3.4 Biological Resources

INTRODUCTION

This section of the EIR evaluates individual and cumulative impacts to biological resources resulting from the proposed project. The analysis of biological resources presented in this section is based on a review of the project description as well as data collected from field surveys, available literature from federal, state and local agencies, and a PMC peer review of the biological technical reports by H.T. Harvey & Associates, including a biotic assessment (2007a), results of species-specific surveys (2007b), two wetland delineations (2007c; 2008a), and a biological assessment for the U.S. Fish and Wildlife Service (USFWS; 2008b). PMC biologists also conducted reconnaissance-level surveys of the project site in July 2009 and March 2010. All the technical reports are discussed in the environmental setting. The impact analysis relies on peer-reviewed biological resource information obtained through recent surveys and the reports completed by H.T. Harvey in 2007 and 2008, all of which are included as **Appendix D**.

3.4.1 ENVIRONMENTAL SETTING

The project site is located within the Central California Coast ecological subregion of the Santa Clara Valley subsection (Miles and Goudey 1997). This subsection consists of an alluvial plain in the Santa Clara Valley that extends from the Hollister area to San Francisco Bay. The region is generally characterized by rolling hills with annual grassland and oak woodland to the east and flat cultivated and developed land to the west. The climate is generally hot and subhumid, and is affected by marine influences. The mean annual precipitation is approximately 12 to 20 inches. Mean annual temperature is approximately 56 to 60 degrees Fahrenheit (Miles and Goudey, 1997).

EXISTING CONDITIONS

As described in **Chapter 2.0, Project Description**, the project site consists of the 292-acre "Plan Area" within which the proposed residential mixed-use project will be developed, and an adjacent 26-acre site abutting the northeastern corner of the Plan Area proposed for a potential on-site wastewater treatment plant ("WWTP site") to serve the project in the event that connection to the City of Hollister Domestic Wastewater Treatment Plant is not feasible. Two other parcels are also included within the project site, including the existing CDF fire station parcel and the existing LESSALT plant parcel. Because of the existing development on each of these sites, no biological resources on these sites are anticipated. No physical changes will occur on these parcels. However, they are included within the project description given their anticipated annexation into the Sunnyslope County Water District.

The Plan Area is located at the base of a series of rolling hills at the eastern edge of the City of Hollister, and west of Dry Creek and Santa Ana Creek. The topography of the Plan Area is variable, with elevations ranging from 340 to 500 feet. The majority of the Plan Area is undeveloped with the exception of two residences in the northwestern portion of the Plan Area. The Plan Area has been used primarily for dry farming and cattle grazing since the early 1990s with a smaller area used as a walnut orchard (H.T. Harvey). No perennial drainages exist within the Plan Area, and surface runoff drains generally northward towards a collection swale alongside Fairview Road and to an isolated pond immediately north of the Plan Area boundary. A 26-acre portion of the project site has been identified for a potential wastewater treatment plant (WWTP) to serve the project if the project cannot ultimately connect to the City of Hollister's Domestic Wastewater Treatment Plant; it is located to the east of the northern portion of the Plan Area. This potential WWTP site is similar to the Plan Area in character, consisting of gently sloping topography with seasonal grassland vegetation. This area is not used for

cultivation, but has been used in the past for horse and cattle grazing (H.T. Harvey). The biological characteristics of the project site are described more fully in the following discussion.

Biological Communities

The principal plant communities within the project site include cultivated hayfield, annual grassland, orchard, developed/ruderal land, and seasonal wetland areas. The acreages of these communities are presented in **Table 3.4.1** below, and are shown on **Figure 3.4.1** that follows. The terrestrial vegetative communities within the Plan Area and potential WWTP site are described as documented during the July 1, 2009 survey by PMC. In addition, PMC visited the site on March 5, 2010 to verify site conditions. The aquatic communities were delineated by H.T. Harvey and Associates. The seasonal wetlands and swale within the Plan Area have been delineated by H.T. Harvey and Associates (H.T. Harvey 2008a) and verified by the U.S. Army Corps of Engineers (USACE). Although the potential WWTP site has been delineated by H.T. Harvey and Associates (H.T. Harvey 2007c), it has not been verified by USACE.

TABLE 3.4-1
VEGETATIVE COMMUNITIES WITHIN THE PROJECT SITE

Vegetative Communities	Acreage within the Project Site
Terrestrial Communities	
Annual Grassland	46.6
Cultivated Hayfield	146.2
Disked	90.1
Orchard (Walnut)	24.6
Developed/Ruderal	7.4
Aquatic Communities	
Seasonal Wetlands	0.67
Swale	0.16
Drainage	0.04
TOTAL	**316**

Source: H.T.Harvey 2007c; 2008a and observed conditions during the July 1, 2009 site visit by PMC.

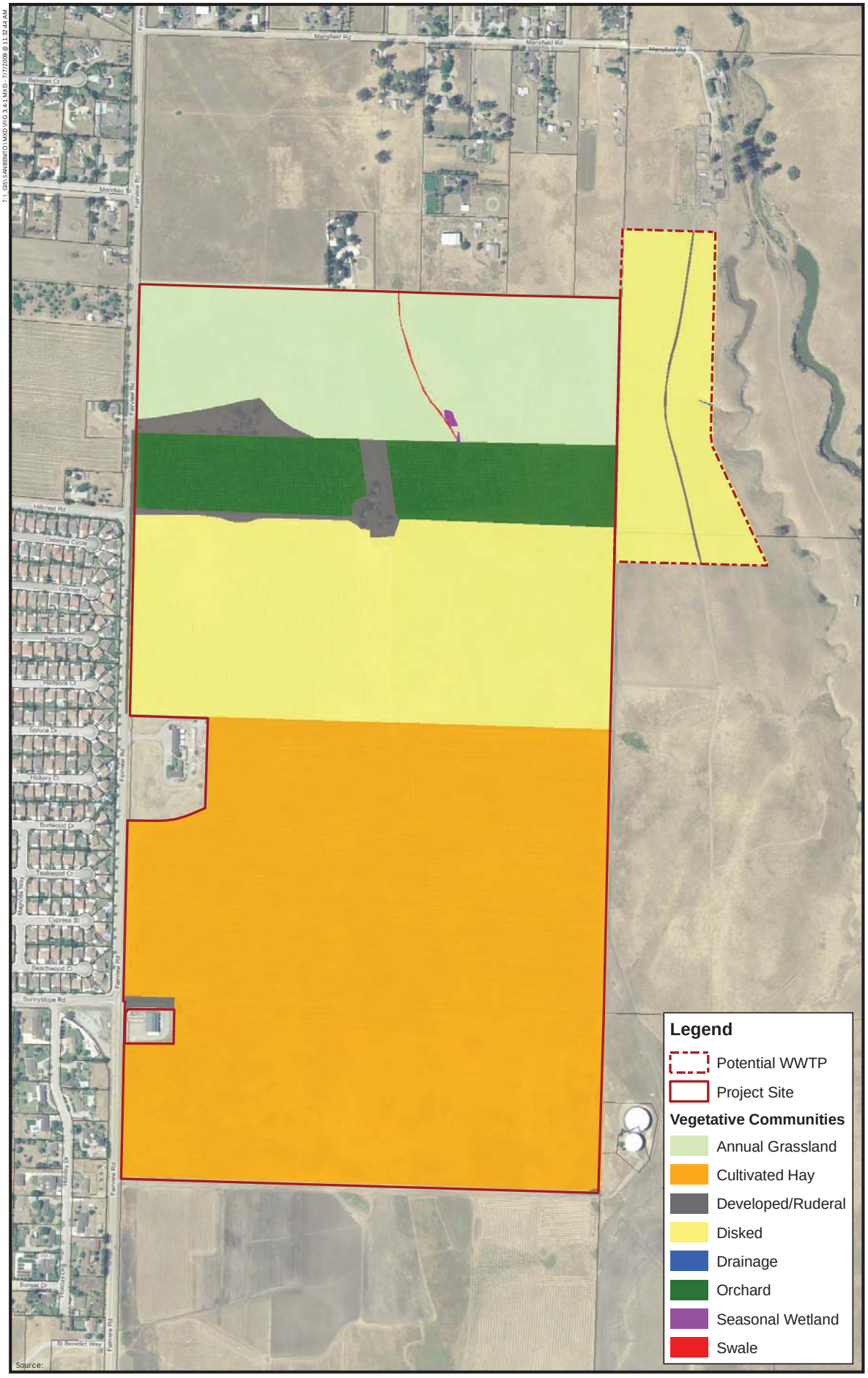

Figure 3.4-1
Vegetative Communities within the Project Site and Potential WWTP Site

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Annual Grassland

Within the annual grassland areas of the project site, foxtail barley (*Hordeum marinum* ssp. *gussoneanum*), red brome (*Bromus rubens*), rip-gut brome (*B. diandrus*), soft chess (*B. hordeaceous*), foxtail chess (*B. madritensis* ssp. *madritensis*), Italian ryegrass (*Lolium multiflorum*), wild oats (*Avena fatua*), milk thistle (*Silybum marianum*), rattail fescue (*Vulpia myuros*), and mustard (*Brassica* spp.) are the most prevalent. Yellow star-thistle (*Centaurea solstitialis*), wild carrot (*Daucus carota*), turkey mullein (*Eremocarpus setigerus*), bull thistle (*Cirsium vulgare*), field bindweed (*Convolvulus arvensis*), Russian thistle (*Salsola kali*), and stork's bill (*Erodium* sp.) also occur scattered within the annual grassland and along field perimeters. No native grasses typical of native valley grassland were observed, and grasslands on the project site are not expected to support the diverse annual flora associated with this native habitat (H.T. Harvey 2007a). The only area currently being used for grazing purposes is the northern parcel (Assessor Parcel Number [APN] 025-10-0010), which is surrounded by barbed wire and an electric fence.

The annual grassland habitat on the project site supports an abundance of California ground squirrels. Other small mammal burrows occur on the project site, which may be used by California vole (*Microtus californicus*) and deer mouse (*Peromyscus maniculatus*); in addition, signs of Botta's pocket gopher (*Thomomys bottae*) were observed. The numerous small mammals on the project site provide an adequate prey base for raptors and other predators. Five red-tailed hawks (*Buteo jamaicensis*) and an American kestrel (*Falco sparverius*) were observed foraging in the area. Suitable habitat for burrowing owl (*Athene cunicularia*), a California species of special concern, occurs within the annual grassland habitat.

Although the loose soil and burrow availability provide upland habitat for aestivating amphibians like California tiger salamander (*Ambystoma californiense*) and various reptiles, the frequency of plowing and weed control practices such as disking may periodically disturb mammal burrows and ground cover and therefore lower the suitability for California tiger salamander and other amphibians and reptiles (H.T. Harvey 2007a). Amphibians such as Pacific chorus frog (*Pseudacris regilla*) and western toad (*Bufo boreas*) may forage and seek cover in grassland habitats; California tiger salamander breeding in ponds outside the project site may use these habitats for refuge and dispersal; and California red-legged frog (*Rana aurora draytonii*) associated with Dry Creek likely forage in the adjacent non-native grassland habitats, at least during the wet season (H.T. Harvey 2007a).

Reptiles such as western fence lizard (*Sceloporus occidentalis*), common kingsnake (*Lampropeltis getulus*), gopher snake (*Pituophis catenifer*), and northern alligator lizard (*Elgaria coerulea*) may occur here as well. Bird species typical in these habitats are common and widespread varieties such as American crow (*Corvus brachyrhynchos*), killdeer (*Charadrius vociferous*), mourning dove (*Zenaida macroura*), Brewer's blackbird (*Euphagus cyanocephalus*), house finch (*Carpodacus mexicanus*), savannah sparrow (*Passerculus sandwichensis*), western meadowlark (*Sturnella neglecta*), American pipit (*Anthus rubescens*), white-crowned sparrow (*Zonotrichia leucophrys*), and barn swallow (*Hirundo rustica*). Larger mammal species such as coyote (*Canis latrans*) and black-tailed deer (*Odocoileus hemionus columbianus*) are likely to forage the project site and adjacent lands for small prey (H.T. Harvey 2007a).

Cultivated Hayfield

The majority of the habitat within the project siteis agricultural in nature. During the July 1, 2009 site survey, the southern half of the project site was being cultivated for hay, which typically includes barley varieties (*Hordeum murinum* ssp. *gussonaeum* and *H. leporinum*) and wild oats. In the past, portions of the project site were periodically left fallow and devoted to grazing (H.T. Harvey 2007a).

The cultivated hayfield in the project site also supports an abundance of California ground squirrels, and therefore has the potential to support burrowing owl and other predatory species such as raptors and coyote.

Disked Areas

Immediately adjacent to the cultivated hayfield within APN 025-37-002-0 of the Plan Area, the soil has been deeply disked. The potential WWTP site was also observed on the July 1, 2009 site survey to have been disked, consistent with existing agricultural uses. Disked fields have little habitat value to wildlife. Although small mammals and their underground burrows may survive the disking, the lost vegetative cover makes them more likely to be preyed upon, reducing their habitat suitability.

Orchard

Approximately 25 acres of the project site is managed as a walnut orchard that also includes some almond trees. Orchards are typically poor wildlife habitat due to the intensive management practices of pruning, tilling, and irrigation; however, common wildlife species may use the habitat for foraging and nesting. Persistent wildlife generally consists of birds attracted to the fruit, such as American crows, yellow-billed magpies (*Pica nuttalli*), and western scrub-jays (*Aphelocoma californica*). Winter species foraging under the trees may include flocks of white-crowned sparrows and dark-eyed juncos (*Junco hyemalis*). Common amphibian and reptile species such as Pacific chorus frogs, western toads, western fence lizards, and gopher snakes can also be expected to utilize this habitat (H.T. Harvey 2007a).

Developed/Ruderal Land

The project site contains two small residences with associated driveways and outbuildings. Vegetation in and adjacent to these areas is typically ornamental or consists of ruderal species. Landscape trees around the existing residences include black locust (*Robinia pseudoacacia*), Peruvian pepper tree (*Shinus mollis*), Torrey pine (*Pinus torreyana*), and palo verde (*Cercidium* sp.). Ruderal species that are present include black mustard (*Brassica nigra*), curly dock (*Rumex crispus*), milk thistle, and Italian thistle (*Carduus pycnocephalus*).

Developed and ruderal areas commonly provide habitat to species accustomed to human presence such as western scrub jay, American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), house finch, house sparrow (*Passer domesticus*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel, Botta's pocket gopher, Pacific chorus frog, western toad, western fence lizard, common kingsnake, gopher snake, and northern alligator lizard (H.T. Harvey 2007a).

Seasonal Wetlands

Seasonal wetlands were identified within the Plan Area and potential WWTP site. These areas were determined not to maintain seasonally inundated or saturated soil conditions for durations long enough for colonization by perennial, obligate plant species. As such, plant species in the seasonal wetlands areas were determined to be of two types: species that can tolerate short periods of inundation but have not adapted to withstand sustained saturated soil conditions, and short-lived (primarily annual) species that take advantage of ephemeral aquatic and/or saturated soils conditions. Plant species observed occurring within the seasonal wetlands within the project site during the wetland delineation include saltgrass (*Distichlis spicata*), Italian ryegrass, curly dock (*Rumex crispus*), bristly ox-tongue (*Picris echioides*), iris-leaved rush (*Juncus xiphioides*), and umbrella sedge (*Cyperus squarrosus*) (H.T. Harvey 2008a).

Wetland Delineations

Two wetland delineations were conducted for the project site, including a delineation for the Plan Area by H.T. Harvey (2008a), which was verified by the USACE on March 4, 2009 (Verification No. 2008-004-01S). A second wetland delineation was completed for a portion of the potential WWTP site and extended beyond the WWTP site boundary to the east side of Dry Creek (H.T. Harvey 2007c). The wetland delineation for the potential WWTP site has not been verified by the USACE. **Table 3.4-2** lists the acreages for each feature delineated within the project site, and **Figure 3.4-1** shows the delineated wetland features within the project site. Both wetland delineation reports are included as **Appendix D**.

TABLE 3.4-2
WETLANDS AND OTHER WATERS OF THE U.S.

Potential Jurisdictional Waters	Acreage within the Plan Area	Acreage within the Potential WWTP Site	Off-site Features
Seasonal Wetlands	0.40	0.27	0.02*
Linear Wetland Drainage	~	0.04	~
Roadside Ditch	~	~	0.01*
TOTAL	**0.40**	**0.31**	**0.03**

*Source: H.T. Harvey 2007c; 2008a. *Note: Only 0.01 acre of seasonal wetland was determined to be jurisdictional of the off-site features delineated.*

Results of the Wetland Delineation for the Plan Area

The 2008 wetland delineation identified four seasonal wetlands within the Plan Area totaling 0.40 acres (H.T. Harvey 2008a). This delineation was verified by the USACE in February 2009. Although the wetlands on the Plan Area appear to be completely isolated hydrologically from all navigable waters of the U.S. and their tributaries and all appear to either drain to an off-site, isolated pond at the northern boundary of the Plan Area or are themselves completely isolated at topographic low points (H.T. Harvey 2008a), the USACE claimed jurisdiction over these wetlands largely on the grounds that they were located in or near the alignment of a historical channel that did have a surface connection to Santa Ana Creek. Ongoing agricultural practices have reduced the habitat value of the wetlands within the Plan Area.

Generally, the Plan Area drains to an existing roadside ditch along the east side of Fairview Road that extends approximately 2/3 mile to an existing off-site outfall area at Santa Ana Creek. A small wetland area within the roadside ditch, which was determined to be non-jurisdictional, is approximately 78 feet in length and constitutes 0.01 acres (305 square feet) (H.T. Harvey 2008a). Additionally, approximately 566 square feet of seasonal wetlands was delineated within Santa Ana Creek at the outfall area of the roadside ditch by H.T. Harvey. The USACE determined that the seasonal wetlands at the outfall area are jurisdictional features as they are contiguous with Santa Ana Creek which is an ephemeral drainage.

Results of the Wetland Delineation for the Potential WWTP Site

A 0.27-acre depressional wetland was delineated within the potential WWTP site (H.T. Harvey 2007c). This wetland is regularly disked, consistent with existing agricultural uses of the site. The delineation also identified a 0.04-acre linear drainage wetland connecting the depressional wetland to Dry Creek. Various cuttings, wood debris, metal scraps, and cattle bones were observed within the drainage, degrading potential habitat quality such that ruderal species

such as black mustard and wild carrot (*Daucus carota)* are the primary components of the bank vegetation.

The wetlands delineated in the Plan Area and potential WWTP site have limited habitat value to wetland obligate species due to ongoing agricultural practices.

SPECIAL-STATUS SPECIES

Listed and Special-status Species

The CDFG's California Natural Diversity Database (CNDDB) (CDFG, 2009a/b), California Native Plant Society (CNPS) online inventory (CNPS, 2009) and USFWS online species list (USFWS, 2009a) were queried for a list of special-status wildlife, botanical, and fisheries resources that have the potential to occur or are known to occur in the project site and vicinity. **Appendix D** includes the results of the CNDDB, CNPS, and USFWS queries. Special-status species from this search were selected for consideration in this analysis based on habitat suitability within the project site, previously recorded occurrences of these species within a five mile radius of the project site, species-specific surveys, and professional expertise. Locations of previously recorded occurrences of special-status species are shown on **Figure 3.4-2.**

Listed and Special-status Plant Species

The March 2007 biotic assessment (H.T. Harvey 2007a) initially reported 97 special-status plant species that could potentially occur within the project site, based upon initial background database searches and literature review. H.T. Harvey determined, however, that all but four of these should be removed from consideration due to lack of appropriate habitat, and other local environmental factors. The four species are listed in the table below, along with their listing classification.

TABLE 3.4-3
SPECIAL-STATUS PLANT SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT SITE

Scientific Name	Common Name	Federal/ State/ CNPS
Plants		
Atriplex joaquiniana	San Joaquin spearscale	~/~/1B.2
California macrophylla	round-leaved filaree	~/~/1B.1
Eryngium aristulatum var. hooveri	Hoover's button-celery	~/~/1B.1
Plagiobothrys glaber	hairless popcorn-flower	~/~/1A

Code Designations	
California Native Plant Society Classification	***Threat Ranking***
List 1A *= Plant species that are presumed extinct in California*	***0.1****-Seriously threatened in California (high degree/immediacy of threat)*
List 1B *= Plant species that are rare, threatened, or endangered in California and elsewhere.*	***0.2****-Fairly threatened in California (moderate degree/immediacy of threat)*

Results of the subsequent H.T. Harvey focused surveys in April/June 2007 concluded that all four species were absent from the Plan Area (H.T. Harvey 2007a/b). While this survey did not address the potential WWTP site specifically, the disked condition of this site precludes the current presence of any of these species, because disking tills the soil and removes existing vegetation.

The findings of the rare plant surveys are consistent with the marginal suitability of the project site for rare plants, due to the preponderance of non-native invasive species as a result of previous hay production and ongoing agricultural practices. The four species are described below, along with their specific on-site evaluations.

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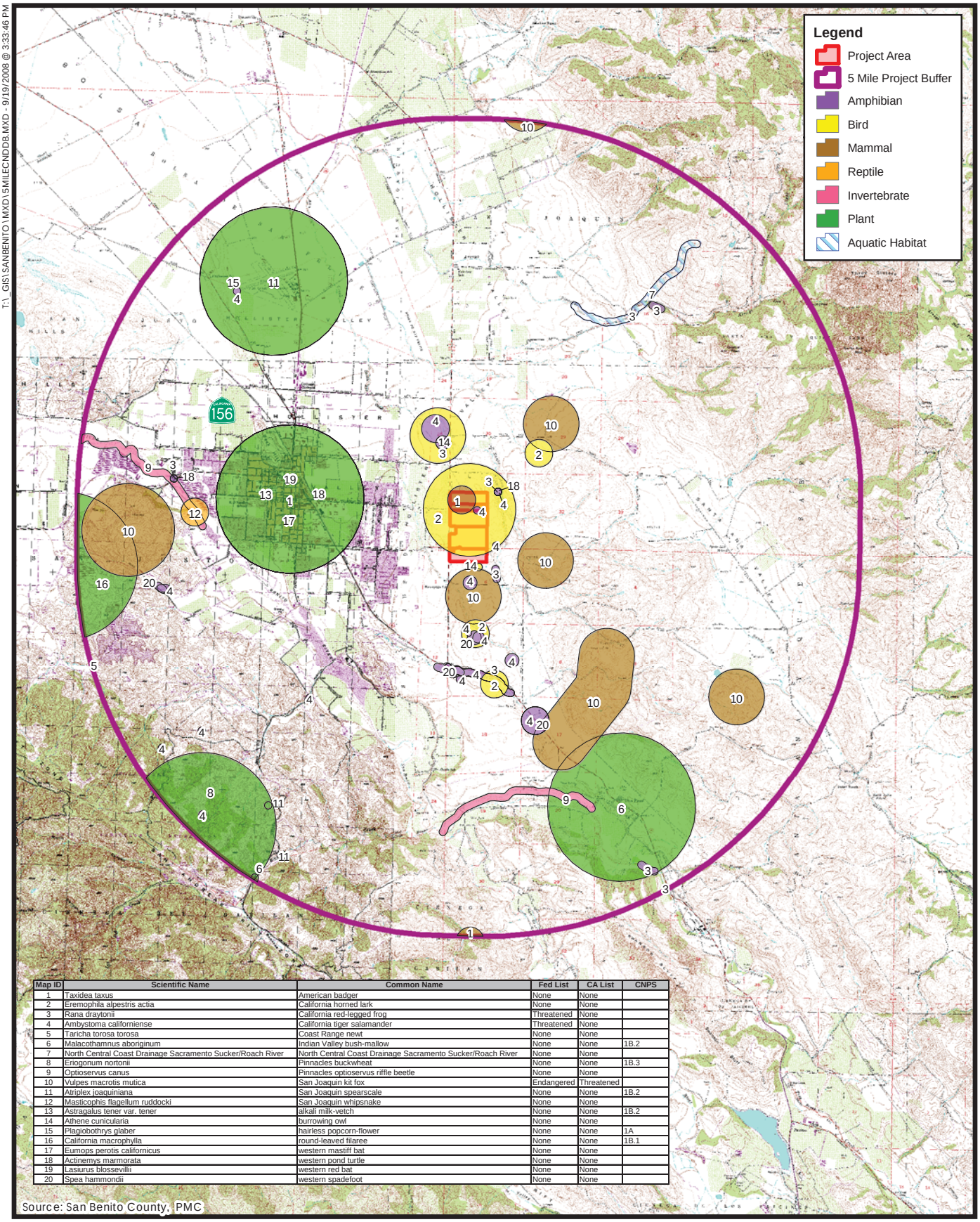

Map ID	Scientific Name	Common Name	Fed List	CA List	CNPS
1	Taxidea taxus	American badger	None	None	
2	Eremophila alpestris actia	California horned lark	None	None	
3	Rana draytonii	California red-legged frog	Threatened	None	
4	Ambystoma californiense	California tiger salamander	Threatened	None	
5	Taricha torosa torosa	Coast Range newt	None	None	
6	Malacothamnus aboriginum	Indian Valley bush-mallow	None	None	1B.2
7	North Central Coast Drainage Sacramento Sucker/Roach River	North Central Coast Drainage Sacramento Sucker/Roach River	None	None	
8	Eriogonum nortonii	Pinnacles buckwheat	None	None	1B.3
9	Optioservus canus	Pinnacles optioservus riffle beetle	None	None	
10	Vulpes macrotis mutica	San Joaquin kit fox	Endangered	Threatened	
11	Atriplex joaquiniana	San Joaquin spearscale	None	None	1B.2
12	Masticophis flagellum ruddocki	San Joaquin whipsnake	None	None	
13	Astragalus tener var. tener	alkali milk-vetch	None	None	1B.2
14	Athene cunicularia	burrowing owl	None	None	
15	Plagiobothrys glaber	hairless popcorn-flower	None	None	1A
16	California macrophylla	round-leaved filaree	None	None	1B.1
17	Eumops perotis californicus	western mastiff bat	None	None	
18	Actinemys marmorata	western pond turtle	None	None	
19	Lasiurus blossevillii	western red bat	None	None	
20	Spea hammondii	western spadefoot	None	None	

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Figure 3.4-2
Recorded Occurrences of Special Status Species within 5 Miles of the Project Area

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Round-leafed filaree is designated by CNPS as a List 1B.1 species (plant species that are rare, threatened, or endangered in California and elsewhere). This plant is an annual herb in the geranium family (Geraniaceae) that is found in cismontane woodland and valley and foothill grassland in clay soils at elevations between 15 and 1,200 meters above mean sea level. The round-leafed filaree blooms from March to May. There is one previously recorded occurrence of this species within a five-mile radius of the project site (CDFG 2009a). While not observed to be present in the project site, suitable habitat is present within the project site to support this plant. There is potential, therefore, that the plant could be found on the project site in the future, prior to the start of construction activities.

Hoover's button celery is designated as a List 1B.1 species by CNPS. This species is an annual/perennial herb in the carrot family (Apiaceae) that occurs in vernal pools at elevations between three and 45 meters, and blooms in July. There are no previously recorded occurrences of this species within a five-mile radius of the project site (CDFG 2009a). Further, given the disturbed nature of the seasonal wetlands within the project site, it is unlikely that this species would occur within the project site boundaries.

San Joaquin spearscale is designated as a List 1B.2 species by CNPS. This species is an annual herb in the chenopod family (Chenopodiaceae) that occurs in chenopod scrub, meadows and seeps, playas, and valley and foothill grassland in alkaline soils at elevations between one and 835 meters. This species blooms from April to October. There are three previously recorded occurrences for this species within a five-mile radius of the project site (CDFG 2009a). It is unlikely for this species to occur within the project site boundaries, due to marginal habitat quality given the disturbed nature of the area.

Hairless popcorn-flower is designated as a List 1A species by CNPS (plant species that is presumed extinct in California). It is an annual herb in the borage family (Boraginaceae) that was known to occur in meadows and seeps in alkaline soils, and marshes and swamps with coastal salt at elevations between 15 and 180 meters. This species' blooming period is between March and May. There is one previously recorded occurrence within a five-mile radius of the project site (CDFG 2009a), dating from 1954. Given the disturbed nature of the seasonal wetlands within the project site boundaries, it is unlikely that this species would occur within the project boundaries.

Listed and Special-status Wildlife Species

Table 3.4-4 lists the special-status wildlife species from the database searches that have the potential to occur within the project site based on habitat suitability, previously recorded occurrences of these species, species-specific surveys, and professional expertise.

TABLE 3.4-4
SPECIAL-STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT SITE

Scientific Name	Common Name	Federal/ State/ CNPS
Invertebrates		
Desmocerus californicus dimorphus	Valley elderberry longhorn beetle	FT/~/~
Amphibians		
Ambystoma californiense	California tiger salamander	FT/ CSC; ST/~
Rana aurora draytonii	California red-legged frog	FT/CSC/~
Spea hammondii	Western spadefoot	~/CSC/~

Reptiles		
Actinemys marmorata marmorata	Northwestern pond turtle	~/CSC/~
Masticophis flagellum ruddocki	San Joaquin whipsnake	~/CSC/~
Birds		
Athene cunicularia	Burrowing owl	~/CSC/~
Elanus leucurus	White-tailed kite	~/CFP/~
Lanius ludovicianus	Loggerhead shrike	~/CSC/~
Mammals		
Eumops perotis californicus	Western mastiff bat	~/CSC/~
Lasiurus blossevillii	Western red bat	~/CSC/~
Taxidea taxus	American badger	~/CSC/~
Vulpes macrotis mutica	San Joaquin kit fox	FE/ST/~

Code Designations	
Federal status	*State status*
***FE** = Listed as endangered under the federal Endangered Species Act*	***ST** = Listed as threatened under the California Endangered Species Act*
***FT** = Listed as threatened under the federal Endangered Species Act*	***CSC** = California Species of Special Concern*

The following descriptions provide detail on the special-status wildlife species that have the potential to occur in the project site.

Invertebrates

The **valley elderberry longhorn beetle** (VELB) is a federally threatened species that occurs in the Central Valley of California only where its host plant, the elderberry (*Sambucus* spp.), is found. The exit holes from the elderberry stems made by the emerging adults are distinctive, one-half to one centimeter round or oval openings. The entire life cycle of the VELB revolves around the elderberry. Adults eat the elderberry foliage until about June when they mate. The females lay eggs in crevices in the bark. Upon hatching, the larvae then begin to tunnel into the tree, where they will spend one to two years eating the interior wood. There is one seven-foot tall blue elderberry (*Sambucus mexicana*) elderberry shrub within the linear wetland drainage in the potential WWTP site. This shrub has a total of 10 stems (eight one-inch stems and two stems that are between three and five inches). There are no recorded occurrences of VELB within a five-mile radius of the project site (CDFG 2009a). The project site is outside the known range of the VELB and therefore this species is not expected to occur within the project site.

Amphibians

California tiger salamander (CTS) is federally and state-listed as threatened. CTS primarily occur in valley floor and foothill grasslands, and in open oak woodland and oak savannah. Adults utilize existing rodent burrows for refuge during the non-breeding season, and migrate to aquatic breeding sites during the rainy season, to which they may move overland up to one mile. The larvae take three to four months to metamorphose into adults. There are six previously

recorded occurrences within a one-mile radius of the project site and an additional ten within a five-mile radius of the project site (CDFG 2009a).

The entire project site is within critical habitat for California tiger salamander, as depicted in **Figure 3.4-3**. Although CTS larvae have been previously observed within the project site, the stock pond where they were found was destroyed during a severe storm in March 1995, and this area has since been planted in walnuts (H.T. Harvey 2008b). Further, the seasonal wetlands found within the project site were determined to be of low habitat quality or ecological value for the species (H.T. Harvey 2008b), due to repeated disking and ripping over the years as a result of on-going agricultural activity on the project site. Further, the seasonal wetlands were also determined during site surveys in December, January and February--the height of the rainy season--not to pond water long enough to support breeding by CTS (H.T. Harvey 2008b).

While suitable breeding habitat for CTS does not occur within the project site, suitable breeding habitat does occur in several ponds and pools located offsite to the north, northeast, and southeast. Further, the presence of ground squirrel colonies on the project site indicates that the site may be suitable as non-breeding upland habitat for CTS.

California red-legged frog (CRLF) is federally listed as threatened and a California species of special concern. The project site is not located within designated Critical Habitat for this species. The CRLF is California's largest native frog, and is generally restricted to riparian and lacustrine (lake) habitats. They prefer deep, still pools, usually greater than two feet in depth, in creeks, rivers or lakes below 5,000 feet in elevation. Breeding habitats require fresh water emergent vegetation or thick riparian vegetation, especially willow thickets adjacent to shorelines. CRLFs can survive in seasonal bodies of water that dry up for short periods if a permanent water body or dense vegetation is nearby. They can move considerable distances overland, with dispersal occurring predominantly within creek drainages. Individuals are often found in summer in foraging habitat not suitable for breeding, and are therefore presumed to move seasonally between summer foraging and winter breeding habitats. There are three previously recorded occurrences within a one-mile radius of the project site and an additional seven within a five-mile radius of the project site (CDFG 2009a).

The aquatic habitat in Santa Ana Creek, east of the project site, is typical of habitat supporting CRLF elsewhere in the region, and contains several pools suitable for breeding habitat; a larger perennial pond within Santa Ana Creek just northeast of the project site provides even higher-quality habitat. Dry Creek, which parallels Santa Ana Creek to the west, and due east of the project site, may not possess adequate hydrology to support breeding of CRLFs, but does appear to have sufficient structure to support breeding within the channel if adequate water is present during late winter and into the early summer. As such, CRLFs may still occur in the adjacent Dry Creek and/or Santa Ana Creek. A pond just outside the project site boundary to the north also provides potential breeding habitat. No suitable breeding habitat occurs within the project site, since the wetland features do not contain water long enough for successful breeding to occur there. Potential wet-season foraging habitat does occur in several pools near the project site, and could be used by CRLFs when the pools are inundated and frogs are dispersing. The upland habitat within the project site may be used for dispersal; however the species' inability to be away from aquatic resources for long periods of time makes it unlikely that the CRLFs would occupy the few existing burrows in the project site's uplands.

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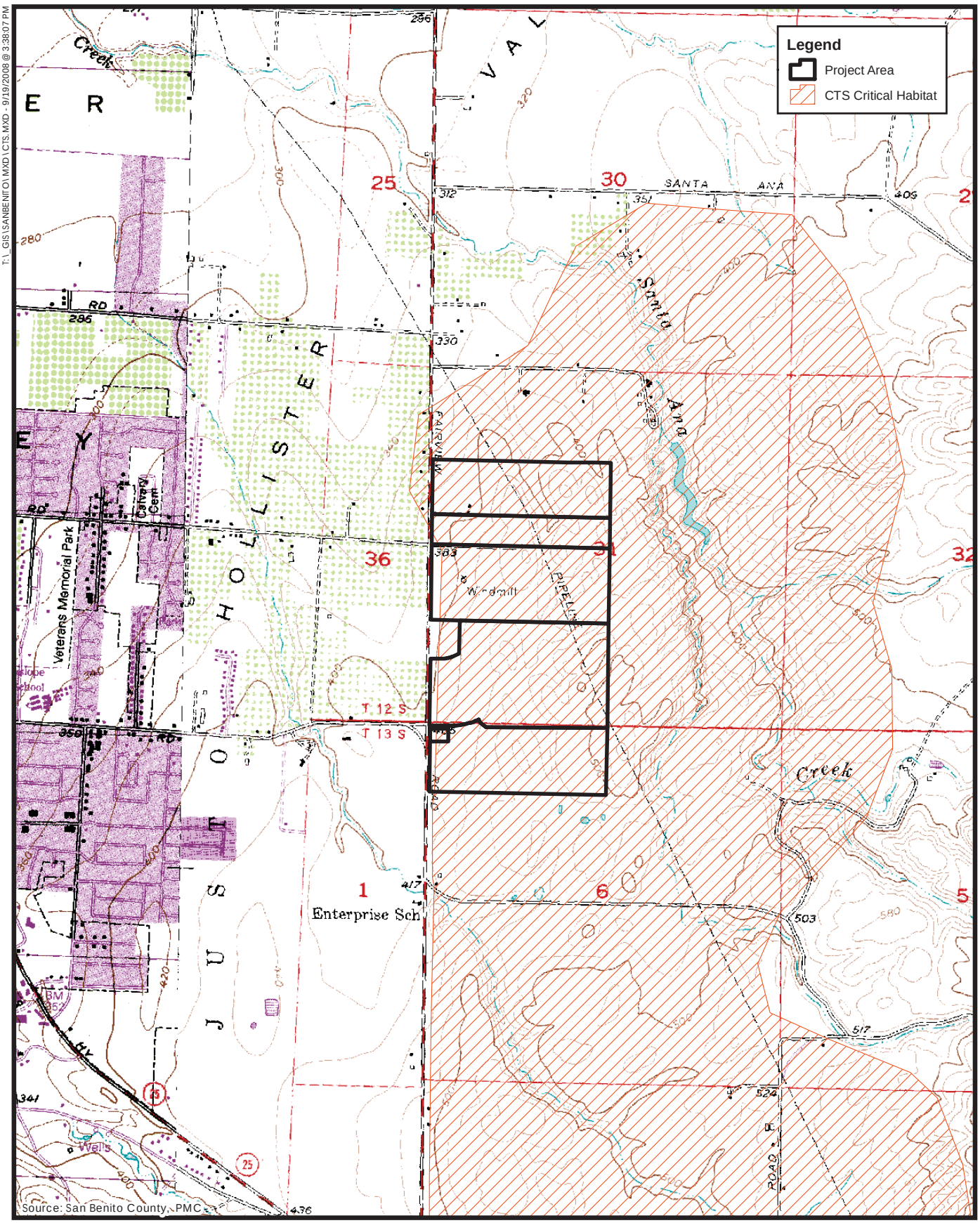

Figure 3.4-3
California Tiger Salamander Critical Habitat

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Western spadefoot is a California species of special concern. The western spadefoot is a toad that inhabits grassland habitats of central California and the southern California coast. It requires temporary pools of water free of predators (such as fish, bullfrogs, or crayfish) for egg-laying. Breeding usually occurs in late winter. With the exception of the breeding season and foraging excursions during rain events, this species spends most of its life aestivating in self-excavated burrows, although burrows of small mammals are sometimes utilized. There is one previously recorded occurrence within a one-mile radius of the project site and an additional three within a five-mile radius of the project site (CDFG 2009a). Western spadefoots could utilize the uplands throughout the project site for aestivation habitat; however, there is no breeding habitat within the project site.

Reptiles

Western pond turtle is a California species of special concern. The western pond turtle is found west of the Sacramento-San Joaquin Delta, and south to northern Baja, except in desert areas. Two sub-species are recognized, including the northwestern pond turtle (*Actinemys marmorata marmorata*) and the southwestern pond turtle (*A. m. pallida*). The turtle is normally found in and along riparian areas, and nesting sites are usually near stream or pond margins. Preferred habitat includes ponds or slow-moving water with numerous basking sites, food sources, and few predators. A focused survey for western pond turtles and their nests was conducted by a H.T. Harvey herpetologist on May 31, 2007 (H.T. Harvey 2007b). Results of that survey indicated that there was no evidence of a long-term, traditional, communal nesting area, and repeated and continued disking, consistent with existing agricultural uses on the site, would prevent such a nesting site from becoming established, even though a western pond turtle shell was found within an in-channel pond in Dry Creek, immediately east of the project site, in 1999. In addition, there is one previously recorded occurrence within a one-mile radius of the project site and an additional two within a five-mile radius of the project site (CDFG 2009a). Although surveys for western pond turtle were negative, this species could still occur within Dry Creek and use the upland habitat within the project site for egg-laying and dispersing.

San Joaquin whipsnake is a Calfiornia species of special concern. The whipsnake occurs in desert plains, open grasslands, scrub, pasturelands and farmlands. Dense vegetation is generally avoided. The species seeks cover in rodent burrows, rock piles, bushes and trees, and is known to nest in subterranean situations. Although little information is available on the distribution of this species in the region, this snake has been observed in the Paicines area of San Benito County. There is one previously recorded occurrence within a five-mile radius of the project site (CDFG 2009a). Although this species has never been observed during field surveys, the annual grassland and cultivated hayfield could provide marginal habitat within the project site.

Birds

Burrowing owl is a California species of special concern. Burrowing owls are generally found in open valley grassland habitat where grasses are relatively short. They use burrows dug by small mammals, primarily ground squirrels, for nest and roosting sites. Resident burrowing owls are rare in northern San Benito County, although wintering owls are known to occur in the area, and have been sighted within several miles of the project site, and there are two previously recorded occurrences within a one-mile radius of the project site (CDFG 2009a). In addition, H.T. Harvey observed a single burrowing owl at a ground squirrel burrow in the disked hayfields in the central portion of the project site during their December 2006 reconnaissance-level survey (H.T. Harvey 2007b). It was unknown, however, if the species bred onsite at that time. Subsequent protocol-level, breeding-season surveys for burrowing owl conducted in May of 2007 found no burrowing owl individuals, nor any signs of their presence onsite, and so it was determined that the species

was not nesting onsite at that time (H.T. Harvey 2007b). This species may colonize the project site at any time, however.

White-tailed kite is a California fully protected species. This species nests in shrubs (in Delta) and trees adjacent to grasslands, oak woodland, and edges of riparian habitats. White-tailed kites roost communally. They are a year-round resident that breeds between February and October. This species may nest and forage within and adjacent to the project site.

Loggerhead shrike is a California species of special concern, and occurs in grasslands and agricultural areas where trees and shrubs are scattered. Shrikes feed on insects, reptiles, small mammals and birds. Nests are usually built in trees and shrubs, although telephone poles and abandoned buildings and machinery are also used. This species is a fairly common resident in the region. Although this species has not been observed in recent surveys, suitable nesting and foraging habitat is present within the project site.

Other Raptors and Other Migratory Birds

Many bird species are migratory and fall under the jurisdiction of the Migratory Bird Treaty Act (MBTA) (16 U.S.C. Section 703-711). Various migratory birds and raptor species, in addition to those described in detail above, have the potential to inhabit the project site and vicinity, including mourning dove, western scrub jay, and short-eared owl (*Asio flammeus*). While some raptor species, such as red-tailed hawk (*Buteo jamaicensis*), are not considered special-status species because they are not rare or protected under the federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA), active nests of all raptor species are protected under the MBTA and Section 3503.5 of the California FGC, and may not be destroyed.

Mammals

San Joaquin kit fox is federally listed as endangered and state-listed as threatened. The present range of the San Joaquin kit fox extends from the southern end of the San Joaquin Valley, north to Tulare County, and along the interior Coast Range valleys and foothills to central Contra Costa County. This species is typically associated with arid valley alkaline scrub, and valley and foothill grasslands of low to moderate relief. Kit foxes use rodent burrows, which they will enlarge for reproduction and cover. Prey includes kangaroo rats (*Dipodomys* spp.), black-tailed jackrabbit (*Lepus californicus*), desert cottontail, and particularly California ground squirrel in the northern part of its range. There are three previously recorded occurrences within a one-mile radius of the project site and an additional four within a five-mile radius of the project site (CDFG 2009a). Two additonal kit fox sightings have occurred in northern San Benito County in the last 25 years. The first sighting occurred in 1987, in the Tres Pinos area six miles southeast of the project site (CDFG 2009a). The second sighting took place in 1991, eight miles northwest of the project site (CDFG 2009a). Three previous protocol-level surveys in 1993 and 1997 of the project site, however, found no evidence to indicate presence of kit fox (County of San Benito 1998), although this does not conclusively establish that kit foxes are currently absent from the project site. The project site supports a prey base and potential denning sites, and is contiguous to extensive suitable habitat to the east, but is considered only marginal habitat for the kit fox due to its adjacency to an urbanizing area. Disking and mowing also diminish habitat suitability for the kit fox. Thus, if kit fox use the site at all, they likely use it only for foraging or dispersal on rare occasions and/or in low numbers.

American badger is a California species of special concern. This species prefers grasslands and savannah habitats with friable soils, but is also found in open scrub and woodland habitats. It requires an abundant source of burrowing mammals such as ground squirrels and gophers for sustinence. When not disked, the project site provides ideal habitat for badgers due to the presence of friable soils and the abundance of ground squirrels. Badgers and their den were

observed on the project site during the 1993 and 1997 surveys (County of San Benito 1998). There is one previously recorded occurrence within a one-mile radius of the project site and an additional two within a five-mile radius of the project site (CDFG 2009a). Since badgers have been observed previously on the project site and suitable habitat is present within the project site, this species may still be present.

Special-status bat species, such as western red bat (*Lasiurus blossevillii*) and western mastiff bat (*Eumops perotis*), could inhabit the area within the vicinity of the project site. These species are widely distributed throughout California; however, many of these species are rare within these overall ranges. Bat species require foraging habitat, night roosting cover, day roosting sites, maternity roost sites, and winter hibernacula. These bat species may forage within a variety of habitats, including annual grasslands, agricultural lands, and wetland habitats. Suitable roosting sites within these habitats include caves, rock crevices, cliffs, buildings, tree bark, and snags. Some or all of these bat species are likely to forage in the project vicinity, but there is a low likelihood that maternity roosts or hibernacula are located in the project site. Tree bark, snags, and manmade structures within or adjacent to the project site could, however, provide some roosting habitat for special-status bat species.

SENSITIVE HABITATS

Sensitive habitat includes areas of special concern to resource agencies, such as:

- Areas protected under the California Environmental Quality Act (CEQA);
- Areas designated as sensitive natural communities by California Department of Fish and Game (CDFG);
- Areas outlined in Section 1600 of the California Fish and Game Code (FGC);
- Areas regulated under Section 404 of the federal Clean Water Act (CWA) (33 U.S.C. Section 1344);
- Areas protected under Section 402 of the CWA (33 U.S.C. Section 1342); and
- Areas protected under local regulations and policies.

The seasonal wetlands found on the project site are sensitive habitats protected by various agencies.

USFWS defines "critical habitat" as a specific area that is essential for the conservation of a federally listed species and which may require special management considerations or protection. The project site is included in the area considered USFWS "critical habitat" based on critical habitat maps for the federally listed California tiger salamander (**Figure 3.4-3**).

WILDLIFE CORRIDORS

Wildlife corridors refer to established migration routes commonly used by resident and migratory species for passage from one geographic location to another. Corridors are present in a variety of habitats and link otherwise fragmented acres of undisturbed area. Maintaining the continuity of established wildlife corridors is important to sustain species with specific foraging requirements, preserve a species' distribution potential, and retain diversity among many wildlife populations. For these reasons, resource agencies consider wildlife corridors to be a sensitive resource. Large mammals such as coyote and deer, and smaller mammals such as raccoons and weasels rely on wildlife corridors for migrations necessary for their survival. Amphibians often require the ability to move between wetlands and other aquatic systems such as streams to forage and breed successfully. These wildlife movements may occur on a seasonal or even daily basis. Corridors provide foraging opportunities and shelter during migration. In wooded areas, these

corridors often occur in open meadow or riverine habitats and provide a clear route for migration in addition to supporting ample food and water sources during movement.

Although the project site is surrounded on three sides by open space, the adjacent urban community on the opposite side of Fairview Road and structures within and surrounding the project site (i.e., homes, outbuildings, CDF fire station, water treatment plant and water towers) hinder the use of the project site for migration by large mammals. In addition, the project site does not contain habitat types that provide cover (i.e., riparian, woodland or forest habitats) for species that need cover for migration. The orchard within the project site is regularly disturbed (i.e. herbicides and insecticides, disking and cultivation) and is dissected by ruderal/developed habitat; therefore, it would not be expected to be used as a wildlife corridor. Finally, the project site does not contain established or known migratory routes and/or wildlife corridors, and is not located in an area that is proposed for establishment of a wildlife corridor (*Missing Linkages* Report, Penrod et.al. 2001). For the reasons described above, the project site is not considered to function as a wildlife corridor.

3.4.2 REGULATORY SETTING

This section lists specific environmental review and consultation requirements and identifies permits and approvals that must be obtained from local, state, and federal agencies before construction of the proposed project.

FEDERAL

Federal Endangered Species Act

Provisions of the Federal Endangered Species Act (FESA), as amended (16 USC Section 1531), protect federally listed threatened and endangered species and their habitats from unlawful take. "Take" under FESA is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" with regard to listed or proposed species. The USFWS regulations define harm to include some types of "significant habitat modification or degradation." The Supreme Court ruled on June 29, 1995, that "harm" may include habitat modification "...where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." For projects carried out, funded, or permitted by the federal government (i.e., with a federal nexus), Section 7 of the FESA requires that federal agencies, in consultation with USFWS or the National Oceanic and Atmospheric Administration (NOAA) Fisheries, use their authority to further the purpose of FESA and to ensure that their actions are not likely to jeopardize the continued existence of listed species or result in destruction or adverse modification of critical habitat. When the USFWS lists a species as threatened or endangered under FESA, areas of habitat considered essential to its conservation and survival may be designated as critical habitat. These areas may require special consideration and/or protection due to their ecological importance. Section 10(a)(1)(B) allows non-federal entities to obtain permits for incidental taking of threatened or endangered species through consultation with USFWS or NOAA Fisheries.

Clean Water Act, Section 404

The objective of the Clean Water Act (CWA 1977, as amended, 33 USC Section 1251-1376) is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Discharge of fill material into waters of the U.S., including wetlands, is regulated by the USACE under Section 404 of the federal Clean Water Act (33 USC Section 1344). USACE regulations implementing Section 404 define "waters of the U.S." to include intrastate waters, including

lakes, rivers, streams, wetlands, and natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce. Wetlands are defined for regulatory purposes as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR Section 328.3; 40 CFR Section 230.3). The placement of structures in navigable waters of the U.S. is also regulated by the USACE under Section 10 of the federal Rivers and Harbors Act (33 USC 401 et seq.). Projects are permitted under either individual or general (e.g., nationwide) permits. Specific applicability of permit type is determined by the USACE on a case-by-case basis.

In 1987, the USACE published a manual that standardized the manner in which wetlands were to be delineated nationwide. To determine whether areas that appear to be wetlands are subject to USACE jurisdiction (i.e., are "jurisdictional" wetlands), a wetlands delineation must be performed. Under normal circumstances, positive indicators from three parameters: (1) wetland hydrology, (2) hydrophytic vegetation, and (3) hydric soils must be present to classify a feature as a jurisdictional wetland. In addition to verifying wetlands for potential jurisdiction, the USACE is responsible for the issuance of permits for projects that propose the filling of wetlands.

Clean Water Act, Section 401

Section 401 of the Clean Water Act (33 USC Section 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards. In California, the appropriate Regional Water Quality Control Board regulates Section 401 requirements.

Migratory Bird Treaty Act

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 USC Section 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR Section 21). The vast majority of birds found in the region of the project are protected under the MBTA.

Bald Eagle Protection Act

The bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*) are federally protected under the Bald Eagle Protection Act (16 U.S.C. Section 668-668c). It is illegal to take, possess, sell, purchase, barter, offer to sell or purchase or barter, transport, export or import at any time or in any manner a bald or golden eagle, alive or dead; or any part, nest or egg of these eagles unless authorized by the Secretary of the Interior. Active nest sites are also protected from disturbance during the breeding season.

STATE

California Endangered Species Act

Under the California Endangered Species Act (CESA), the CDFG has the responsibility for maintaining a list of endangered and threatened species (California Fish and Game Code Section 2070). CDFG maintains a list of "candidate species" which are species that CDFG formally notices as being under review for addition to the list of endangered or threatened species. CDFG also maintains lists of "species of special concern" which serve as species

"watch lists." Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project study area and determine whether the proposed project will have a potentially significant impact on such species. In addition, CDFG encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of the CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under *California Fish and Game Code Section 206.591*. Authorization from CDFG would be in the form of an Incidental Take Permit.

California Regional Water Quality Control Board

Clean Water Act, Section 401 Water Quality Certification

Section 401 of the Clean Water Act (33 USC Section 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards. The Central Coast Regional Water Quality Control Board (Region 3 for the proposed project) regulates Section 401 requirements.

California Department of Fish and Game

Streambed Alteration Agreement (California Fish and Game Code Sections 1600-1607)

State and local public agencies are subject to Section 1602 of the California Fish and Game Code, which governs construction activities that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the CDFG. Under Section 1602, a discretionary Stream Alteration Agreement permit from the CDFG (Region 4 for the proposed project) must be issued by the CDFG to the project developer prior to the initiation of construction activities on lands under CDFG jurisdiction. As a general rule, this requirement applies to any work undertaken within the 100-year floodplain of a stream or river containing fish or wildlife resources.

Native Plant Protection Act (*California Fish and Game Code Sections 1900-1913*)

The Native Plant Protection Act (*California Fish and Game Code Section 1900-1913*) prohibits the take, possession, or sale within the state of any plants with a state designation of rare, threatened, or endangered (as defined by CDFG). An exception to this prohibition in the Act allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify CDFG and give that state agency at least 10 days to retrieve (and presumably replant) the plants before they are destroyed (Fish and Game Code Section 1913 exempts from "take" prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way").

Birds of Prey

Under Section *3503.5 of the California Fish and Game Code,* it is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

"Fully Protected" Species

California statutes also accord "fully protected" status to a number of specifically identified birds, mammals, reptiles, and amphibians. These species cannot be "taken," under any circumstances. Specific species subject to this level of protection are listed within Sections 3505 and 3511 (birds), Section 4700 (mammals), and 5050 (reptiles and amphibians).

NON-GOVERNMENTAL ORGANIZATIONS

California Native Plant Society

The California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of rare plants receive consideration under CEQA review. The CNPS ranking systems applicable to the project are defined below:

- **List 1A:** Plants Believed Extinct.
- **List 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere.
- **List 2:** Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere.

LOCAL POLICIES AND PLANS

The San Benito County General Plan contains the following policies with regard to biological resources:

Land Use Element

Policy 32 Specific development sites shall be free from the hazards identified within the Open Space and Conservation Element Maps (e.g., faults, landslides, hillsides over 30% slope, flood plains). The site 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, set back from creeks). Absent adequate mitigation, development shall not be located on environmentally sensitive lands (wetlands, erodable soil, archaeological resources, important plant and animal communities).

Policy 33 Specific development sites shall avoid, when possible, locating in an environmentally sensitive area (wetlands, erodable soils, important plant and animal communities, archaeological resources).

Open Space and Conservation Element

Policy 1 Major subdivisions of 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.

Policy 2 **Maintain corridors for habitat**

In rural areas, road and development sites shall be designed to maintain habitat connectivity with a system of corrridors for wildlife or plant species and avoiding fragmentaiton of open space areas. Measures to maintain the long-term health of the plant and animal communities in the area shall be incorporated into project design such as buffers, consolidation of or rerouting access, transitional landscaping, linking nearby open space areas, and habitat corridors.

Policy 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.

Policy 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.

Policy 7 **Grading, erosion, and native tree removal**

It is the policy of the County to minimize erosion resulting from grading and cutting and native tree removal for all development proposals.

Policy 18 **Protect rural atmosphere and natural resources**

General Plan Amendments, Specific Plans, Area Plans, and Areas of Special Study that result in a net increase in general plan buildout (Table 1 of the Land Use Element), shall include methods to conserve open space for natural resources including agriculture, wildlife habitat, and water (e.g. conservation easements and/or other similar resource protection measures). Proposed development areas shall also include measures to protect resources on-site and contiguous to the project with the use of clustering, conservation easements, and other similar programs.

In April 1988, the County of San Benito adopted Ordinance No. 541 (San Benito County Code, Chapter 19.19) which established a habitat conservation plan study area for the San Joaquin kit fox and set interim mitigation fees for the preparation and adoption of a Habitat Conservation Plan (HCP). Currently, the interim mitigation fee is $550 per conversion of raw land to commercial use and $0.15 per square foot of any structures, paid at the building permit stage. Also, an interim mitigation fee is required to be paid at the time of recordation of each final map. (County Code Section 19.19.004(A)(2).). As of this writing, the HCP has not yet been prepared or adopted by the County.

METHODOLOGY

Habitat Assessment: For areas within the Plan Area and potential WWTP site, a habitat layer was created using GIS ArcView program based on aerial photograph interpretation and knowledge from reconnaissance-level surveys by a PMC biologist. In addition, the data from the wetland delineations (H.T. Harvey and Associates 2008a; 2007c) were added to **Figure 3.4-1.** A reconnaissance-level field survey was conducted on March 18, 2008 and again on July 1, 2009 for both the Plan Area and potential WWTP site by a PMC biologist to assess habitat types and current site conditions.

Wetland Delineation: The wetland delineations for the Plan Area and potential WWTP site were conducted by H.T. Harvey and Associates (2008a; 2007c). For the Plan Area, surveys for potential jurisdictional features were conducted on February 7 and 19, 2008 using methodologies approved by the USACE. Existence of the wetland parameters were determined based on the guidelines outlined in USACE *1987 Wetlands Delineation Manual* (USACE 1987) and the *Interim Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region* (USACE 2006). **Appendix D** includes the wetland delineation reports by H.T. Harvey and Associates and USACE verification letter (Verification No. 2008-004-01S).

Special-status Species Assessment: The habitat mapping and field surveys were reviewed for potential habitat for the special-status species identified from the literature and database searches. A species was determined to have potential to occur in the project site if its documented geographical range from the literature and database searches includes the vicinity of the project site and if suitable habitat for the species was identified within or near the project site. The CDFG's CNDDB was queried for a list of special-status wildlife, botanical, and fisheries resources with a potential to occur or known to occur within the project site and vicinity (CDFG 2009a/b). The database search was performed for special-status species within the *Tres Pinos, California* United States Geologic Survey (USGS) 7.5-minute quadrangle and the surrounding quadrangles (*Paicines, Mount Harlan, Mariposa Peak, Quien Sabe Valley, Cherry Peak, Three Sisters, San Felipe, and Hollister*). Locations of special-status species occurrences as recorded in CNDDB within a one-mile radius of the project site and potential WWTP site are shown in **Figure 3.4-2**. The CNPS inventory was also searched for the quads listed above for CNPS List 1A, List 1B, and List 2 special-status plants that may occur within the project site and potential WWTP site (CNPS 2009). In addition, the USFWS list for the USGS 7.5-minute quadrangles listed above was consulted for federally listed or candidate plant and wildlife species that could potentially be affected by the proposed project (USFWS 2009a). **Appendix D** includes a copy of the database searches.

When the USFWS lists a species as threatened or endangered under the FESA, areas of habitat considered essential to its conservation and survival may be designated as critical habitat. These areas may require special consideration and/or protection due to their ecological importance. In July 2009, potential critical habitat designations within the general vicinity of the project site were checked using the USFWS Critical Habitat Portal (USFWS 2009b). Designated critical habitat for California tiger salamander is shown in **Figure 3.4-3.**

In addition, H.T. Harvey and Associates biologists conducted protocol-level surveys for burrowing owl on April 30 and May 1, 7, 8, 14, and 16 2007; western pond turtle on May 31, 2007; and rare plants on April 30 and June 1 2007. Additional surveys were conducted by H.T. Harvey and Associates biologists on December 28, 2006; January 11, 2007; February 2, 2007; April 30, 2007; June 1 and 15, 2007; July 6, 2007; February 7 and 19 2008. **Appendix D** includes the reports from H.T. Harvey and Associates outlining the methods for the surveys.

3.4.3 IMPACTS AND MITIGATION MEASURES

The impact assessment is based on the project description (**Chapter 2.0**), information (technical and otherwise) described in the environmental setting, and the standards of significance described below. The impact assessment discusses impacts to implementation of the proposed project and assumes that all natural resources within the project site could be removed, or otherwise impacted by the project.

STANDARDS OF SIGNIFICANCE

The following thresholds for measuring a project's environmental impacts are based on CEQA Guidelines (Appendix G) and previous standards used by the County. For the purposes of this EIR, impacts are considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, endangered, threatened, or other special status species in local or regional plans, policies and regulations, or by the CDFG or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies and regulations, or by the CDFG or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, coastal, riverine, stream, marsh, vernal pool, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

An evaluation of the significance of potential impacts on biological resources must consider both direct effects to the resource as well as indirect effects in a local or regional context. Potentially significant impacts would generally result from the loss of a biological resource or obviously conflict with local, state, or federal agency conservation plans, goals, policies, or regulations. Actions that would potentially result in a significant impact locally may not be considered significant under CEQA if the action would not substantially affect the resource on a population-wide or region-wide basis.

PROJECT IMPACTS AND MITIGATION MEASURES

Impacts to Endangered, Threatened, and Other Listed Species

Impact 3.4-1 Implementation of the proposed project would result in direct and indirect loss of habitat and may result in the loss of individuals of plants of endangered, threatened, rare, proposed, and candidate status, as well as plant species identified by the California Native Plant Society with a rating of List 1A or 1B (i.e. rare, threatened or endangered plants). This would be a **potentially significant** impact.

Rare Plants

As discussed in the Environmental Setting section above, the special status plant species identified as potentially occurring within the project site include the round-leaved filaree (List 1B), Hoover's button celery (List 1B), San Joaquin spearscale (List 1B), and hairless popcorn-flower (List 1A). The focused survey for rare plants concluded that all four species were absent from the project site (H.T. Harvey 2007a/b). The survey also concluded that habitat conditions on the project site were unsuitable for all but the round-leaved filaree.

The focused plant survey did not include the potential WWTP site specifically. However, as discussed earlier, habitat conditions on the WWTP site are similarly unsuitable for all but the round-leaved filaree as with the Plan Area. Therefore, it is not anticipated that the Hoover's button celery, San Joaquin spearscale, or hairless popcorn flower are present on the WWTP site, as discussed above.

Because habitat is suitable for the round-leaved filaree, there is potential that this plant could occur within the project site. Rare plant surveys are only valid for a period of two years, because rare plants could potentially colonize the site after surveys are completed. Additionally, rare plant surveys were not conducted on the potential WWTP site. For these reasons, the proposed project could still potentially impact rare plants. These impacts could include trampling or removal of plant species during the grading and construction phases of the project. Implementation of the following mitigation measures will minimize the potential for these impacts to occur:

MM 3.4-1a Prior to any vegetation removal or ground disturbing activities on the project site, focused surveys shall be conducted by a qualified biologist retained by the developer and approved by the County to determine the presence of special-status plant species with potential to occur in the impact areas. The costs associated with retention of the biologist and completion of the surveys shall be paid for by the project developer. Surveys shall be conducted in accordance with CDFG's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009). These guidelines require rare plant surveys to be conducted at the proper time of year when rare or endangered species are both "evident" and identifiable. Field surveys shall be scheduled to coincide with known blooming periods, and/or during periods of physiological development that are necessary to identify the plant species of concern. If no special-status plant species are found, the project will have no impacts to rare plants, and no further rare plant mitigation measures are required.

MM 3.4-1b If any rare plants are found on-site, the developer shall consult with the USFWS, CDFG, and/or CNPS, as applicable, to determine appropriate minimization and mitigation for special-status plants, which shall include, but is not limited to the following measure:

The developer shall use diligent, good faith efforts to salvage portions of the habitat or plant populations that will be lost as a result of implementation of the proposed project by transplanting the plants that would be adversely affected by the proposed project for either re-establishment after construction is complete or for planting in a preserve with appropriate habitat. The developer, in consultation with the biologist, shall develop a propagation program for the salvage and transfer of rare, threatened, or endangered plant populations from the site before the initiation of construction activities. Permits may be required from the CDFG or USFWS, which will ensure that certified biologists are involved in the propagation and transport of rare, threatened or endangered plant species. (Note: Propagation methods for the salvaged plant population may be developed on a case-by-case basis and must include the involvement of local conservation easements/ preserves/ open space, where applicable). The propagation and transfer of individual plant species must be performed at the correct time of year and successfully completed before the project's construction activities eliminate or disturb the plants and habitats of concern.

Mitigation measures **3.4-1a and b** would reduce potential impacts to special-status plant species to a **less than significant** level, by requiring a protocol-level rare plant survey of the project site under the direction of a qualified biologist prior to commencement of construction to identify any rare plants. Further, any rare plants identified as part of the survey process would be protected through salvage, propagation, and/or relocation, in consultation with USFWS, CDFG, and/or CNPS and under the direction of a qualified biologist.

California Tiger Salamander

While the depressional seasonal wetlands on the project site do not support breeding habitat for California tiger salamanders (H.T. Harvey 2008b), project development could result in the permanent loss of the species' upland aestivation and dispersal habitat, for which all undeveloped portions of the project site may be considered as such. The overall habitat quality of the project site has been degraded from many years of agricultural practices and is regularly disked; therefore, it is considered to be low-quality habitat for aestivation and dispersal of California tiger salamanders. Nevertheless, project development that results in the destruction of the existing onsite ground squirrel and gopher burrows could result in the take of aestivating California tiger salamanders that may occupy these burrows. This potential impact, in addition to the overall loss of upland habitat, would represent a **potentially significant impact.**

MM 3.4-1c Prior to any ground disturbance within the project site, the developer shall provide replacement aestivation and dispersal habitat for California tiger salamander at a 1:1 ratio of project site impact area to compensation habitat area, which shall be offered for dedication to the appropriate wildlife preservation entity, to be preserved and managed in perpetuity. Providing aquatic breeding habitat (i.e., ponds) on the mitigation lands could, at the County's discretion, reduce the amount of upland mitigation required by up to 50% of the total upland habitat requirement so that the upland habitat requirement may be reduced to 0.5:1 (compensation area to impacted area). This would allow a landscape-based mitigation strategy that provides

a greater benefit to the species by creating more breeding ponds in relatively dry San Benito County as opposed to preserving more upland areas.

Additionally, if the accepted mitigation lands are located within the range of the California red-legged frog, western spadefoot, and San Joaquin kit fox and support suitable habitat for those species as well, these same mitigation sites may be utilized to meet the mitigation requirements for those three species, which are also identified as potentially adversely impacted by project development.

MM 3.4-1d Prior to any ground disturbance within the project site, a temporary barrier shall be constructed along the limits of the grading and disturbance area, to prevent the movement of California tiger salamanders and California red-legged frogs into the area. The barrier shall consist of three-foot-tall silt fencing with the bottom edge buried to a depth of at least six (6) inches below the soil surface, held in place by rigid stakes or other stable means. Silt fence fabric shall also be installed on any swinging gates or other movable sections of temporary construction fencing. Fence fabric installed on gates and moveable sections of fence shall drape onto the ground surface to form a continuous barrier to California red-legged frog and California tiger salamander access. Installation of silt fencing and fence fabric shall be supervised by a qualified biologist, who shall be retained by the developer and approved by the County. Said barriers shall remain in place until all development activities within the disturbance area have been completed. Said barriers shall be inspected, maintained and repaired as necessary to ensure continuous functionality.

MM 3.4-1e Any netting used for erosion control or other purposes during the construction phase of the project shall be of tightly woven fiber or similar material to ensure that California red-legged frogs and California tiger salamanders do not get trapped within the netting. Plastic monofilament netting (erosion control matting) or similar material shall not be used. This netting specification shall be incorporated within the bid and construction documents for the project.

MM 3.4-1f All vegetation within affected areas containing or immediately adjacent to aquatic habitats shall be removed by hand just prior to the initiation of construction in these areas to remove cover that might be used by California tiger salamanders or California red-legged frogs, thus facilitating the detection of individuals of these species.

Implementation of mitigation measures **3.4-1c through 3.4-1f** would reduce this impact to a **less than significant** level by requiring replacement of habitat impacted by the project, installation of barriers to prevent species from entering the construction work area, and measures to minimize harm to the species during construction. This species' federally threatened listing may necessitate consultation with the USFWS, and their recommendations, including any required mitigation, shall be followed in connection with the above mitigation measures. Note that these measures would also help mitigate potential impacts to California red-legged frog, as indicated within the measures.

California Red-legged Frog

Development of the project site would result in the permanent loss of a limited number of California ground squirrel burrows, which represents a small area of potential California red-legged frog upland refugia habitat. Development activities could also potentially result in the

take of individual California red-legged frogs by way of destruction of onsite ground squirrel burrows that could be occupied by the frogs. The amount of potential habitat that would be removed is limited, however, due to the regular on-site disking activities associated with dry farming on the site which limit the duration of burrows. Additionally, the outfall area at Santa Ana Creek may support California red-legged frog habitat. Changes to the outfall area to support higher water flows may negatively impact this species by direct removal of habitat or changes to water quality within the creek.

The entire project site may be considered dispersal habitat for the species, which would be permanently lost during project development. The quality of this dispersal habit is low due to years of dry farming and cultivation. The proximity of the project site to existing development also limits the value of the property as dispersal habitat, and it is therefore more likely that the frogs would utilize Dry and Santa Ana Creeks as their primary dispersal routes through the region. Despite the low-quality of habitat on-site, the loss of this habitat would still be considered a **potentially significant** impact due to the listing of the frog as a federally threatened species. The following mitigation measures, in addition to measures **MM 3.4-1a-c**, would reduce this potential impact to a less than significant level:

MM 3.4-1g Prior to recordation of the first final map, the developer shall provide mitigation lands with similar or better habitat for California red-legged frogs relative to that being impacted at a minimum 1:1 ratio of project site impact area to compensation habitat area, which shall be offered for dedication to the appropriate wildlife preservation entity, to be preserved and managed in perpetuity. Providing aquatic breeding habitat (i.e., ponds) on the mitigation lands could, at the County's discretion, reduce the amount of upland mitigation required by up to 50% of the total upland habitat requirement (so that the upland habitat requirement may be reduced to 0.5:1 (compensation area to impacted area). The creation of breeding ponds to serve as partial upland impacts mitigation would provide a greater benefit to the local California red-legged frog populations, because the relative lack of breeding habitat in dry San Benito County is the limiting factor for the local California red-legged frog population.

MM 3.4-1h A preconstruction survey for California red-legged frogs shall be undertaken no more than 14 days prior to commencement of any construction or mitigation implementation activities that occur in or adjacent to (i.e., within 50 feet of) wetlands that contain water at the time of construction. Surveys shall be conducted by a qualified biologist retained by the developer and approved by the USFWS. The costs associated with retention of the biologist and completion of the surveys shall be paid for by the project developer. Surveys shall be conducted for two (2) days and two (2) nights within the 14-day period. The final nighttime survey shall occur the evening preceding the commencement of construction or mitigation implementation activities. If California red-legged frogs are found during preconstruction surveys, nighttime surveys shall continue, and no construction or mitigation implementation activities shall be commenced, until California red-legged frogs are no longer found during a survey. Alternatively, relocation of any California red-legged frogs from the impact areas may be undertaken, with approval of the USFWS, and under the supervision of the biologist. Immediately after the frogs are relocated, a temporary exclusion barrier shall be constructed around the aquatic habitat to be impacted, under the supervision of a qualified biologist, to prevent frogs that are relocated from moving back onto the area of impact. Nighttime surveys shall then continue inside the barrier until frogs are no longer detected during a survey.

MM 3.4-1i All vegetation within affected areas containing or immediately adjacent to aquatic habitats shall be removed by hand just prior to the initiation of construction in these areas to remove cover that might be used by California red-legged frogs or California tiger salamanders, thus facilitating the detection of individuals of these species.

MM 3.4-1j During all construction and mitigation implementation in and along streams, Best Management Practices (BMPs) shall be used to minimize erosion and impacts to water quality to protect water quality in downstream areas used by the California red-legged frog.

Implementation of the mitigation measures **3.4-1g through 3.4-1j,** in addition to mitigation measures **3.4-1c through 3.4-1f,** would reduce the impacts to California red-legged frogs to a **less than significant** level. This species' federally threatened listing will necessitate consultation with the USFWS. USFWS's recommendations, including any required mitigation, are required to be followed in conjunction with the mitigation measures listed above.

San Joaquin Kit Fox

The project could result in impacts to the San Joaquin kit fox through destruction of dens on the project site, or through the loss of foraging habitat for the fox. This would be considered a **potentially significant impact.** Each of these impacts are disussed below.

Impacts to Dens

Direct evidence of San Joaquin kit fox was not observed on the project site during the course of field surveys, and it was determined that the project site may be only marginally suitable habitat for the kit fox. Further, the very low abundance of the species in the region portends that the likelihood of a kit fox den located onsite is extremely small. Nevertheless, if a den were located onsite, the loss of such denning habitat would represent a significant impact to the species. Also, while the probability of a San Joaquin kit fox denning on the project site is a very low probability, incidental take of an individual kit fox resulting from ground disturbance and/or other construction-related activity, should an individual, however unlikely, occupy the site at that time, would represent a **significant impact** due to the rarity of the species. This potential impact would be reduced to a less than significant level through implementation of the following mitigation measures:

MM 3.4-1k The USFWS *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS 1999b) shall be implemented prior to initiation of any construction activity on the project site to avoid take of individual San Joaquin kit foxes.

As part of the implementation of these guidelines, transect surveys to detect potential kit fox dens shall be performed by a qualified biologist approved by the USFWS and retained by the developer, within 15 days prior to any habitat modification. Walking transects shall be conducted such that 100% visual coverage of the area of the project site planned to be under disturbance is achieved. The costs of retaining the biologist and performance of the survey shall be paid for by the project developer.

If potential kit fox dens are identified that will be impacted by construction, the occupancy status of the den shall be determined by the biologist. If the den is determined to be unoccupied, it shall be destroyed immediately to preclude subsequent occupation by kit foxes.

MM 3.4-1l Any occupied den located within the construction area may only be excavated during the non-reproductive season (August 1 to October 31). Prior to excavation, the entrance to the den shall be progressively plugged with loose dirt for at least five (5) days to discourage the use of the den while still allowing resident foxes to escape. The den shall be monitored daily during this time by the biologist. When there is no sign of activity at the den and it is deemed safe to do so by the biologist, the den shall be dug out with hand tools to a point where it is certain that no kit foxes are present. The den shall then be fully excavated, filled with dirt and compacted to ensure that kit foxes cannot re-enter the den during the construction period.

Protective exclusion zones and fencing shall be established around dens that are determined to be occupied by kit foxes during the reproductive season (November 1 to July 31). Non-natal dens shall be protected by a 300-foot exclusion zone and natal/pupping den shall be protected by a 500-foot exclusion zone. Exclusion zones around the dens shall not prevent access to the dens by kit foxes, and shall be maintained until all construction-related or operational disturbances have been terminated. Construction and other project activities shall be prohibited or restricted within these exclusion zones as determined necessary by the biologist. Only essential vehicle operation on existing roads and foot traffic in the exclusions zones will be permitted. Otherwise, all construction, vehicle operation, material storage, or any other type of surface-disturbing activity shall be prohibited within the exclusion zones. All fencing shall be removed immediately after construction to avoid attracting subsequent attention to the dens.

Impacts to Foraging Habitat

The annual grassland onsite provides potential foraging habitat for the kit fox, but at ±25 acres is very small relative to the 1- to 12-square-mile range required for a typical home range for San Joaquin kit foxes (USFWS 1998). Development of the project site would therefore not represent a substantial loss of foraging habitat for individuals or the local population as a whole. The very low densities of this species in the Hollister region and the large expanses of unbroken annual grassland habitat to the east of the project site make it even more unlikely that loss of the grassland habitat onsite would prove to be a detrimental factor in the success of the species in the area. The cultivated hayfield and orchard portions of the project site provide neither potential denning habitat nor high-quality foraging habitat for the San Joaquin kit fox. The developer will pay the kit fox habitat impact fee per County Ordinance 541 (San Benito County Code, Chapter 19.19); therefore, the loss of foraging habitat within the project site is **less than significant.**

All Special-status Species

In addition to the above mitigation measures, the following mitigation measures are applicable to all special-status species with the potential to occur within the project site:

MM 3.4-1m A worker's environmental awareness program (WEAP) shall be conducted by a qualified biologist before the initiation of any construction activity for all contractors and their employees involved in the project. The program shall consist of a brief presentation by the USFWS-approved biologist to explain (1) compliance provisions and restrictions of all project permits; (2) how to recognize listed and special-status species that could occur onsite; and (3) how best to avoid the accidental take of listed and special-status species. The program shall include the following: a description of the species and their

habitat needs; photographs of these species; an explanation of the legal status of these species and their protection under the Endangered Species Act; and a list of measures being taken to reduce effects to these species during project construction. A fact sheet conveying this information shall be prepared for distribution to the above-mentioned personnel and all others who may enter the project site. Upon completion of training, construction personnel shall sign a form stating that they attended the training and understand all the conservation and protection measures. The original form(s) shall be submitted to the USFWS.

MM 3.4-1n Prior to project groundbreaking, the developer shall submit the qualifications of its proposed biologist(s) to the USFWS for its review. The USFWS-approved biologist shall be onsite during all construction-related activities, including groundbreaking, earth-moving, and other construction activities, which could result in the take of the California tiger salamander, California red-legged frog, and/or San Joaquin kit fox; the need for the biologist's presence shall be determined by the recommendation of the qualified biologist or the USFWS. The biologist(s) shall have the authority to stop any work that may result in the take of listed species. Any employee or contractor who might inadvertently kill or injure a California tiger salamander, California red-legged frog or San Joaquin kit fox, or anyone who finds a dead, injured, or entrapped individual of these species shall report the occurrence to the onsite biologist. The onsite biologist shall possess a working cell phone whose number shall be provided to the USFWS.

In addition, the developer shall ensure that a readily available copy of the Biological Opinion associated with the proposed project is maintained by the construction foreman/manager on the project site whenever earthmoving and/or construction is taking place. The name and telephone number of the construction foreman/manager shall be provided to the USFWS prior to project groundbreaking.

MM 3.4-1o If a California tiger salamander, California red-legged frog, or any amphibian that construction personnel believes may be one of these species, or San Joaquin kit fox, is encountered during Project construction, the following protocol shall be followed:

a) All work that could result in direct injury, disturbance, or harassment of the individual animal shall immediately cease;

b) The foreman and onsite biologist shall be immediately notified;

c) The onsite biologist shall notify the USFWS via telephone or electronic mail within one (1) working day; and

d) If at any time a California tiger salamander and/or California red-legged frog is discovered in the construction area by the onsite biologist or any other person, the onsite biologist shall move the animal to a safe USFWS-approved offsite location. This location will be determined by the developer, but must be approved by the USFWS prior to the initiation of preconstruction surveys. If a San Joaquin kit fox is found in construction areas, the onsite biologist shall halt construction and allow the animal to disperse on its own. The individual shall be monitored until it is determined that the animal is not imperiled by predators or other dangers.

MM 3.4-1p During construction activities, the following measures shall be implemented to ensure no direct take or harm to special-status species.

a) Because California tiger salamanders, California red-legged frogs, and San Joaquin kit foxes are attracted to cavities such as pipes and may enter stored pipes and become trapped, all construction pipes, culverts, or similar structures that are stored at a construction site for one or more overnight periods shall be either securely capped prior to storage or thoroughly inspected by the onsite biologist and/or the construction foreman/manager before the pipe is subsequently buried, capped, or otherwise used or moved in any way. In addition, the onsite biologist and/or construction foreman/manager shall ensure all excavated, steep-walled holes or trenches more than one foot deep are completely covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks and inspected by the onsite biologist. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals by the onsite biologist and/or construction/foreman/manager.

b) To avoid attracting predators of special-status species that may occur within or surrounding the project site, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in solid, closed containers (trash cans) and removed at the end of each working day from the entire construction site.

c) Construction vehicles shall observe a 15 mph speed limit within the project site.

d) Nighttime construction shall be minimized to the maximum extent feasible.

e) Pesticides and herbicides shall be utilized in such a manner to prevent primary or secondary poisoning of the California tiger salamander, California red-legged frog, and San Joaquin kit fox and the depletion of prey populations on which they depend. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other appropriate State and Federal regulations, as well as additional project-related restrictions deemed necessary by the USFWS.

Implementation of the mitigation measures **3.4-1a through 3.4-1p** would reduce the impacts to listed special-status species with the potential to occur within the project site to a **less than significant** level. These species' federal and state-listing status will necessitate consultation with the USFWS. USFWS's recommendations, including any required mitigation, are required to be followed in conjunction with the mitigation measures listed above.

Impacts to Species of Concern, California Fully Protected, and Other Non-listed Special-status Species

Impact 3.4-2 Implementation of the proposed project may result in direct and indirect loss of habitat and individuals of western spadefoot, northwestern pond turtle, San Joaquin whipsnake, burrowing owl, loggerhead shrike, which are listed as California species of special concern, as well as nesting migratory birds and raptors. This would be a **potentially significant impact.**

Western Spadefoot

Project construction would result in the permanent loss of western spadefoot aestivation habitat which occurs throughout the project site in annnual grassland, cultivated hayfield, and ruderal habitats. Since overall habitat quality on the project site has been degraded from many years of agricultural practices and is regularly disked, it is considered low-quality aestivation habitat for this species. Nevertheless, development of the project site and requisite ground disturbance could result in injury and mortality to individual spadefoots aestivating in their burrows.

Northwestern Pond Turtle

Because western pond turtles are expected to occur in Dry Creek and Santa Ana Creek, they could potentially nest within the project site. Although the disked fields within the project site represent low-quality habitat for western pond turtles, the annual grassland in the undisked grasslands and hayfields provides suitable nesting habitat for this species. Although the loss of a single western pond turtle or its nest is not considered significant, western pond turtles frequently nest communally, and thus the loss of a single nesting area could adversely affect an entire population of breeding adults and possibly result in the loss of an entire cohort of incubating eggs or hatchlings, which would be a significant impact.

San Joaquin Whipsnake

Although there is a low potential for this species to occur within the project site, there is a small chance this species may be present during construction activities. Development of the project site and requisite ground disturbance could result in injury and mortality to individual whipsnakes, if present.

The potential for impacts to non-listed special-status species will be minimized with the implementation of the species avoidance and protection efforts below.

MM 3.4-2a During preconstruction surveys and construction monitoring for California tiger salamanders and California red-legged frogs, the biologist will also survey for individuals of the western spadefoot, western pond turtle, and San Joaquin whipsnake. If juvenile or adult individuals are found within the survey area, they should be moved to suitable habitat at least 150 meters (500 feet) outside of the affected area. If a pond turtle or whipsnake nest is found within the survey area, construction activities should not take place within 30 meters (100 feet) of the nest until the eggs have hatched, or the eggs have been moved to an appropriate location.

Implementation of the above measures, combined with the avoidance and protective measures previously described for the listed special-status species (mitigation measures **3.4-1a through 3.4-1p**), will minimize potential impacts to these species of special concern through

implementation of a pre-construction survey, participation in a WEAP, and provision of a qualified biological monitor, resulting in a **less than significant impact.**

Burrowing Owl

Hayfield, grassland and ruderal areas within the project site provide suitable habitat for reproduction, cover, and foraging for the burrowing owl. While no burrowing owls were observed during the protocol-level survey, a burrowing owl was observed on the project site in 2006, as well as burrows that could be potential nest sites for this species. Therefore, the project could result in the loss of individual burrowing owls, including active nests, if occupied burrows are lost during construction, and it could result in the loss of occupied burrowing owl habitat. Implementation of the proposed project may result in direct and indirect loss of habitat and individuals of burrowing owl, which is listed as California species of special concern. This would be a **potentially significant** impact. Implementation of the following mitigation measure will reduce any impacts of the proposed project on this species.

MM 3.4-2b Within project work areas and within 250 feet of work areas, surveys for occupied owl burrows shall be performed within 30 days prior to site disturbance, using CDFG and California Burrowing Owl Consortium guidelines (CBOC 1993). All occupied burrows shall be mapped on an aerial photo. At least 15 days prior to the expected start of any project-related ground disturbance activities, or restart of activities, the developer shall provide the burrowing owl survey report and mapping to the CDFG. If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed. If no burrowing owls are detected during the pre-construction survey, no further action is necessary.

Based on the burrowing owl survey results, the following actions shall be taken by the developer to avoid impacts during construction (as outlined in CDFG guidance):

a) During the non-breeding season (September 1 through January 31), no disturbance shall occur within a 160-foot radius of an occupied burrow if feasible. If disturbance must occur within this buffer during the non-breeding season, the applicant shall ensure that a buffer sufficient to avoid direct, physical disturbance of the occupied burrow is maintained, or shall have a qualified biologist passively relocate the owl to prevent injury or mortality of individuals. During the nesting season (February 1st through August 31st), occupied burrows shall not be disturbed within a 250-foot radius unless a qualified biologist approved by the CDFG verifies through non-invasive methods that either (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival;

b) If owls must be moved away from the disturbance area, passive relocation techniques (as outlined by the CDFG [i.e., use of one-way doors]) shall be used rather than trapping.

c) If owls are present in or within 160 feet of areas scheduled for disturbance or degradation (e.g., grading) and nesting is not occurring, owls shall be removed per CDFG-approved passive relocation protocols. Passive relocation requires the use of one-way exclusion doors, which shall remain

in place at least 48 hours prior to site disturbance to ensure owls have left the burrow prior to construction.

d) If paired owls are nesting in areas scheduled for disturbance or degradation, nest(s) shall be avoided by a minimum 250-foot buffer from February 1 through August 31 or until fledging has occurred. Following fledging, owls may be passively relocated.

The protocol-level, breeding-season survey H.T. Harvey and Associates conducted in 2007 found no owls, and thus if owls use the project site, they do so sporadically, in low numbers, and/or primarily during the non-breeding season. In that case, habitat in the Hollister area is likely not so limiting that the development of this habitat would result in a substantial impact to burrowing owl populations. Implementation of the above mitigation measure will minimize potential impacts to burrowing owls through implementation of pre-construction surveys, work area buffers around occupied burrows, and passive relocation measures, resulting in a **less than significant impact.** In addition, habitat mitigation for impacts to California tiger salamander will target maintenance of ground squirrel populations, which will benefit burrowing owls as well.

Loggerhead Shrike

Loggerhead shrikes have previously nested and foraged on the project site, and could continue to do so at the present time. If this species is actively nesting during project construction, construction activities may result in the loss of young or eggs of this species.

Migratory Birds

Project construction may result in the loss of nests, eggs, young or individuals of migratory birds, including raptors such as white-tailed kite. Construction activities that require the disturbance of trees and vegetation could cause direct impacts to nesting raptors and other migratory birds, if birds are actively nesting during construction activities. Excessive noise, disturbance and vibrations can cause nesting raptors to abandon their nests. Potential nest abandonment, mortality to eggs and chicks, as well as stress from loss of foraging areas would also be considered potentially significant impacts.

Implementation of the proposed project may result in direct and indirect loss of habitat and individuals of loggerhead shrike, a California species of special concern, as well as migratory birds, including raptors, protected under the Migratory Bird Treaty Act such as white-tailed kite. This would be a **potentially significant** impact.

Mitigation Measures

MM 3.4-2c For trees/shrubs that must be removed to construct the proposed project, the project developer shall target the removal of trees and other vegetation to occur outside the nesting season between September 1st and February 28th. If trees/shrubs cannot be removed outside the nesting season, pre-construction surveys will be conducted prior to vegetation removal to verify the absence of active raptor nests within 250 feet of construction activities and active loggerhead shrike nests within 100 feet of construction activities.

If construction or tree/shrub removal is proposed during the breeding/nesting season for local avian species (typically March 1st through August 31st), a focused survey for active nests of raptors and other migratory birds within and in the vicinity of (no less than 250 feet outside project boundaries, where

possible, for raptors and 100 feet for loggerhead shrikes and other migratory birds) the project construction activities shall be conducted by a qualified biologist. Surveys shall include searches of all potential nest sites, including snags, shrubs, ground, buildings and other structures. The survey would detect the presence of uncommon species such as loggerhead shrike and common species such as red-tailed hawk, mourning dove, and western scrub-jay. Two surveys shall be conducted, at least one week apart, with the second survey occurring no more than two days prior to vegetation removal. If no active nests are found, vegetation removal or construction activities may proceed.

If an active nest is located during pre-construction surveys, USFWS and/or CDFG (as appropriate) shall be notified regarding the status of the nest. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or the biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 250 feet around an active raptor nest and 100 feet around an active non-raptor migratory bird nest) or alteration of the construction schedule.

No action is necessary if no active nests are found or if construction will occur during the non-breeding season (generally September 1st through February 28th).

Implementation of the above measures will minimize potential impacts to nesting loggerhead shrikes, raptors, and other migratory birds through implementation of pre-construction nest surveys, and work area buffers around occupied nests, resulting in a **less than significant impact.**

Habitat within the project site would also be lost as a result of this project. While this habitat provides suitable foraging opportunities for many avian species, including some raptors and migratory birds, overall foraging habitat within San Benito County is abundant, and would not be significantly diminished as a result of the project. A **less than significant impact** to foraging habitat as a result of the project is therefore anticipated.

Special-status Bat Species

Bats are most vulnerable in buildings or other roost sites during the summer, when large numbers may be gathered together and young bats, unable to fly, may be present. Removal of maternity roost sites may cause direct mortality of numerous bats. Noise and dust from construction could indirectly impact special-status bat species during construction.

Precautions must be taken to avoid the deliberate killing or injury of bats. The most common and effective method of avoiding these offences is to carry out the work at an appropriate time of the year. The great majority of roosts are used only seasonally, so there is usually some period when bats are not present. Although there are differences between species, maternity sites are generally occupied between May and September and hibernation sites between October and March, depending on the weather. Suitable bat roosting habitat is present within the human structures and trees within the project site, even though it is unlikely that the orchard trees on the project site support bat roosts. **Table 3.4-5** shows approximate periods for construction activities if bat species are present within the project site.

TABLE 3.4-5
BAT USAGE DURING THE YEAR

Bat usage of Site	Optimum period for carrying out work (some variation between species)
Maternity	1st October – 1st May
Summer (not a proven maternity site)	1st September – 1st May
Hibernation	1st May – 1st October
Mating/swarming	1st November – 1st August

Source: Kelleher and Marnell 2006.

Construction of the proposed project may result in impacts to active maternity roost sites of special-status bats. This would be a **potentially significant** impact.

MM 3.4-2d A bat survey shall be performed by a wildlife biologist or other qualified professional between March 1 and July 31 in the year prior to the removal of any oak trees or buildings. If special-status bat roosts are identified on site, the County shall require that the bats be safely flushed from the sites where roosting habitat is planned to be removed prior to roosting season (typically May to August, though possibly as early as April) of each construction phase and prior to the onset of construction activities. If maternity roosts are identified during the maternity roosting season, they shall remain undisturbed until a qualified biologist has determined the young bats are no longer roosting. If a maternity roost is found to occur onsite, replacement roost habitat (e.g., bat boxes) shall be provided onsite for roosting sites removed. If no bat roosts are detected, then no further action is required, provided that trees and buildings are removed prior to the next breeding season, and within 30 days of the original survey. If removal is delayed, then an additional pre-demolition survey shall be conducted within 30 days prior to removal to ensure that a new bat colony has not been established.

The project may be constructed without the elimination or disturbance of a roosting colony, provided that a wildlife biologist shall identify activity buffer zones and construction timing limits to ensure the continued success of the colony. Such buffer zones may include a construction-free barrier of 200 feet from the roost and/or the timing of the construction activities outside of the maternity roost season (after July 31 and before March 1).

If an active nursery roost is known to occur on site and the project cannot be conducted outside of the maternity roosting season, bats shall be excluded from the site after July 31 and before March 1 to prevent the formation of maternity colonies. Non-breeding bats shall be safely evicted, under the direction of a bat specialist.

Implementation of the above measures will minimize potential impacts to special status bat species through implementation of pre-construction roosting surveys, work area buffers around active roost sites, and timing limits on construction, resulting in a **less than significant impact.**

American Badger

Direct impacts to the American badger may occur if this species is present during construction activities, as a result of den destruction during compaction or earthmoving activities. Indirect impacts such as noise or ground disturbance may cause the badger to abandon its den or relocate and forage in another location. With implementation of the following mitigation measure, potential impacts to any American badgers on site will be minimized.

MM 3.4-2e Preconstruction surveys for badger dens and burrows shall occur concurrently with burrowing owl and kit fox surveys to ensure that no occupied dens or burrows are present within or surrounding project construction activities.

If active dens/burrows are present on or immediately adjacent to (i.e., within 300 feet of) the project site, a buffer, within which no new activity will be permissible, will be maintained between the den and construction activities during the pupping season (i.e., 15 February through 1 July, or as otherwise determined through surveys and monitoring of the den). The size of the buffer will be determined by a qualified biologist in consultation with the CDFG. Any dens determined to be occupied, but which cannot be avoided through construction timing or activity buffers, may be vacated during the non-pupping season by a qualified biologist using the procedures identified in **MM 3.4-1k**. If no active dens/burrows are found, then no further mitigation is necessary.

Implementation of the above measures will minimize potential impacts to American badgers through implementation of pre-construction den surveys, and vacation of any active dens to be carried out by a qualified biologist, resulting in a **less than significant impact.**

Implementation of the mitigation measures **3.4-2a through 3.4-2e,** in addition to mitigation measures **3.4-1a through 3.4-1p,** would reduce the impacts to non-listed special-status species with the potential to occur within the project site to a **less than significant** level. The special-status of these species will necessitate consultation with the CDFG. Feasible CDFG recommendations in accordance with applicable law, including any required mitigation, are required to be followed in conjunction with the mitigation measures listed above.

Impacts to Jurisdictional Wetlands

Impact 3.4-3 The project would potentially result in a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, coastal, riverine, stream, marsh, vernal pool, etc.) through direct removal, filling, hydrological interruption, or other means. This is a **potentially significant** impact.

The Plan Area contains 0.40 acre of USACE-verified seasonal wetlands that would be directly impacted by project construction. The potential WWTP site contains approximately 0.31 acre of seasonal wetlands (depressional and linear drainage). In addition, there is a 0.01-acre seasonal wetland within Santa Ana Creek located off the project site that may be impacted by improving the outfall area of the drainage ditch to accommodate larger flows. Even though the seasonal wetland habitat within the project site is of poor quality for plant and wildlife species, the loss or fill of jurisdictional wetlands is potentially significant under CEQA regardless of habitat quality, as the USACE has a no-net-loss policy. Authorization for such fill would be secured from USACE via the Section 404 permitting process prior to project implementation. Because a Section 404 permit would be required from the USACE, a Section 401 water quality certification would be also required from the RWQCB. The project developer would need to

obtain authorization from both the USACE and the RWQCB to fill/disturb these features prior to project implementation. A streambed alteration agreement may also be required from CDFG depending on the final design of the stormwater outfall area near Santa Ana Creek.

In addition, construction activities typically include the refueling of construction equipment on location. As a result, minor fuel and oil spills may occur with a risk of larger releases. Without rapid containment and clean-up, these materials could be potentially toxic depending on the location of the spill in proximity to water features, including the Dry Creek near the potential WWTP site or Santa Ana Creek near the outfall area or other isolated wetland areas surrounding project construction. Oils, fuels, and other contaminants could directly affect aquatic organisms, including special-status species that inhabit the creeks on and off the project site. Avoidance and minimization measures would reduce affects from erosion, sedimentation, runoff, and accidental spills.

MM 3.4-3a The developer shall comply with USACE "no net loss" policy for mitigation of wetlands under the jurisdiction of the USACE. The developer shall apply for a Section 404 permit, a Section 401 permit, and a 1602 Streambed Alteration Agreement (if applicable). If wetland resources are proposed to be taken, the project developer shall do the following:

a) If required, apply for a Section 404 permit from the USACE after verification of the wetland delineation by the U.S. Army Corps of Engineers (USACE). Any waters of the U.S. that would be lost or disturbed shall be replaced or rehabilitated on a "no net loss" basis in accordance with the USACE mitigation guidelines. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to the USACE.

b) Obtain a Section 401 water quality certification from the RWQCB.

c) A mitigation plan shall be implemented that includes <u>one</u> of the following:

   1) Completion of a Mitigation and Monitoring Plan that includes on- or off-site creation/preservation of the wetlands.

   2) Credits may be obtained at an approved mitigation bank.

The project developer shall provide written evidence to the County from the USACE and the RWQCB that this measure has been complied with prior to project approval.

MM 3.4-3b A 1602 Streambed Alteration Agreement for removal of or disturbance to riparian habitat and Waters of the U.S. (i.e., stream, lake, or river) from CDFG may be required for the proposed project, depending on the final design of the outfall area. This agreement would include measures to minimize and restore riparian habitat. The 1602 Streambed Alteration Agreement would require the project developer to prepare and implement a riparian vegetation mitigation and monitoring plan for disturbed riparian vegetation. If impacts to riparian and other sensitive natural communities are not avoidable, and on-site preservation is not possible, habitat compensation standards include a 2:1 (two acres of preserved habitat for every acre impacted) impact preservation ratio.

MM 3.4-3c The project's Stormwater Pollution Prevention Plan (SWPPP) shall include specific and detailed Best Management Practices (BMPs) designed to mitigate construction-related pollutants. The best available technology in BMPs to reduce sedimentation, erosion, water pollution, and dust to the greatest extent practicable shall be employed on all work sites during construction. A Grading and Erosion Control Plan shall be prepared by the contractor and submitted to the Public Works and Planning Departments for approval prior to the start of project construction, including clearing and grubbing. In areas where wetlands are within 250 feet of the project footprint, erosion control measures and construction fencing shall be emplaced, monitored for effectiveness, and maintained throughout the construction operations around all wetlands. These controls shall include methods to minimize the contact of construction materials, equipment, and maintenance supplies with stormwater. BMPs intended to reduce erosion of exposed soil may include, but are not limited to, soil stabilization controls, watering for dust control, perimeter silt fences, placement of hay bales and sediment basins. If grading is to occur during the rainy season, the primary BMPs selected shall focus on erosion control. End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures.

MM 3.4-3d Prior to working near any wetlands and other waters of the U.S., all heavy equipment shall be closely examined for oil and fuel discharges. All equipment operated adjacent to these areas shall be checked and maintained daily, to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic life. Petroleum from project-related activities shall be prevented from contaminating the soil and or/entering the vernal pool areas. Any of these materials placed within or where they may enter the wetland habitats shall be removed immediately. Regulating agencies shall be notified immediately if a spill occurs, and shall provide consultation regarding clean-up procedures.

MM 3.4-3e Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project-related activities, shall be prevented from contaminating the soil and/or entering the wetlands and other waters of the U.S. Any of these materials placed within or where they may enter these areas shall be removed immediately.

MM 3.4-3f Adequate erosion control and water pollution control measures shall be adopted and maintained for the duration of the project in order to prevent deleterious materials from entering any waterways or other aquatic habitat. The siltation curtain shall be of effective design to limit and abate heavily silted material from impacting the creek.

The USACE, along with the appropriate RWQCB will issue compensatory mitigation requirements to effectively mitigate any potential loss of these resources that may result from project construction to a **less than significant** level.

Impacts to the Movement of Native Resident or Migratory Fish or Wildlife Species or with Established Migratory Corridor

Impact 3.4-4 Implementation of the proposed project would not interfere substantially with the movement of special-status and common wildlife species within a wildlife migratory corridor. The impact to wildlife movement would be **less than significant**.

As described within the Environmental Setting section above, wildlife movement corridors are routes that provide shelter and sufficient food supplies to support wildlife species during migration. Movement corridors generally consist of riparian, woodlands, or forested habitats that span contiguous acres of undisturbed habitat, and are important elements of resident species' home ranges.

There are no drainages, riparian habitat, woodland or forested areas within the project site. The orchard within the project site is regularly disturbed and is dissected by ruderal/developed habitat and therefore would not be used as a wildlife corridor. The remaining natural lands within the project site do not provide adequate cover and vegetation to be used as a migratory corridor for common and special-status wildlife species; therefore implementation of the proposed project would not impact the movement of resident or migratory wildlife species. The impact to wildlife movement would be **less than significant**.

Conflict with adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any adopted biological resources recovery or conservation plan of any Federal, State, or local agency

Impact 3.4-5 Implementation of the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any adopted biological resources recovery or conservation plan of any Federal or State agency. There would be **no impact.**

Currently there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, nor any other conservation or recovery plan in effect for the project site, in whole or in part. Therefore, **no impacts** associated with project inconsistency with such plans would occur.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to Special Status Species, Critical Habitats and Wildlife Movement

Impact 3.4-6 The proposed project, in addition to other past, present and reasonably foreseeable, probable future residential and institutional projects along the Fairview Road corridor, may disturb special status species, critical habitats and wildlife movement throughout the region. These impacts would be considered **less than significant cumulative impacts.**

The Santana Ranch project will result in the conversion of the project site from rural uses to suburban uses. Other planned projects along the Fairview Road corridor include:

- **Gavilan College San Benito Campus** This project involves the construction of a 3,500 full-time equivalent (FTE) student college facility, as well as approximately 285 residential units and 35,000 square feet of retail space, on a 137-acre site at the northeastern corner of Fairview Road and Airline Highway.

- **Award Homes Subdivision** 595 single-family homes and 100 apartment units are proposed for this project on the western side of Fairview Road, south of St. Benedict's Church and east of Calistoga Drive within the City of Hollister.

It is also anticipated that, over time, the Fairview Road corridor will be further developed, consistent with the Area of Special Study designation of this corridor.

As presented in the impact discussions above, implementation of the proposed project would result in a loss of habitat and contribute to biological resource impacts, including disturbance of special-status species. Anticipated development and urban expansion of the area is expected to further contribute to these impacts and is considered a **potentially significant cumulative impact** to biological resources. Due to the size of the proposed project, the incremental contribution of the project to this potentially cumulative impact could also be potentially significant.

Implementation of mitigation measures presented within this section, **MM 3.4-1** through **MM 3.4-3**, would, however, reduce the project's overall contribution to cumulative biological resource impacts resulting from completion of the project to a less than significant level. Further, it is anticipated that future projects along the Fairview Road corridor also will be required to undergo environmental review, during which potential impacts to biological resources as a result of the projects will be identified and mitigated where feasible. Therefore, the proposed project, both incrementally and in combination with other planned future projects along the Fairview Road corridor, is anticipated to result in **less than significant cumulative impacts** with regard to potential loss and/or restriction of biological resources in the region.

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