policies or ordinances protecting biological resources.

Policies included in the 2035 General Plan protecting oak woodlands in the County are found in [Table 8-3](#). The policies listed in [Table 8-3](#) protect and promote the restoration of oak woodlands and establish a mechanism for mitigation. Goal NCR-2 would reduce impacts associated with conflicts with local policies and ordinances that protect oak woodland habitat by providing an overall goal to enhance wildlife communities and habitat resulting in a policy that supports local and ordinances. Other policies listed in [Table 8-3](#) (NCR-1.1, NCR-1.2, and NCR-4.4) establishing and protecting open space preservation and acquisition would result in direct benefits to oak woodland conservation, as oak woodlands constitute a significant portion of the native vegetation in the County. Policy AD-2.3 encourages and supports coordination with state

and federal agencies that have responsibility for natural open space and habitat areas in the County. This coordination will lead to better management of oak woodland resources.

General Plan Policy NCR-2.3 will help protect oak woodlands and other natural communities by directing the County to consider development of a state Natural Communities Conservation Plan (NCCP) and Habitat Conservation Plan (HCP). Funding (separate from that required to mitigate for impacts to HCP-covered species) could be used to purchase land or easements over oak woodland and other natural communities. An NCCP would provide for the integration of natural communities into the overall conservation program for the County.

Policy NCR-2.3 encourages the County to develop a NCCP as well as an HCP, but does not require the County to do so because the County may lack funds ensure that a NCCP and HCP are timely completed. For this reason, potential impacts remain significant and unavoidable. There is no additional or technically feasible mitigation to reduce the net loss of oak woodlands. Consequently, implementation of the 2035 General Plan could substantially convert oak woodlands to urban and rural uses, resulting in a significant and unavoidable impact.

Impact BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan (IV.f).

Level of Significance: Less than significant, no mitigation required.

The 2035 General Plan would not conflict with any existing HCPs, NCCPs, or local habitat management plans since none have been adopted in the County. This would be a less-than-significant impact. There are currently no HCPs, NCCPs, or other local habitat conservation plans in effect in the County. As shown in [Table 8-3](#), Policy NCR-2.3 requires the County, in cooperation with other federal and state agencies, to consider developing an HCP and NCCP for listed and candidate species.