This section of the Draft EIR evaluates individual resource and cumulative impacts to biological resources that could occur with implementation of the proposed project. The baseline information presented in this section is based on several technical reports and peer reviews of those reports.

WRA Environmental Consultants (WRA) prepared Biological Assessments in October 2006 and December 2007, a Wetland Delineation in January 2007 (WRA 2007b), and a Technical Memorandum regarding the Ferrini Ranch wildlife corridor in December 2008 (WRA 2008). Results of genetic testing of California tiger salamander were prepared in January 2009 (WRA 2009a), and Proposed Biological Resource Impact and Mitigation Measures were submitted in January 2009 (WRA 2009b). Denise Duffy and Associates prepared protocol-level surveys for western burrowing owl in March 2008 (DDA 2008a), surveys for California tiger salamander in September 2008 (DDA 2008b), and surveys for California red-legged frog in September 2008 (DDA 2008c). Staub Forestry and Environmental Consulting (Staub) prepared a Forest Management Report in September 2006, which was supplemented in March 2010 (Staub 2006, 2010).

All reports were prepared for the project applicant and peer reviewed by PMC biological resources staff. All final reports and peer reviews are included in **Appendix C**.

3.3.1 ENVIRONMENTAL SETTING

REGIONAL SETTING

The project site is located in Monterey County, California, in the *Toro Area Plan* planning area. The county contains a wide range of plant communities and habitat types, including fresh- and saltwater marshes, riparian woodland, oak woodland and savanna, grassland, coastal scrub, chaparral, broadleaf evergreen, coniferous forest, and mixed conifer forest. Coastal strand, wetlands, riparian woodland, and maritime chaparral are all considered severely limited or threatened. Monterey County's wildlife communities are varied and abundant. Some of the dominating communities consist of mountain lion, bobcat, coyote, birds of prey, boar, and seabirds.

LOCAL SETTING

The project site consists primarily of grazing land on rolling terrain that ranges in elevation from about 65 to 550 feet above sea level. The majority of the site is characterized by oak woodland and annual grassland with some areas of scrub present in the upper slopes of drainages and south-facing slopes.

BIOLOGICAL COMMUNITIES

Biological communities (or habitats) on the project site were mapped based upon a review of the Soil Survey of Monterey County (USDA 1978) and site visits conducted. The biological communities identified on the project site were classified as sensitive or non-sensitive habitats as defined by CEQA and other applicable laws and regulations.

According to the Biological Assessments, biological communities on the project site are divided as follows: approximately 49 percent of the project site contains non-sensitive habitat, and approximately 51 percent of the project site contains sensitive habitat as shown in **Figures 3.3-1a** and **3.3-1b** (WRA 2006, 2007a). The majority of the sensitive habitat on the site is coast live oak woodland and savanna. This habitat type is not identified as sensitive in the Biological Assessments, but has been treated by Monterey County as sensitive habitat in the analysis of similar projects.

Non-Sensitive Habitats

Non-sensitive habitats are those communities that are not protected under CEQA or other applicable laws, regulations, and ordinances. However, these communities may provide suitable habitat for special-status plant or wildlife species. Non-sensitive habitats on the project site are annual grasslands, coastal scrub, and developed land.

Annual Grassland

According to the Biological Assessments, approximately 400 acres or 45 percent of the project site comprises annual grasslands, located primarily in open areas of valleys and foothills (WRA 2006, 2007a). Annual grasslands are characterized by a mixture of non-native annual grasses and forbs along with scattered native grasses and wildflowers growing in fine-textured clay or loam soils that are somewhat poorly drained. Plant species observed on the project site include wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), Italian rye-grass (*Lolium multiflorum*), and rattail fescue (*Vulpia myuros*). A low percentage of needlegrass (*Nasella* sp.), a native perennial species, was also observed in the grassland.

Annual grasslands provide foraging habitat for small mammals, which in turn serve as prey for a variety of other animals, including snakes, raptors (birds of prey), and coyotes (*Canis latrans*). Numerous invertebrate species, many of which provide a food source for larger animals such as lizards, birds, and some small mammals, can also be found in annual grassland communities. The annual grassland at the project site has a long history of intensive disturbance from farming and grazing and is currently utilized for grazing.

Coastal Scrub

According to the Biological Assessments, approximately 3 percent, or 30 acres, of the project site comprises coastal scrub habitat, which is primarily located on the drier, steep south-facing slopes (WRA 2006, 2007a). Coastal scrub habitat is characterized by moderate to low growing evergreen and drought-tolerant shrubs that are adapted to shallow soils. Coastal scrub habitat on the project site is dominated by California black sage (*Salvia mellifera*) or coyote brush (*Baccharis pilularis*). Other species observed included sticky monkey flower (*Mimulus aurantiacus*) and California sagebrush (*Artemisia californica*).

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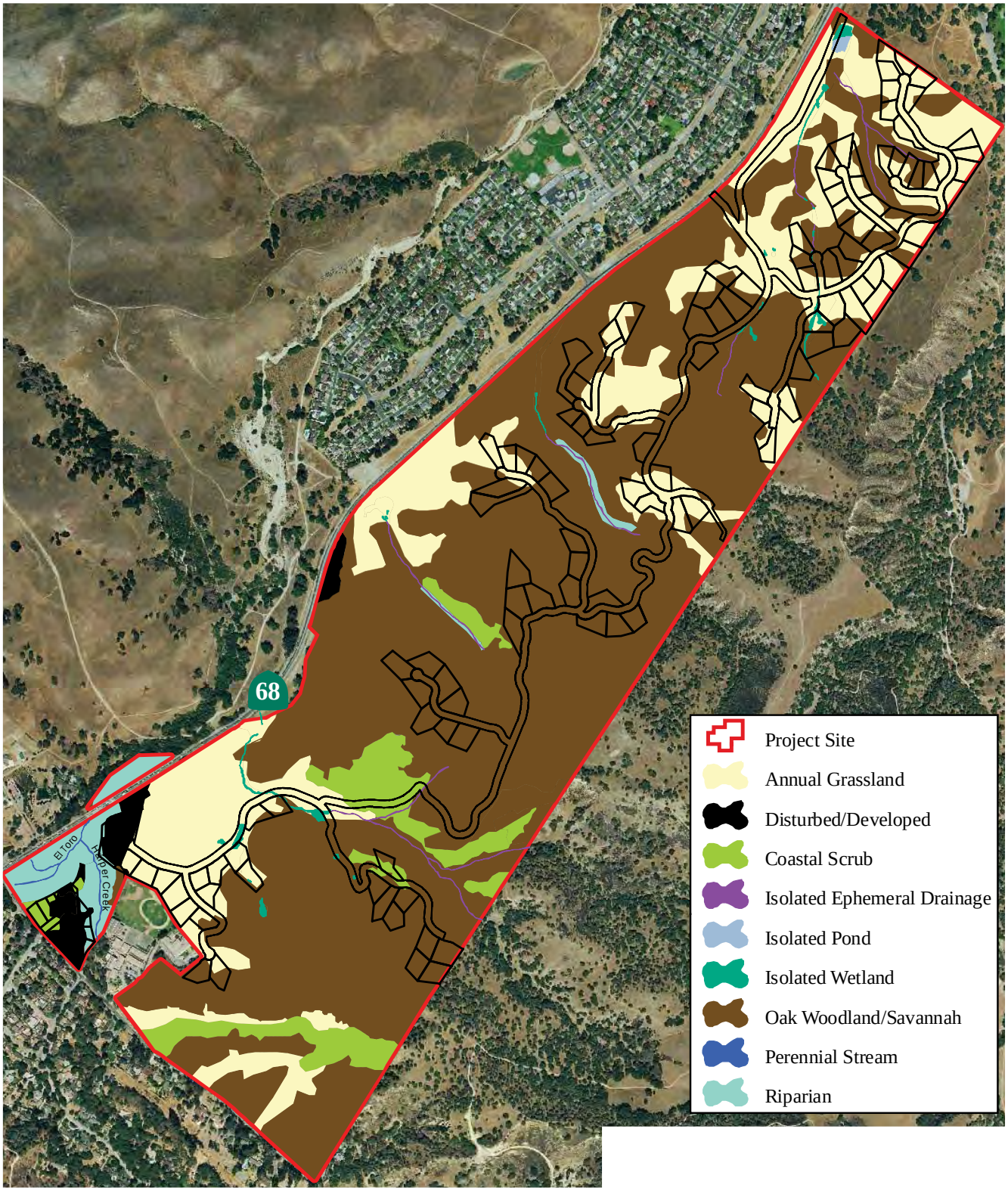

Source: Denise Duffy & Associates, Inc.

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FIGURE 3.3-1A
BIOLOGICAL COMMUNITIES - WESTERN PARCEL

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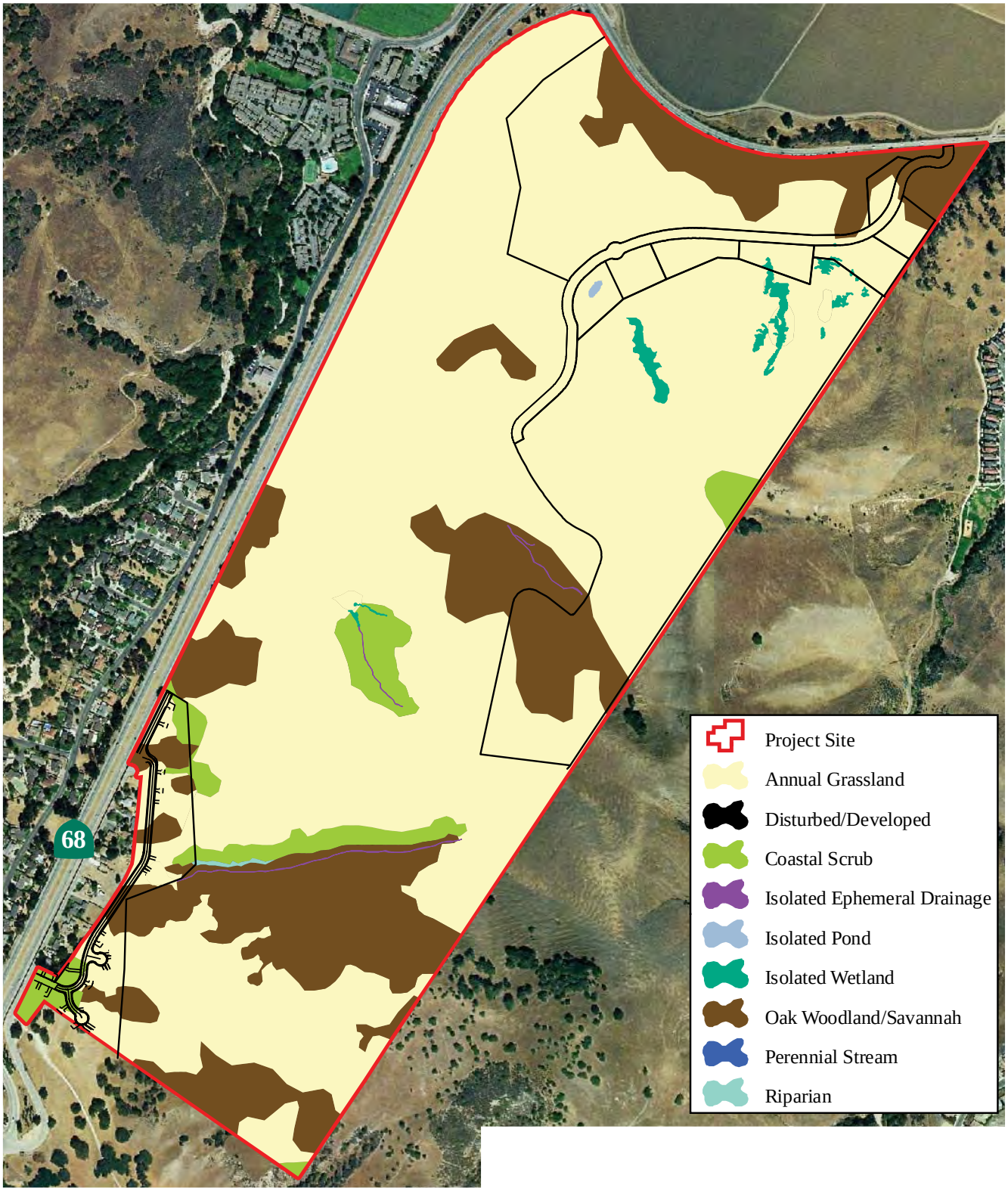

Source: Denise Duffy & Associates, Inc.

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FIGURE 3.3-1B
BIOLOGICAL COMMUNITIES - EASTERN PARCEL

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Developed Land

According to the Biological Assessments, approximately 1 percent, or 9 acres, of the project site comprises developed land (WRA 2006, 2007a). The developed areas are associated with those structures within the Ferrini Ranch complex and ranching operations, as well as a small area south of Parcel E near Portola Drive.

Sensitive Habitats

Sensitive habitats are those biological communities that are provided special protection under CEQA and other applicable laws, regulations, and ordinances. Sensitive habitats identified on the project site include oak woodland, riparian, and wetland.

Oak Woodland

According to the Biological Assessments, approximately 49 percent of the project site contains oak woodlands, which are dominated by open to nearly closed canopies of coast live oak (*Quercus agrifolia*) trees (WRA 2006, 2007a). According to the Forest Management Plan, approximately 24 acres are classified as having dense canopies and approximately 412 acres are classified as having moderate canopies. The 24 acres of dense canopies are primarily located on the mesic, north-facing slopes and the bottom of canyons. The 412 acres of moderate canopies (cover less than 25 percent) are primarily located on the drier, east-facing slopes and along the ridgelines.

The understory species of oak woodlands varies depending upon local conditions, such as moisture availability and soil type. Common oak woodland understory species observed on the project site include oak leaf duff and sparse herbaceous vegetation. In the transitional areas between the dense woodlands and the grasslands, the understory consists of species common to the annual grassland habitat but may include additional wildflower species.

Oak woodlands are complex ecosystems that not only provide habitat for a variety of wildlife but also provide an array of additional benefits such as protection of water quality and quantity, erosion prevention and soil quality, and efficient carbon sequestration. In terms of habitat, the oak trees provide suitable nesting sites and cover for birds and many mammals. Woody debris and duff in the woodland understory provide foraging areas for small mammals and microclimates suitable for amphibians and reptiles. Acorns are a valuable food source for many animal species. Other representative animal species of oak-dominated woodlands include the arboreal salamander (*Aneides lugubris*), western screech owl (*Otus kennicotti*), scrub jay (*Aphelocoma corulescens*), and Virginia opossum (*Didelphis virginianus*).

Riparian

According to the Biological Assessments, approximately 1 percent, or approximately 12 acres, of the project site comprises riparian habitat (WRA 2006, 2007a). In the northwest corner of the project site at the confluence of El Toro Creek and Harper Creek there is a

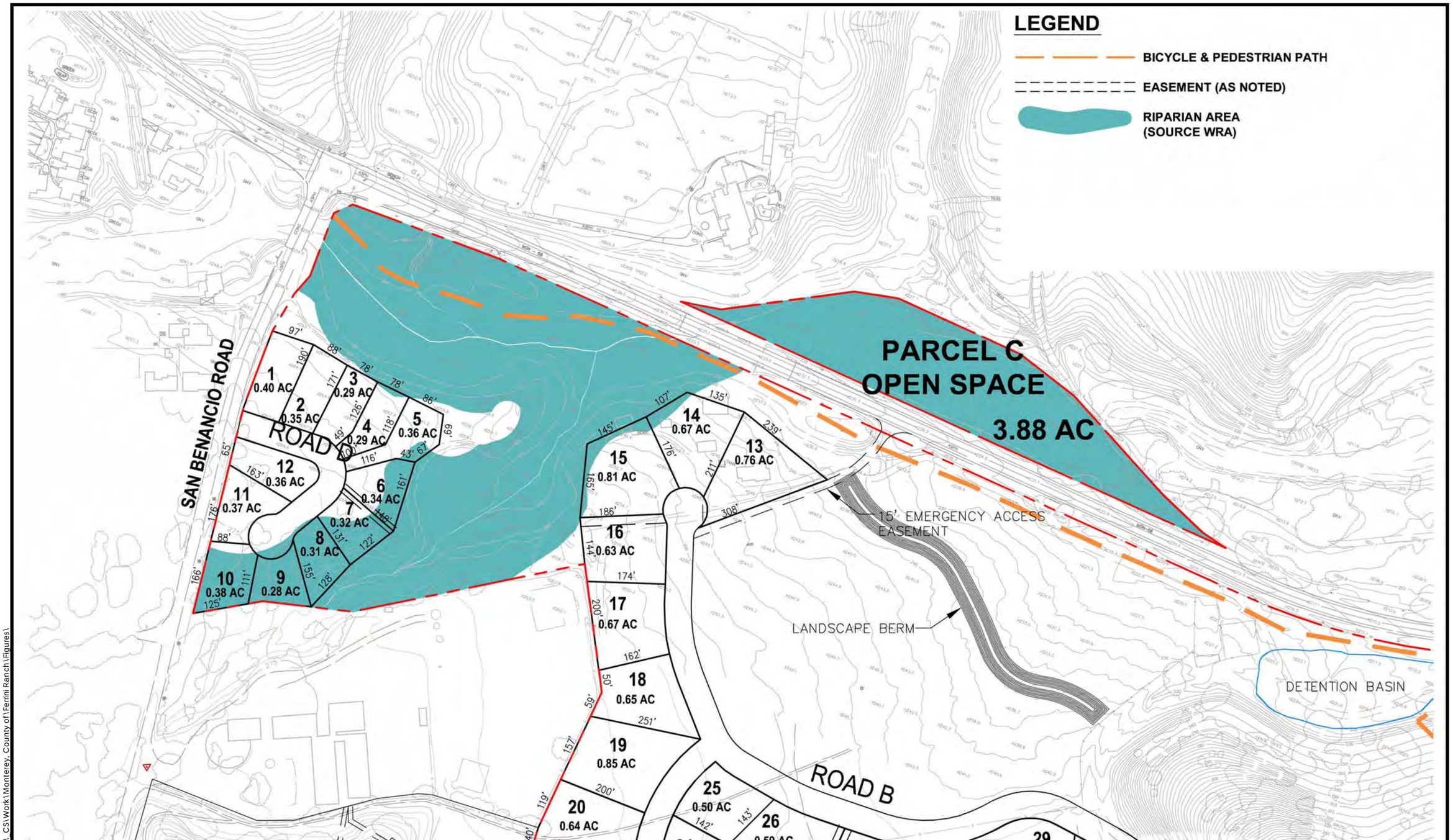
riparian corridor as shown in **Figure 3.3-2**. Riparian habitat identified on the project site consists of riparian woodland habitat located in the northwest corner of the project site near proposed Lots #1 through #15. This riparian woodland habitat is currently degraded in some locations due to the presence of debris and trash, soil compaction related to the use of dirt bikes, and the presence of invasive plant species in the understory. Within the riparian corridor, dominant plant species include California buckeye (*Aesculus californica*), willow (*Salix* spp.), California blackberry (*Rubus ursinus*), mugwort (*Artemisia douglasiana*), and poison oak (*Toxicodendron diversilobum*). In addition, ephemeral drainages transecting the project site from south to north provide marginal riparian habitat, supporting some California buckeye, but lack riparian species understory.

Wetlands and Other Waters

Figures 3.3-3a and **3.3-3b** identify the extent of jurisdictional waters on the project site based upon a jurisdiction delineation (WRA 2007b). The USACE has reviewed the jurisdictional delineation and verified their jurisdiction under the Clean Water Act on December 18, 2007 (USACE 2007).

Activities occurring in wetlands and other waters of the U.S. may be regulated by the U.S. Army Corps of Engineers (USACE). Three criteria serve as a preliminary basis by USACE to determine if wetlands are within their jurisdiction. In accordance with Section 404 of the Clean Water Act, the feature must have (1) hydrophytic vegetation, (2) wetland hydrology, and (3) hydric soils. According to the USACE, evidence of a minimum of one positive wetland indicator from each parameter (vegetation, hydrology, and soil) must be found in order to make a positive wetland determination. Other factors are employed to finalize the determination.

Areas that appear to lack a hydrological connection to navigable waters of the U.S., one of its tributaries, or an adjacent jurisdictional wetland are considered to be exempt from Section 404 of the Clean Water Act. A hydrological connection is determined to be absent if (1) the wetland is located too far from another jurisdictional feature, and/or (2) the wetland does not have a discernable surface water connection that would allow surface water to be transported from the wetland into a jurisdictional feature. These wetland features are further described and categorized below.



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Source: Whitson Engineers, 2010

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FIGURE 3.3-2
RIPARIAN AREA

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Feature ID	Type	Linear Feet	Square Feet	Acres	Isolated
17	Isolated Ephemeral Drainage	1696	3395	0.078	Y
18	Isolated Pond	N/A	15437	0.354	Y
19	Isolated Wetland	N/A	11787	0.271	Y
20	Isolated Ephemeral Drainage	686	1368	0.031	Y
21	Isolated Ephemeral Drainage	1197	3297	0.076	Y
22	Isolated Wetland	N/A	5388	0.124	Y
23	Isolated Ephemeral Drainage	478	1197	0.027	Y
24	Isolated Wetland	N/A	121	0.003	Y
25	Isolated Ephemeral Drainage	42	64	0.001	Y
26	Isolated Wetland	N/A	110	0.003	Y
27	Isolated Ephemeral Drainage	45	68	0.002	Y
28	Isolated Wetland	N/A	414	0.010	Y
29	Isolated Ephemeral Drainage	120	180	0.004	Y
30	Isolated Wetland	N/A	316	0.007	Y
31	Isolated Ephemeral Drainage	49	83	0.002	Y
32	Isolated Wetland	N/A	8893	0.204	Y
33	Isolated Wetland	N/A	3110	0.071	Y
34	Isolated Wetland	N/A	333	0.008	Y
35	Isolated Wetland	N/A	534	0.012	Y
36	Isolated Wetland	N/A	1159	0.027	Y
37	Isolated Wetland	N/A	2310	0.053	Y
38	Isolated Wetland	N/A	322	0.007	Y
39	Isolated Ephemeral Drainage	563	845	0.019	Y
40	Isolated Wetland	N/A	1324	0.030	Y
41	Isolated Ephemeral Drainage	1251	3756	0.086	Y
42	Isolated Wetland	N/A	375	0.009	Y
43	Isolated Wetland	N/A	424	0.010	Y
44	Isolated Wetland	N/A	275	0.006	Y
45	Isolated Ephemeral Drainage	1374	3438	0.079	Y
46	Isolated Wetland	N/A	368	0.008	Y
47	Isolated Wetland	N/A	290	0.007	Y
48	Isolated Wetland	N/A	298	0.007	Y
49	Isolated Wetland	N/A	19047	0.437	Y
50	Isolated Ephemeral Drainage	932	3721	0.085	Y
51	Isolated Ephemeral Drainage	847	3379	0.078	Y
52	Isolated Ephemeral Drainage	928	3708	0.085	Y
53	Isolated Ephemeral Drainage	729	2918	0.067	Y
54	Isolated Wetland	N/A	1324	0.030	Y
55	Isolated Wetland	N/A	490	0.011	Y
56	Isolated Wetland	N/A	503	0.012	Y
57	Isolated Wetland	N/A	1462	0.034	Y
58	Isolated Wetland	N/A	8564	0.197	Y
59	Isolated Wetland	N/A	295	0.007	Y
60	Isolated Wetland	N/A	5279	0.121	Y
61	Perennial Stream	898	2702	0.062	N
62	Perennial Stream	894	3590	0.082	N
63	Perennial Stream	306	926	0.021	N

Study Area (903 acres)
Sample Points
Culverts

Section 404 Jurisdictional Features

Perennial Stream (2,099 linear ft., 0.17 acres)

Isolated Features

Ephemeral Drainage (12,249 linear ft., 0.77 acres)
Pond (0.46 acres)
Wetland (3.61 acres)

Source: WRA, 2007

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FIGURE 3.3-3A
WETLANDS & OTHER WATERS - WESTERN PARCEL

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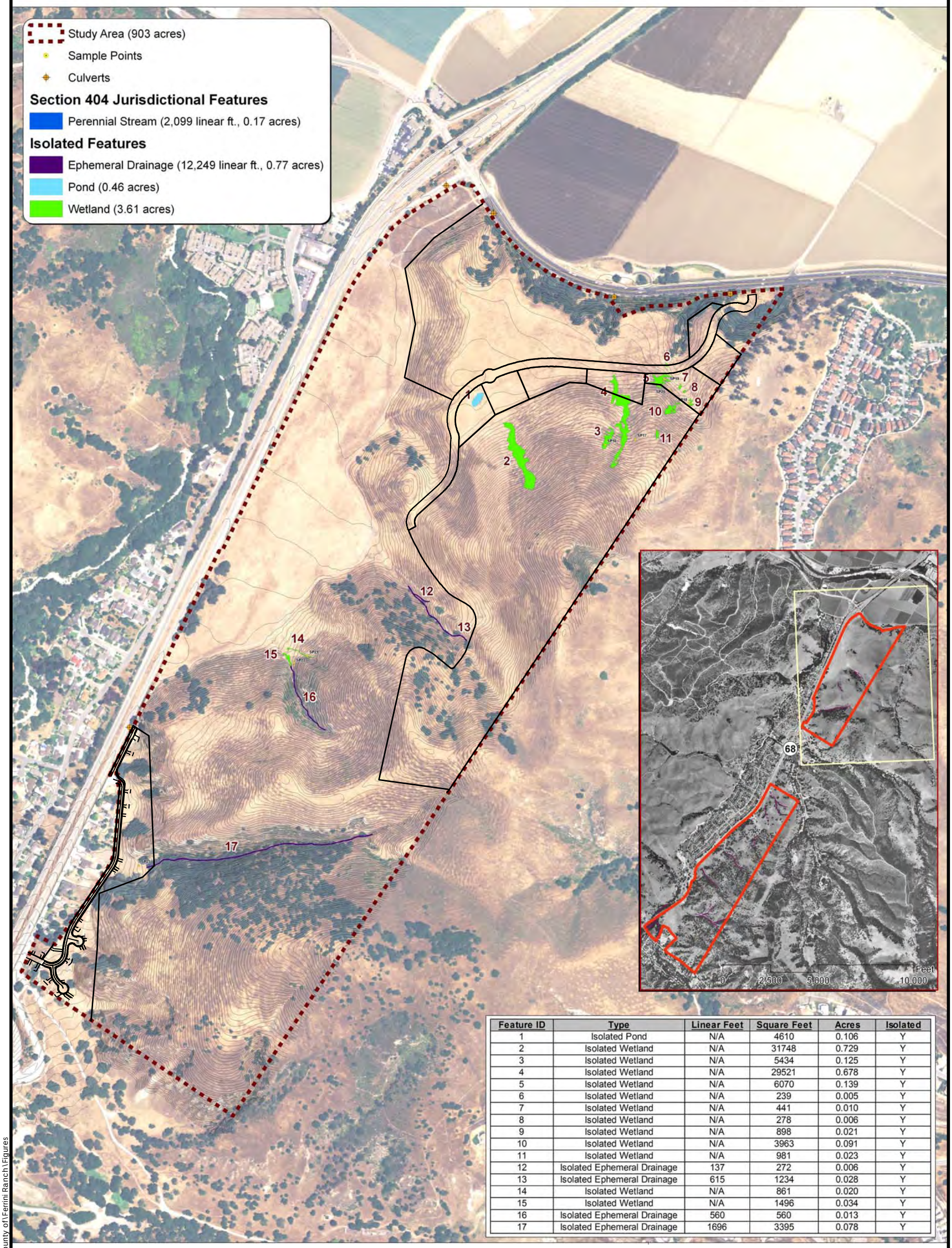

Feature ID	Type	Linear Feet	Square Feet	Acres	Isolated
1	Isolated Pond	N/A	4610	0.106	Y
2	Isolated Wetland	N/A	31748	0.729	Y
3	Isolated Wetland	N/A	5434	0.125	Y
4	Isolated Wetland	N/A	29521	0.678	Y
5	Isolated Wetland	N/A	6070	0.139	Y
6	Isolated Wetland	N/A	239	0.005	Y
7	Isolated Wetland	N/A	441	0.010	Y
8	Isolated Wetland	N/A	278	0.006	Y
9	Isolated Wetland	N/A	898	0.021	Y
10	Isolated Wetland	N/A	3963	0.091	Y
11	Isolated Wetland	N/A	981	0.023	Y
12	Isolated Ephemeral Drainage	137	272	0.006	Y
13	Isolated Ephemeral Drainage	615	1234	0.028	Y
14	Isolated Wetland	N/A	861	0.020	Y
15	Isolated Wetland	N/A	1496	0.034	Y
16	Isolated Ephemeral Drainage	560	560	0.013	Y
17	Isolated Ephemeral Drainage	1696	3395	0.078	Y

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Source: WRA, 2007

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FIGURE 3.3-3B
WETLANDS & OTHER WATERS - EASTERN PARCEL

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Seasonal and Seep Wetlands (3.61 acres)

Wetlands on the project site occur primarily as seasonal wetlands and seep wetlands. Seasonal wetlands are located in depressions or flat areas that are inundated with ephemeral water for a sufficient period of time to sustain a community of wetland-adapted plant species and hydric soil conditions. Seasonal wetlands on the project site are primarily located at the mouths of the ephemeral drainages. Seep wetlands occur on foot slopes and sand toe slopes where groundwater intersects with the soil surface. Seep wetlands on the project site occur at ephemeral drainages and perennial drainages. Both seasonal and seep wetland habitats on the project site are dominated by wetland plant species including iris-leaved rush (*Juncus xiphioides*), Mexican rush (*Juncus mexicanus*), cut-leaf plantain (*Plantago coronopus*), bermudagrass (*Cynondon dactylon*), and Hyssop's loosestrife (*Lythrum hyssopifolia*). None of these wetlands were determined to be jurisdictional under Section 404 of the Clean Water Act. However, they may be considered waters of the State by the Regional Water Quality Control Board.

Seasonal Ponds (0.46 acres)

There are two seasonal ponds on the project site, one on the eastern parcel and another on the western parcel. The larger of the two, "Pond 18" as identified in the U.S. Army Corps of Engineers verified wetland delineation, is 0.35 acres in size. As seasonal wetland features, these are low depressions and do not retain water year-round. Both pond features are non-jurisdictional, isolated wetlands.

Ephemeral Drainages (0.77 acres)

There are approximately 12,249 linear feet (0.77 acres) of ephemeral drainages on the project site. According to the USACE (USACE 2007), none of the ephemeral drainages were determined to be jurisdictional under Section 404 of the Clean Water Act (WRA 2007a). Ephemeral drainages occur in swales where water flow is restricted to peak rainfall events that create defined drainage channels with defined high water marks. Ephemeral drainages occur throughout the project site and primarily flow from east to west. These drainages were determined not to be jurisdictional under Section 404 of the Clean Water Act.

Perennial Streams (0.17 acres)

Approximately 2,099 linear feet (0.17 acres) of perennial streams occur on the project site and are classified as potential jurisdictional area. This area includes the confluence of El Toro Creek and Harper Creek in the northwestern portion of the project site. This is where the riparian corridor is located. The perennial waters were determined to be waters of the U.S. under Section 404 of the Clean Water Act.

Readers are directed to Draft EIR **Appendix C** for additional detail regarding delineated on-site wetlands.

SPECIAL-STATUS SPECIES

In general, special-status species include plants and wildlife that are listed, proposed for listing, or candidates for listing as threatened or endangered or proposed or candidates for these listings by the U.S. Fish and Wildlife Service (USFWS); those listed or proposed for listing as rare, threatened, or endangered by the California Department of Fish and Game (CDFG); plants occurring on Lists 1B or 2 of the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (1994); and animals designated as species of special concern by the CDFG. The U.S. Fish and Wildlife Service, California Natural Diversity Database (CNDDB), and California Native Plant Society (CNPS) inventory identify special-status species that may be affected by projects in Monterey County.

Plant Species

Based on literature review (e.g., CNPS Inventory of Rare and Endangered Plants), soil survey analysis, on-site survey observations, and species' range information, 38 special-status species of plants have been documented in the vicinity of the project site as shown in Appendix B of the Biological Assessment (WRA 2007a), which is included as **Appendix C** of this Draft EIR. Rare plant surveys conducted by Denise Duffy and Associates in April, May, and September 2007 identified three special-status plant species on the project site (WRA 2007a), which are discussed below.

Congdon's tarplant (*Centromadia = Hemizonia parryi* ssp. *congdonii*)

The CNPS lists Congdon's tarplant as a rare, threatened, or endangered species in California and elsewhere (List 1b). This plant is a spring to fall blooming native annual herb commonly found in valley and foothill grassland habitats. The lower elevation grasslands in the project area host several populations of this species.

Pacific Grove clover (*Trifolium tridentatum* var. *polyodon,* syn. *Trifolium polyodon*)

Pacific Grove clover is listed as rare, threatened, or endangered in California with the California Native Plant Society (CNPS List 1b). This plant species is a variety of annual clover, a spring blooming native annual forb/herb commonly found within closed-cone coniferous forests, coastal prairie, meadows and seeps, broadleaved upland forest, and cismontane woodland habitats. This species was identified in wetland and mesic areas within grassland, coast live oak woodland/savanna, and riparian woodland habitats in the southern portion of the project site.

Mt. Diablo cottonweed (*Mircropus amphibolus*)

Mt. Diablo cottonweed is listed as a plant about which more information is needed by the CNPS (List 3). Mt. Diablo cottonweed is an annual herb that occurs in broadleaved upland forests, chaparral, cismontane woodlands, and rocky grasslands at elevations from 45 to 825 meters. It blooms between March and May. Mt. Diablo cottonweed is found in grassy areas of the oak savanna habitats on the project site.

Listed and Special-Status Wildlife

Seventy-five special-status wildlife species have been recorded in the vicinity of the project site, as shown in Appendix B of the Biological Assessment (WRA, 2007a), which is included as **Appendix C** of this Draft EIR. The project site has moderate to high potential to support 27 of these special-status wildlife species, as shown in **Table 3.3-1**.

TABLE 3.3-1
POTENTIAL SPECIAL-STATUS WILDLIFE SPECIES

COMMON NAME	SCIENTIFIC NAME	STATUS	
		FEDERAL	STATE
REPTILES AND AMPHIBIANS			
California tiger salamander	*Ambystoma californiense* (potential hybrid)	T	T
Coast Range newt	*Taricha torosa torosa*	None	CSC
Western spadefoot toad	*Spea hammondii*	None	CSC
Silvery legless lizard	*Anniella pulchra pulchra*	None	CSC
Coast (California) horned lizard	*Phrynosoma coronatum frontale*	None	CSC
Two-striped garter snake	*Thamnophis hammondii*	None	CSC
BIRDS			
Cooper's hawk	*Accipiter cooperi* (nesting)	None	CSC
Sharp-shinned hawk	*Accipiter striatus* (nesting)	None	CSC
Golden eagle	*Aquila chrysaetos* (nesting)	None	CSC, CFP
Ferruginous hawk	*Buteo regalis*	None	CSC
Northern harrier	*Circus cyaneus*	None	CSC
White-tailed kite	*Elanus leucurus*	None	CFP
Merlin	*Falco columbarius*	None	CSC
Prairie falcon	*Falco mexicanus* (nesting)	None	CSC
American peregrine falcon	*Falco peregrinus anatum*	E	E, CFP
Long-eared owl	*Asio otus*	None	CSC
Lewis' woodpecker	*Melanerpes lewis*	FWS:BCC	None
Olive-sided flycatcher	*Contopus cooperi* (nesting)	FWS:BCC	None
Loggerhead shrike	*Lanius ludovicianus*	None	CSC
California horned lark	*Ermophila alpestris actia*	None	CSC
Yellow warbler	*Dendrocia petechia brewsteri*	None	CSC
Bell's sage sparrow	*Amphispiza belli belli*	None	CSC
Lawrence's goldfinch	*Carduelis lawrencei*	FWS:BCC	None
MAMMALS			
Pallid bat	*Antrozous pallidus*	None	CSC
Monterey dusky-footed woodrat	*Neotoma fuscipes luciana*	None	CSC
American badger	*Taxidea taxus*	None	CSC
Monterey (Salinas) ornate shrew	*Sorex ornatus salaries*	None	CSC

Notes: E = Endangered; T = Threatened; CSC = California Species of Concern; CFP = CDFG Fully Protected Animal; BCC= USFWS Birds of Conservation Concern.

Source: WRA 2006

Raptors and other migratory birds protected under the Migratory Bird Treaty Act could nest and/or forage on the project site, primarily in the larger coast live oak trees. A loggerhead shrike (*Lanius ludovicianus*) was observed in the northern portion of the project site during the site assessment. Protocol-level surveys determined the presence of California tiger salamanders (*Ambystoma californiense*) in the western parcel of the project site. These observed species plus those species that have moderate to high potential to occur on the project site are discussed in more detail below.

California tiger salamander (*Ambystoma californiense*) (potential hybrid)

The California tiger salamander is a federally and state-listed threatened species. This amphibian species inhabits annual grasslands and open oak woodlands in the vicinity of ephemeral pools or other suitable breeding ponds. California tiger salamanders use burrows of ground squirrels or other rodents as aestivation sites. With the onset of the rainy season, adults migrate from their burrows to nearby ponds for breeding. Following breeding, adults disperse to upland areas and retreat into burrows where they remain for most of the year. California tiger salamanders have been reported to migrate as far as 1 mile between their underground retreats and breeding ponds, but aestivation sites are usually located within one-quarter mile of breeding ponds. According to the Biological Assessment (WRA 2007a), the northwest corner of the project site near El Toro Park is the only aquatic feature on the project site that may sustain the aquatic phase of the California tiger salamander. Protocol-level surveys were conducted by Denise Duffy & Associates, Inc. between October 2007 and March 2008 in this area to determine the presence of California tiger salamanders. The results of this survey identified that California tiger salamanders are present on the project site between State Route 68 and proposed Lot #134 in a detention basin referred to by the biologist as Pond 18.

The Salinas Valley California tiger salamander population is largely a hybrid population. The native population has interbred with an introduced non-native species. Most samples of DNA in the area contain a high frequency of introduced alleles in the genome. Hybridization is a concern in cases of listed species, including California tiger salamander (CTS). According to WRA, hybrid species are not explicitly addressed by the Endangered Species Act, and the U.S. Fish and Wildlife Service does not have an official policy on the matter; therefore, hybrid species are treated on a case-by-case basis. WRA collected tissue samples and genetic testing was performed to determine if the CTS captures on the project site represented native CTS, non-native barred tiger salamanders, or a mixture of the two genotypes (hybrid) as part of the consultation process with the U.S. Fish and Wildlife Service (was not listed as threatened by the State at the time of consultation).

Results of the genetic testing concluded that individuals captured on the project site were hybrids based on a Hybrid Index Score (HIS) of 0 to 0.30 (0–30 percent non-native alleles), indicating that at least 70 percent of the individuals captured could be described "pure native" (WRA 2009a). The observed low levels of non-native genotypes indicate that the project site may (1) have supported a purely native population that was invaded by a small number of hybrid salamanders; (2) consist of a native population currently receiving infrequent immigrants from adjacent sites containing hybrid individuals; or (3) be the result of colonization by individuals whose lineages originated from sites containing low levels of non-native genes.

California red-legged frog (*Rana aurora draytonii*)

California red-legged frog is a federally threatened species. The California red-legged frog is the largest native frog in California and historically has been widely distributed in the

central and southern portions of the state. The species requires still or slow-moving water during the breeding season (typically between December and April) to deposit their large egg masses. California red-legged frogs can migrate up to 2 miles between non-breeding and breeding sites. Adults inhabit aquatic habitats with riparian vegetation, overhanging banks, or plunge pools for cover, especially during the breeding season. They may take refuge in small mammal burrows, leaf litter, or other moist areas during periods of inactivity. During the non-breeding season, a wider variety of aquatic habitats are used, including small pools in coastal streams, springs, water traps, and other ephemeral water bodies. Appropriate habitat existing in the riparian and perennial stream habitat of the El Toro Creek and Harper Creek confluence located in the western parcel of the project site.

Protocol-level surveys were conducted by Denise Duffy & Associates, Inc. between July 2007 and November 2007 in all portions of El Toro Creek and Harper Creek associated with the project site to determine the presence of California red-legged frogs. The results of the surveys identified no California red-legged frogs at any life stage detected or observed on the project site during the course of the surveys.

Coast Range newt (*Taricha torosa torosa*)

The Coast Range newt is a California species of special concern. Coast Range newts frequent terrestrial habitats, but breed in ponds, reservoirs, and slow-moving streams from Mendocino County to San Diego County. The Coast Range newt is a conspicuous diurnal salamander that, if the behavior of the related red-bellied newt (*T. rivularis*) can be considered an appropriate indicator, probably engages in sometimes long-distance (greater than one kilometer) migrations to breeding sites. Adult newts eat a wide variety of aquatic and terrestrial invertebrates, as well as egg masses, larvae, and carrion. This species is highly likely to inhabit the wetland and water areas located on the project site.

Western spadefoot toad (*Spea hammondii*)

Western spadefoot toad is a California listed species of special concern. This amphibian species prefers open vegetation and short grasses where the soil is sandy or gravelly and is commonly found within grassland, scrub, chaparral, and woodland habitats. Western spadefoot toad species require temporary rain-pools that last at least three weeks. This species may inhabit the coastal scrub, grassland, and oak woodland habitats and areas with sandy substrate located on the project site.

Silvery legless lizard (*Anniella pulchra pulchra*)

Silvery legless lizard is a California listed species of special concern. This reptile species burrows in loose, friable soils or sand. This species may be present in the areas of the project site that have sandy substrate.

Coast (California) horned lizard (*Phrynosoma coronatum frontale*)

The Coast horned lizard is a California listed species of special concern. This reptile species is distributed in the California coastal ranges extending from Sonoma County south to Mexico. Coast horned lizards inhabit open country, especially sandy areas, washes, floodplains, and wind-blown deposits in a wide variety of habitats, including shrublands, woodlands, riparian habitats, and annual grassland. Warm, sunny, open areas are a main habitat requirement, along with patches of loose soils where the lizard can bury itself. This species is highly likely to inhabit areas of the project site with a sandy substrate.

Two-striped garter snake (*Thamnophis hammondii*)

Two-striped garter snake is a California listed species of special concern. The two-striped garter snake is a highly aquatic snake rarely found far from water, which it freely enters to forage or escape predators. It commonly inhabits perennial and intermittent streams having rocky beds bordered by willow thickets or other dense vegetation. This species also inhabits large sandy riverbeds with riparian vegetation along the stream course, or stock ponds and other artificially created aquatic habitats if a dense riparian border of emergent vegetation and amphibian and fish prey are present. Adult snakes display use of different areas and habitats in summer versus winter. During the summer, snakes utilize streamside sites and have home ranges that vary from approximately 80 square meters to over 5,000 square meters. During winter, they occupy coastal sage scrub and grassland locations in uplands adjacent to riparian areas, and they have home ranges that vary from approximately 50 square meters to nearly 9,000 square meters. This species may be present in the northwestern portion of the project site near Toro Creek.

Cooper's hawk (*Accipiter cooperi*)

Cooper's hawk is a California species of special concern. This hawk is associated with woodland and forest habitats throughout California. Although nest sites are usually found in isolated areas, this species frequently occurs in urban habitats in winter and during migration. This species is highly likely to use the oak woodland and riparian corridor habitats on the project site as nesting and foraging habitat.

Golden eagle (*Aquila chrysaetos*)

Golden eagles are a California fully protected species. Golden eagles occur in a variety of habitats throughout California. This large raptor typically nests in large isolated trees or cliffs. Golden eagles forage over large areas, feeding primarily on ground squirrels, rabbits, large birds, and carrion. The oak savanna and annual grassland habitats on the project site provide foraging habitat for this species.

Ferruginous hawk (*Buteo regalis*)

The ferruginous hawk is a California species of special concern. The ferruginous hawk is a winter visitor to open grasslands, sagebrush flats, desert scrub, low foothills surrounding

valleys, and fringes of pinyon-juniper habitats. The annual grassland of the project site may provide potential foraging habitat during the non-breeding season.

Sharp-shinned hawk (*Accipiter striatus*)

The sharp-shinned hawk is a California species of special concern. This species is a fairly common migrant and winter visitor throughout California and is found in a variety of habitats, especially woodlands. It usually nests in dense small-tree stands of conifers near water. Preferred roost sites are within intermediate to high-canopy forest areas. This species may forage in the project site during the non-breeding season.

Northern harrier (*Circus cyaneus*)

The northern harrier is a California species of special concern. Northern harrier populations have decreased in recent decades but can be locally abundant where suitable habitat exists free of disturbance. Northern harriers frequent meadows, grasslands, open rangelands, desert sinks, and fresh- and saltwater emergent wetlands. Open areas of tall, dense grasses, moist or dry shrubs, and edges are used for nesting, cover, and feeding. The grassland in the project site may provide suitable nesting and foraging habitat for this species.

White-tailed kite (*Elanus leucurus*)

The white-tailed kite is a California fully protected species. White-tailed kites are associated with annual grasslands, agricultural areas, scrub habitats, wet meadows, and emergent wetlands throughout the lower elevations of California. Nesting generally occurs in shrubs or small trees. Individuals are highly likely to forage over open areas of the project site throughout the year. The project site contains suitable nesting habitat in the oak savanna and suitable foraging habitat in the savanna and annual grasslands.

Merlin (*Falco columbarius*)

The merlin is a California species of special concern. Merlins prefer seacoasts, tidal estuaries, open woodlands, savannas, edges of grasslands and deserts, and farms and ranches. Stands of trees that provide windbreaks are required for roosting. The project site contains suitable foraging habitat.

Prairie falcon (*Falco mexicanus*)

The prairie falcon is a California species of special concern. This species is an uncommon resident and migrant that ranges from southeastern deserts northwest along the Coast Ranges and Sierra Nevada. It occurs in many habitats, but typically is associated with grasslands, savannas, rangeland, agricultural areas, and desert scrub. This falcon typically nests on cliffs. This species may forage in the project site.

American peregrine falcon (*Falco peregrinus anatum*)

The American peregrine falcon is a federally delisted, State endangered, and California fully protected species. Historical Dichloro-Diphenyl-Trichloroethane (DDT) contamination is the primary source of decline for this species. It winters throughout the Central Valley and occurs as a vagrant in a wide variety of habitats. This species may forage in the project site.

Long-eared owl (*Asio otus*)

The long-eared owl is a California species of special concern. Nesting long-eared owls range from coastal lowlands to interior deserts, but prefer riparian groves, planted woodlots, and belts of live oaks paralleling streams. Generally, this owl frequents dense riparian and live oak thickets near meadow edges, and nearby woodland and forest habitats. The oak woodland and riparian habitats of the project site may provide suitable nesting and foraging habitat for this species.

Lewis's Woodpecker (*Melanerpes lewis*)

The Lewis's Woodpecker is listed as a bird of conservation concern with the U.S. Fish and Wildlife Service. This species is a resident or winter migrant in California, more commonly found in mountain ranchlands. Preferred habitats include open pine-oak woodlands, ponderosa pine woodland, and oak woodlands. This species is a cavity nester that forms loose colonies, often in a dead tree stump or limb. Suitable nesting and foraging habitat are available in the oak woodlands on the project site.

Loggerhead shrike (*Lanius ludovicianus*)

The loggerhead shrike is a California species of special concern. The loggerhead shrike is a common resident and winter visitor in lowlands and foothills throughout California. It prefers open habitats with scattered trees, shrubs, posts, fences, utility lines, or other perches. Nests are usually built on a stable branch in a shrub or small tree with dense foliage and are usually well concealed. Suitable nesting and foraging habitat is available on the project site. This species was seen during the site visit.

California horned lark (*Eremophila alpestris actia*)

The California horned lark is a California species of special concern. In nonagricultural lands, this species typically inhabits areas of short vegetation or bare ground, including shortgrass prairie, deserts, brushy flats, and alpine habitat. The oak savanna and annual grassland habitats on the project site provide suitable breeding and foraging habitat for this species.

Yellow warbler (*Dendroica petechia*)

The yellow warbler is a California species of special concern. Yellow warblers prefer dense riparian vegetation for breeding. Yellow warbler populations have declined due to brood parasitism by brown-headed cowbirds (*Molothrus ater*) and habitat destruction. This species' diet is primarily insects supplemented with berries. Toro Creek, which crosses the northwest corner of the project site, may provide suitable breeding and foraging habitat for this species.

Bell's sage sparrow (*Amphispiza belli belli*)

Bell's sage sparrow is a California species of special concern. Bell's sage sparrow is an uncommon to fairly common but localized resident breeder in dry chaparral and coastal sage scrub along the coastal lowlands, inland valleys, and in the lower foothills of local mountains. Coastal scrub habitat on the project site may provide suitable breeding and foraging habitat.

Lawrence's goldfinch (*Carduelis lawrencei*)

Lawrence's goldfinch is listed as a bird of conservation concern with the U.S. Fish and Wildlife Service. Lawrence's goldfinch is endemic to the arid woodlands of California and northern Baja. It inhabits oak woodlands, chaparral, riparian woodlands, pinyon-juniper associates, and weedy water during the breeding season. The oak woodland, riparian, pond, and scrub habitats of the project site may provide suitable breeding and foraging habitat for this species.

Monterey dusky-footed woodrat (*Neotoma fuscipes luciana*)

The Monterey dusky-footed woodrat is a California listed species of special concern. The Monterey dusky-footed woodrat is restricted to western and central Monterey County and northwestern San Luis Obispo County. This mammal species is typically found within dense chaparral or oak woodland habitats with moderately dense understory growth and abundant dead wood for nest construction. They feed on live woody plants such as oak, maple, coffeeberry, alder, and elderberry. This species is highly likely to occur in the oak woodland habitat located on the project site.

American badger (*Taxidea taxus*)

The American badger is a California listed species of special concern. This mammal species inhabits drier portions of scrub, forest, and herbaceous habitats where friable soils and prey populations are present. This species is highly likely to inhabit the coastal scrub and oak woodland habitats located on the project site.

Salinas ornate shrew (*Sorex ornatus salaries*)

The Salinas ornate shrew is a California listed species of special concern. This mammal species typically occur in brackish water marshes, along streams, and in forests and brushy areas of valleys and foothills. This species is highly likely to inhabit the coastal scrub and oak woodland habitats located on the project site.

Western burrowing owl (*Athene cunicularia*)

Western burrowing owls are a California species of special concern. Burrowing owls are a year-round resident of open, dry grassland and desert habitats, and in grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats. In general, burrowing owls prefer open grasslands and desert shrub habitats where grass height is relative short, including areas that are actively grazed by livestock, particularly when perches (artificial or natural) are present.

Protocol-level surveys for burrowing owls were conducted by WRA in March 2008. Results of the surveys indicate that during that period of time, burrowing owls were not present on the project site (WRA 2008). However, there is appropriate habitat on the project site.

Pallid bat (*Antrozous pallidus*)

The pallid bat is a California species of special concern. The pallid bat is found in a variety of low elevation habitats throughout California. It selects a variety of day roosts including rock outcrops, mines, caves, hollow trees, buildings, and bridges. Night roosts are usually found under bridges, but also in caves, mines, and buildings. Pallid bats are sensitive to roost disturbance. Hollow trees in the oak woodlands on the project site may provide potential roost habitat for this species.

Migratory Birds

Potential nesting sites and foraging area for birds of prey and other migratory birds exist in the oak woodland and grassland habitats located throughout the project site. Potential nesting and/or foraging habitat for special-status bird species such as the Cooper's hawk, sharp-shinned hawk, white-tailed kite, western burrowing owl, and California horned lark occurs within the oak woodland, coastal scrub and grassland habitats found throughout the project site. Golden eagle would likely forage on the project site. Other special-status birds that may nest and/or forage on the project site include northern harrier, prairie falcon, American peregrine falcon, long-eared owl, Lewis' woodpecker yellow warbler, Bell's sage sparrow, *and* Lawrence's goldfinch. Special-status birds that may migrate through the project site include sharp-shinned hawk, ferruginous hawk (*Buteo regalis*), and olive-sided flycatcher (nesting) (*Contopus cooperi*). One special-status bird, the loggerhead shrike, was observed on the project site during the site assessment.

Sensitive Bat Species

Several species of bats considered sensitive in California could occur in the vicinity of the project site. Such species include the pallid bat (*Antrozous pallidus*) and Townsend's big-eared bat (*Plecotus townsendii* ssp. *townsendii*). These bat species are California listed species of special concern by the CDFG. Each could potentially use the project site, especially the oak woodlands, as roosting habitat. Day roosts can be found in tree cavities, old buildings, caves, or rocky outcrops. Bats generally leave these day roosts at dusk to forage for invertebrates in a variety of habitats, including annual grasslands, shrublands, and woodlands.

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. Therefore, resource agencies consider wildlife corridors to be a sensitive resource.

According to a Technical Memorandum prepared by WRA in December 2008, a wide range of terrestrial wildlife species are known to occur in the immediate vicinity of the project on both sides of State Route 68, including American badger, mountain lion, bobcat (*Lynx rufus*), black-tailed deer (*Odocoileus hemionus*), and coyote (*Canis latrans*). Current corridors for wildlife to move between Fort Ord and the Sierra de Salinas or Santa Lucia ranges are limited to El Toro Creek and the Portola Drive overpass. The undercrossing at the State Route 68 bridge over El Toro Creek is located adjacent to the western parcel of the project site, near the intersection of San Benancio Road and State Route 68. A portion of the creek flows on the project site. State Route 68 is a major barrier to wildlife movement between the thousands of acres of open space on either side of the highway, and the Toro Park Estates development is an additional barrier.

According to WRA, the El Toro Creek undercrossing is one of the few significant safe passages for both small and large mammals, amphibians, and reptiles between the large tracts of open space. The passage is bordered by riparian vegetation which offers cover and shade for daytime movements, and the creek itself is shallow and flows slowly enough (except during storms) to allow mammals to wade through it. A smaller, seasonal tributary to El Toro Creek joins in this location, providing additional opportunities for movement of terrestrial species, as it does not carry perennial flows.

In 2009, Connectivity for Wildlife prepared the *Central Coast Connectivity Project Northern Monterey County Linkages: Report on the Mount Toro to Fort Ord Reserve Study* for the Big Sur Land Trust (CFW 2009). This study was funded by the Big Sur Land Trust to identify animal movement between the San Lucia Mountain range and Bureau of Land

Management and former Fort Ord property located north of State Route 68. This study was prepared as a follow-up to previous studies prepared for the Marks Ranch, which is located adjacent to the project site, and studies conducted within the former Fort Ord area. As part of the study, the State Route 68 bridge that crosses El Toro Creek was monitored for animal movement. This study has not and is not intended to be adopted as an official habitat plan but was developed as a tool to understand wildlife movement in the area. Based on published summaries of the study, its findings appear consistent with the findings of WRA.

3.3.2 REGULATORY SETTING

FEDERAL

Endangered Species Act

The federal Endangered Species Act (FESA) was enacted in 1973 to protect species that are endangered or threatened with extinction. FESA prohibits the "take" of a listed (endangered or threatened) species and defines "take" as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (16 USC 1531 et seq.; 50 CFR 17.1 et seq.).

Section 7 of FESA directs all federal agencies to conserve endangered and threatened species and, in consultation with the USFWS, to ensure that their actions (or actions under their jurisdiction) do not jeopardize listed species or adversely modify critical habitat. Section 10 of FESA directs private landowners, corporations, state and local governments, or other non-federal landowners to develop a Habitat Conservation Plan (HCP) and obtain an incidental take permit from the USFWS before conducting any activity on their land that potentially may harm (or take) a listed species. Some FESA designations include:

- Federally listed endangered;
- Federally listed threatened;
- Federally proposed endangered; and
- Federally proposed threatened.

Fish and Wildlife Conservation Act (1988)

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the USFWS to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973." The Birds of Conservation Concern 2002 accurately identifies the migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent the highest conservation priorities in order to draw attention to species in need of conservation action.

While all of the bird species included in the Birds of Conservation Concern 2002 are priorities for conservation action, this list makes no finding with regard to whether they warrant consideration for FESA listing. The goal of the list is to prevent or remove the need for additional FESA bird listings by implementing proactive management and conservation actions. It is recommended that these lists be consulted in accordance with Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds." This report is intended to stimulate coordinated and collaborative proactive conservation actions among federal, state, and private partners.

Clean Water Act

The Clean Water Act, as amended in 1977, established the basic structure for regulating discharges of pollutants into waters of the United States. Section 404 of the Clean Water Act requires USACE authorization for the discharge of dredged or fill material into all waters of the United States, including adjacent and isolated wetlands. Discharge of fill material includes, but is not limited to, placement of fill that is necessary for the construction of any other structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; dams and dikes; artificial islands; property protection or reclamation devices such as riprap, groins, seawalls, breakwaters, and revetments; beach nourishment; levees; fill for intake and outfall pipes and subaqueous utility lines; fill associated with creation of ponds; dewatering of dredged material prior to final disposal; fills for access roadways, cofferdams, storage and work areas; and any other work involving the discharge of fill or dredged material (33 CFR 26). A USACE permit is required for both permanent and temporary discharges. Section 401 of the Clean Water Act requires any activity that may result in a discharge of a pollutant into waters of the United States to comply with applicable regulatory water quality standards. The State Regional Water Quality Control Board administers Section 401 permits for these activities.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC 703) prohibits the taking, hunting, killing, selling, purchasing, etc., of migratory birds, parts of migratory birds, and their eggs and nests. Most native bird species on the project site are covered by this act. In practice, abiding by the Migratory Bird Treaty Act usually means to avoid removal of trees with active nests until such time as the young have fledged and the nest is abandoned.

STATE

California Endangered Species Act

The California Endangered Species Act (CESA) was enacted in 1984 to ensure that actions under state agency jurisdiction do not jeopardize the existence of state-listed endangered or threatened species. Similar to the federal Endangered Species Act, CESA prohibits taking

of state-listed endangered or threatened plants and wildlife. CESA requires state agencies to consult with the CDFG when preparing California Environmental Quality Act (CEQA) documents for projects or actions potentially impacting listed species or special habitats. The CDFG determines whether jeopardy of a state-listed species may occur and offers reasonable project alternatives or guidance for mitigation planning. The CDFG designations for listed plants are as follows:

- State listed endangered;
- State listed threatened;
- State listed rare; and
- State candidate for listing.

California Department of Fish and Game (CDFG)

The California Fish and Game Code (Section 3511) also provides for protection of certain species, including California tiger salamander. Section 3503.5 of the Fish and Game Code specifically protects the nests and eggs of birds of prey and essentially overlaps with the Migratory Bird Treaty Act.

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, even with an incidental take permit. Section 3505 of the California Fish and Game Code makes it unlawful to take "any aigrette or egret, osprey, bird of paradise, goura, numidi, or any part of such a bird." Section 3511 protects from take the following fully protected birds: (a) American peregrine falcon (*Falco peregrinus anatum*); (b) brown pelican (*Pelecanus occidentalis*); (c) California black rail (*Laterallus jamaicensis coturniculus*); (d) California clapper rail (*Rallus longirostris obsoletus*); (e) California condor (*Gymnogyps californianus*); (f) California least tern (*Sterna albifrons browni*); (g) golden eagle; (h) greater sandhill crane (*Grus canadensis tabida*); (i) light-footed clapper rail (*Rallus longirostris levipes*); (j) southern bald eagle (*Haliaeetus leucocephalus leucocephalus*); (k) trumpeter swan (*Cygnus buccinator*); (l) white-tailed kite (*Elanus leucurus*); and (m) Yuma clapper rail (*Rallus longirostris yumanensis*).

Native Plant Protection Act

The Native Plant Protection Act (California Fish and Game Code Section 1900–1913) prohibits the taking, possessing, or sale within the state of any plants with a state designation of rare, threatened, or endangered (as defined by the 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 the CDFG and give that state agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise 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.") Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

California Code of Regulations

In addition to formally listed species, many other species in California have regulatory protection under various sections of the California Code of Regulations enforced by the CDFG. Species that may be considered for listing, due to declining numbers or threatened habitat, are protected as rare or species of special concern. Certain species are also designated as fully protected, which prevents take of an individual or their habitat unless for scientific purposes. In addition, the California Code of Regulations protects avian species by making it unlawful to take or possess migratory non-game birds, raptors, or the nest or eggs of any bird species.

Natural areas to be protected are also designated in the California Code of Regulations, including significant wildlife habitat, refuges, natural sloughs, riparian areas, and vernal pools. Waterways in particular are protected, such that any project that may divert or obstruct the natural flow or substantially alter the bed, channel, or bank of any waterway is subject to regulatory review by the CDFG.

Senate Bill 1334 – Oak Woodlands Conservation Act

As of January 1, 2005, county governments statewide must comply with Senate Bill 1334 (SB 1334). Section 21083.4 of the Public Resources Code addresses the requirements of SB 1334. Under the provisions of the bill, projects with significant oak woodland impacts must conform both to the state's mandated program that established habitat mitigation standards and to local conservation measures adopted by the county (in the case of the proposed project, Monterey County). The proposed project is subject to SB 1334 because it contains native species of oaks greater than 5 inches diameter at breast height (dbh), it is not subject to stocking regulations for timber harvest, and consists of more than 100 units.

NON-GOVERNMENTAL ENTITIES

California Native Plant Society

The California Native Plant Society (CNPS) maintains and publishes an Inventory of Rare and Endangered Vascular Plants of California. The inventory presents information regarding native California plant species that show a declining population, limited distribution, or are considered by the scientific community to be threatened with extinction. Projects under CEQA review are required to address potential impact to CNPS-listed plants. CNPS definitions for listed plants are as follows:

- List 1A: Plants believed extinct;
- List 1B: Plants rare, endangered, or threatened in California and elsewhere;
- List 2: Plants rare, endangered, or threatened in California, but more numerous elsewhere;
- List 3: Plants about which we need more information; and
- List 4: Plants of limited distribution.

COUNTY OF MONTEREY

Monterey County General Plan

Policies

7.1.1 Development shall be carefully planned in, or adjacent to, areas containing limited or threatened plant communities, and shall provide for the conservation and maintenance of the plant communities.

7.1.2 The County shall encourage the protection of limited or threatened plant communities through dedications of permanent conservation easements and other appropriate means.

7.2.2 Native and native compatible species, especially drought resistant species, shall be utilized to the extent possible in fulfilling landscaping requirements imposed as conditions of discretionary permits.

9.1.1 Development shall be carefully planned in areas known to have particular value for wildlife and, where allowed, shall be located so that the reasonable value of the habitat for wildlife is maintained.

Toro Area Plan

There are no known rare or endangered wildlife species on the project site. The following policy is used to enforce protection of environmentally sensitive habitats:

Policy

7.2.3 The preservation of oak trees in Toro shall be promoted by discouraging removal of healthy trees with diameters in excess of eight inches.

Monterey County Zoning Code

Ordinance

21.64.260 No oak or Madrone tree six inches or more in diameter two feet above ground level shall be removed in the North County Area Plan or Toro Area Plan areas without approval of the permit(s) required in Subsection 21.64.260D. In addition under §21.64.260.C.5 no landmark oak tree shall be removed in any area except as may be approved by the Director of Planning Department pursuant to Subsection 21.64.260D. Landmark oak trees are those trees which are 24 inches or more in diameter when measured two feet above the ground, or trees which are visually significant, historically significant, or exemplary of their species.

Removal of more than three protected trees on a lot in a one-year period shall require a Forest Management Plan and approval of a Use Permit by the Monterey County Planning Commission per Section 21.64.260.D.3 of the Zoning Ordinance.

3.3.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The following thresholds for measuring a project's environmental impacts are based on CEQA Guidelines and standards used by the County of Monterey. For the purposes of this EIR, impacts are considered significant if the following could result from implementation of the proposed project:

1) Result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, endangered, threatened, or other special-status in local or regional plans, policies, and regulations, or by the CDFG or USFWS.

2) Result in 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.

3) 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.

4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy.

6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

An evaluation of the significance of potential impact on biological resources must consider both direct effects to the resource and indirect effects in a local or regional context. Potentially significant impacts would generally result in 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.

METHODOLOGY

The analysis of biological resources presented in this section is based on Biological Assessments prepared by WRA in October 2006 and December 2007, a Technical Memorandum regarding the Ferrini Ranch Wildlife Corridor prepared by WRA in December 2008, Proposed Biological Resource Impact and Mitigation Measures prepared by WRA in January 2009, a Forest Management Report prepared by Staub Forestry and Environmental Consulting in September 2006, and a Wetland Delineation prepared by WRA in January 2007. Protocol-level surveys for western burrowing owl were prepared in March 2008, and protocol-level surveys for California red-legged frog and California tiger salamander were prepared in September 2008. Results of genetic testing of California tiger salamander were prepared in January 2009. All reports were prepared for the project applicant and peer reviewed by PMC. Joyce Hunting, Senior Biologist, PMC, peer reviewed the 2006 Biological Assessment in February 2007, the Wetland Delineation in March 2007, and the results from the protocol-level surveys in January 2009. The Forest Management Plan was peer reviewed by Rochelle Amrhein, ISA Certified Arborist, for PMC in December 2006. Recommendations for the Biological Assessment and Forest Management Plan were provided to the Monterey County Planning Department. The revised Biological Assessment was updated in December 2007 and peer reviewed again by PMC in March 2008, and only minor recommendations were made. Based on the results of the protocol-level surveys, PMC recommended and/or concurred with mitigation provided

in this document. Staub Forestry and Environmental Consulting responded to the recommendations in February 2007. The Biological Assessments, Forest Management Plans, and results from the protocol-level surveys and peer reviews are included in **Appendix C**.

Protocol-Level Surveys

Protocol-level surveys for California tiger salamanders and California red-legged frogs were conducted by Denise Duffy and Associates (DDA). The results of these surveys are included in **Appendix C**.

California tiger salamander

Senior Project Manager Josh Harwayne, Dave Keegan, Brad Travers, Jami Davis, and Matt Johnson of DDA (Federal Permit #TE-091857-0) and Mark Allaback of BioSearch (Federal Permit #TE-768251-10) conducted the protocol-level surveys for California tiger salamanders in accordance with the "interim guidance on site assessment and field surveys for determining presence or a negative finding of the California tiger salamander" developed by the USFWS and CDFG in 2003.

Drift fences and pitfall traps were in place between October 10, 2007, and March 17, 2008. Pitfall traps (two-gallon plastic buckets) were arranged in pairs, one on either side of the fence, in order to capture animals migrating toward and away from the pond. On days when it was raining or forecast to rain, pitfall traps were opened before sunset and checked the following morning. Traps remained open until no rain had fallen and/or no California tiger salamanders were captured in the preceding 24 hours. Open traps were shaded with an elevated piece of plywood, and pieces of foam were used to keep the traps moist. When not in use, traps were closed with lids and the inverted shades were then weighted with bricks to prevent entry.

All captured California tiger salamanders were measured (snout-vent length and total length in millimeters, weight in grams), aged (postmetamorphic juvenile, sub-adult, adult), sexed, and inspected for malformations, injuries, and general health. All captured California tiger salamanders were digitally photographed for identification and to trace recaptures.

Tissue sampling was authorized by USFWS Ventura under Federal Permit #TE-091857-0 and conducted in accordance with "Tissue Collection Protocol for Genetic Research" (WRA 2009a). Ten adult tissue samples were collected on January 26–30, February 1 and 2, 2008. All tissue samples were packed in a cooler with dry ice and sent to the Shaffer Lab at the University of California, Davis (U.C. Davis) for genetic analysis.

California red-legged frog

Targeted, non-random surveys to detect adult, subadult, and/or larval California red-legged frogs were conducted in all portions of El Toro Creek and Harper Creek associated with the Ferrini Ranch property. Senior Wildlife Biologist David Keegan was the lead biologist for

all surveys. Assistant Environmental Scientist Brad Travers assisted Mr. Keegan on three occasions.

Protocol-level surveys for California red-legged frogs consisted of one daytime and one nighttime survey during the non-breeding season (July 1–September 30), and two daytime and four nighttime surveys during the breeding season (October 1–June 30), for a total of eight site visits. Site visits during the day consisted of both passive surveying (listening for calls) and actively walking El Toro Creek and Harper Creek alignments while looking for adult, subadult, and/or larval California red-legged frogs (and other sensitive herpetofauna including pond turtle). Nighttime site visits were generally conducted between one hour after true sunset and 3:00 A.M. Nighttime visits consisted of listening for frog calls periodically and walking the entire alignment of El Toro Creek and Harper Creek within and immediately adjacent to the Ferrini Ranch property; offsets from the Ferrini Ranch property were surveyed up to 400 feet from property boundaries. DDA biologists used USFWS-approved Maglites in search of eye-shine.

Data collected during California red-legged frog surveys included survey date, surveyors, time, visit number, water body depth (when possible), water temperature, precipitation, cloud cover, wind speed, weather, and other appropriate comments. All data was recorded in field notebooks and subsequently organized onto species-specific datasheets, which are included in **Appendix C**.

Burrowing Owl

Burrowing owl survey methodology followed the guidelines provided in "Burrowing Owl Surveying Protocol and Mitigation Guidelines" prepared by the California Burrowing Owl Consortium (CBOC) in 1993 (DDA 2008a). A record search was conducted of the CDFG California Natural Diversity Database for the San Juan Bautista quadrangle and the eight surrounding quadrangles (DDA 2008). Previous biological investigations were reviewed. Researchers with experience in the survey area were contacted for locality records.

The burrowing owl surveys focused primarily on grassland, oak savanna, and oak woodland portions of the site. Field surveys for non-breeding (overwintering) burrowing owls were performed on August 2 and 29, 2007, and January 17 and 31, 2008, by Senior Wildlife Biologist David Keegan and Assistant Environmental Scientist Brad Travers. Survey transects were arranged to provide 100 percent visual coverage of the site; individual transect width was less than 30 meters. Any observations of burrowing owls or burrowing owl sign would have been mapped in the field. Potential burrowing owl burrows, including American badger dens, California ground squirrel burrows, and man-made features such as culverts, were noted. Ground squirrel burrow clusters were ranked by density (i.e., 1–5, 5–10, 10–20, 20–50, >50) and were mapped in the field. Active and abandoned badger dens, as well as "badger diggings" were also mapped. These data were subsequently converted into GIS files.

Visual surveys were conducted between approximately one hour prior to sunrise and two hours after sunrise. Weather and visibility conditions were recorded. All wildlife species identified were recorded. Any observation of burrowing owls or burrowing owl "sign" (whitewash, pellets, feathers) would likewise have been recorded. Burrow census surveys of all suitable burrowing owl habitats on the project site were completed over the course of three days: February 8, February 11, and February 15, 2008.

PROJECT IMPACTS AND MITIGATION MEASURES

Potential Disturbance of Special-Status Plant Species

Impact 3.3-1 Implementation of the proposed project would result in temporary disturbance and direct impact on two special-status plant species: Congdon's tarplant (*Centromadia = Hemizonia parryi* ssp. *congdonii*), and Pacific Grove clover (*Trifolium tridentatum* var. *polyodon,* syn. *Trifolium polyodon*) due to alteration of the project site in the area of Lots #29, #30, #65, #81, #82, #83, #105, #113, and #114 and in roadway development areas near Lots #29, #30, #65, #81, #82, and #83. This would be considered a **significant impact.**

The Biological Assessment prepared by WRA in December 2007 included focused rare plant surveys conducted by Denise Duffy and Associates in April, May, and September 2007. Three special-status plant species were identified on the project site, the Congdon's tarplant, Pacific Grove clover, and Mt. Diablo cottonweed.

Mt. Diablo cottonweed is listed as a plant about which more information is needed (List 3) by the California Native Plant Society (CNPS). Mt. Diablo cottonweed occur in dense, relatively isolated small patches. The distribution of this plant species was not mapped, as CNPS List 3 species are not typically provided management consideration during the CEQA process and have no specific legal protection. Therefore, the proposed project effect on Mt. Diablo cottonweed would be considered a **less than significant impact**. No mitigation is necessary.

Congdon's tarplant is listed as a rare, threatened, or endangered species in California and elsewhere by the (CNPS. Congdon's tarplant was identified within the grassland habitat near Lots #29 and #134 and Parcels E and D. However, the only population of Congdon's tarplant that would be directly impacted by development would be near Lot #29. Construction of the roadway improvements in the vicinity of Lot #29 would impact this special-status plant species. This would be considered a **significant impact.**

Pacific Grove clover is listed by the CNPS as a rare, threatened, or endangered species in California (List 1b). This species was identified in wetland and mesic areas within grassland, coast live oak woodland/savanna, and riparian woodland habitats near Lots #29, #30, #65, #74, #71, #81-#83, #95, #105, #113, and #114. Construction activities on Lots #65, #95, and #105 and roadway improvements near Lots #29, #30, #65, #81, #82, and

#83 would directly impact this special-status plant species based on current population distributions. This would be considered a **significant impact.**

Special-status plant species were found in the approximate location of the proposed development and roadway improvements, as proposed on the Vesting Tentative Map. Take of these species resulting from development of the proposed project would be considered a **potentially significant impact**. Implementation of the following mitigation measure would reduce this impact on special-status plant species to a **less than significant** level.

Mitigation Measure

MM 3.3-1 Prior to grading activities on or near Lots #29, #30, #65, #81, #82, #83, #105, #113, and #114 and in roadway development areas near Lots #29, #30, #65, #81, #82, and #83, the grading areas shall be surveyed by a qualified biologist to document the presence and distribution of Congdon's tarplant (*Centromadia = Hemizonia parryi* ssp. *congdonii*), and Pacific Grove clover (*Trifolium tridentatum* var. *polyodon,* syn. *Trifolium polyodon*). If special-status species are identified within or near these construction areas as proposed, the following mitigation and management steps shall be taken to reduce the loss of individual plants, avoid disturbance or removal of special-status plant species, and create additional habitat:

1) The site plan shall be modified, to the extent feasible with other site and engineering constraints, to relocate improvements in order to avoid special-status plants and to include the plant populations within open space easements.

2) Plants maintained within open space areas shall be protected during construction by construction fencing, providing a minimum 50-foot buffer from areas of disturbance.

3) Signage shall be provided identifying areas of protected plants to inform construction personnel and recreationalists as to the presence of protected plants and the importance of preservation.

4) For impacts to Pacific Grove clover that cannot be avoided due to engineering and site constraints, the project applicant shall restore or create suitable habitat for Pacific Grover clover for long-term management, in an amount at least equal to the clover population area disturbed or impacted.

5) For impacts to Congdon's tarplant populations that cannot be avoided due to engineering and site constraints, the project applicant shall identify an area of grassland in the southern portion of the eastern parcel as Congdon's tarplant habitat, for long-term

management, in an amount equal to or greater than the population area disturbed or impacted. Congdon's tarplant populations shall be created by collecting seed from existing plants or soil from the existing populations prior to disturbance. The annual grassland habitat shall be seeded or covered with harvested soil.

6) The project applicant shall prepare a rare plant management plan as part of the project's Open Space Management Plan. The rare plant management plan shall detail plant success criteria through annual monitoring and remedial action, weed control, fuel management restrictions, grazing management, and maintenance methods for both rare plant species. The rare plant management plan and ongoing monitoring effort shall remain in effect for a period of five (5) years. Annual monitoring reports shall be submitted to the County of Monterey and CDFG. The Open Space Management Plan, including the rare plant management plan, shall be subject to review and approval by the Monterey County Resource Management Agency (RMA) as part of the project's condition compliance.

Implementation of the above mitigation measures will reduce the project's impacts to special-status plant species to a **less than significant** level through a combination of species avoidance, implementation of protective measures during construction, education, creation or restoration of habitat for direct impacts, and through implementation of a long-term management plan that will monitor the success of plant populations and take remedial action as necessary to propagate the plant populations.

Potential Disturbance and Take of California Tiger Salamander

Impact 3.3-2 Implementation of the proposed project would result in temporary disturbance and permanent alteration of the project site, which contains California tiger salamander (CTS), a federally and state-listed threatened species. Direct and indirect impacts to CTS and its habitat would constitute an incidental "take" under state and federal environmental protection law. This would be considered a **significant impact**.

The California tiger salamander is a federally and state-listed threatened species. One seasonal pond (Pond 18) on the western parcel of the project site provides suitable breeding habitat for California tiger salamander. In addition, the surrounding upland habitat provides dispersal and aestivation habitat for the species. Surrounding Pond 18 there is approximately 3.1 acres of upland habitat within 500 feet; approximately 40.5 acres within 2,200 feet; and approximately 90.1 acres within 1.3 miles. While scientific data suggests that most aestivation occurs within 500 feet of natal ponds, the U.S. Fish and Wildlife Service previously afforded protection to upland habitat up to 2,200 feet from occupied California tiger salamander aquatic habitat. According to the Vesting Tentative

Map, Ferrini Ranch Road and a detention pond are proposed in the vicinity of suitable breeding habitat. In addition, within approximately 2,200 feet of suitable breeding habitat, the proposed project would result in development of Lots #81 through #85 and Lots #92 through #136; Roads F, G, H, I, and J; another detention basin; an emergency access road to State Route 68; and a booster pump. Ferrini Ranch Road would directly affect the existing dimensions of Pond 18 and may result in fill to this breeding habitat. Proposed improvements and development would further disturb or impact approximately 43.6 acres of upland aestivation area within 2,200 feet of the pond.

Protocol-level surveys were conducted by Denise Duffy & Associates, Inc. between October 2007 and March 2008 in the detention basin area referred to as Pond 18 to determine the presence of California tiger salamanders. During the protocol-level survey, 15 California tiger salamanders were captured; however, only 11 were unique individuals and four were recaptures. Of the 11 individuals, there were 10 adults and one juvenile. Of the adults, six were determined to be female and four were determined to be male. The 11 individual California tiger salamanders were measured, aged, sexed, and inspected for malformations, injuries, and general health. Sizes ranges from 90 to 115 millimeters (mm) snout-vent length, 150 to 205 mm total length, and weighed from 27.2 to 63.2 grams (g). Tissue sampling of the ten adult species were forwarded to U.C. Davis for genetic testing. The results concluded that of the ten individuals captured and tested, at least 70 percent were native. However, non-native, non-listed eastern tiger salamander hybrid genotypes were detected, indicating that the project site may (a) have supported a purely native population that was invaded by a small number of hybrid salamanders, (b) consists of a native population currently receiving infrequent immigrants from adjacent sites containing hybrid individuals, or (c) be the result of colonization by individuals whose lineages originated from sites containing low levels of non-native genes. Since the population of California tiger salamander identified on the project site appears to have been exposed to non-native hybrid species, the level of protection afforded to these species is subject to review by the U.S. Fish and Wildlife Service and California Department of Fish and Game.

The project applicant is consulting with the US Fish and Wildlife Service through Section 7 of the Endangered Species Act and has submitted an Incidental Take Permit to the Department of Fish and Game. Upon approval of the proposed mitigation measures, the Fish and Wildlife Service will issue a Biological Opinion and the Department of Fish and Game will issue an Incidental Take Permit for the California Tiger Salamander.

In addition to the breeding habitat, the project site also contains undisturbed grazed annual grassland that contains small mammal burrows within 2,200 feet of the breeding habitat, which maybe suitable upland and dispersal habitat for California tiger salamander, take of individuals and or occupied habitat would be considered a **potentially significant impact**.

In addition, the proposed project would result in increased traffic and nighttime lighting, potential introduction of predatory non-native species, and harassment by pets in or adjacent to the suitable habitat area, which could indirectly result in **potentially significant impacts**.

The following mitigation measures are consistent with standard protocols for California tiger salamanders and their habitat according to the state and federal Endangered Species Acts, and would reduce this impact to a **less than significant** level. The project applicant is currently working with the U.S. Fish and Wildlife Service and the California Department of Fish and Game to obtain a Section 2081 (b) and (c) Incidental Take Permit (state) and has submitted a Biological Assessment pursuant to Section 7 of the federal Endangered Species Act for incidental take.

Mitigation Measures

MM 3.3-2a Prior to issuance of any grading permit or permanent ground disturbance on Lots #81 through #85 and #92 through #136; Ferrini Ranch Road and Roads F, G, H, I, and J; any detention ponds on the western parcel; and the booster pump near the emergency access road, the County of Monterey shall require that the project applicant consult with a qualified biologist (approved by the U.S. Fish and Wildlife Service and California Department of Fish and Game) to prepare and implement a Biological Assessment for California tiger salamander meeting state and federal permit requirements for incidental take. The habitat impact assessment shall clearly identify, qualify, and quantify California tiger salamander upland and breeding habitat on the project site that will be directly and indirectly impacted by the proposed project. The habitat impact assessment shall include the following mitigation and management steps to reduce the loss of individual special-status species, avoid disturbance or removal of special-status habitat, create additional habitat as necessary, and avoid invasion of non-native species:

1) The site plan shall be modified to the extent feasible in light of other engineering and site constraints to relocate improvements in order to avoid a direct take of California tiger salamander species or their habitat and to include the special-status habitat within open space easements. Pond 18 shall either be fully avoided by design or shall be designed to maintain pre-project habitat values and water quality in perpetuity if used for stormwater detention.

2) Pond 18 and the immediate area adjacent to the Pond, with the exception of an access road in potential aestivation habitat shall be maintained within open space easements and protected during construction by construction (temporary exclusion) fencing and by providing an appropriate buffer (to be determined by a qualified

biologist) from areas of disturbance. Specifically, an open space easement shall be established in the upland areas around Pond 18 to preserve the area as habitat.

3) Construction best management practices (BMPs) shall be implemented for work near Harper Creek, including working in the dry season, keeping heavy equipment out of the streambed, refueling and maintaining equipment outside the floodplain, stockpiling soils outside the floodplain, tree removal only as necessary to complete improvements, hydromulch and straw bales to be installed prior to October 15, and other measures as identified by the U.S. Army Corps of Engineers.

4) The project will employ barrier fences incorporated into lot fences and/or a closed curb system around proposed lots and roads immediately adjacent to the open space surrounding Pond 18 to prevent amphibians from accessing the road system while still allowing for dispersal. The project's main access roads immediately adjacent to the open space surrounding Pond 18 will be made permeable for as dispersal through the use of undercrossings combined with vertical curbs and/or fences..

5) All sources of trash that may attract predators of California tiger salamanders shall be properly contained at each residence. Any sources of trash associated with construction shall also be contained and removed from the project site. No pets shall be permitted within Pond 18 and any other designated CTS breeding areas.

6) Signage shall be provided identifying areas of protected habitat to inform construction personnel and recreationalists as to the presence of protected species, its habitat, and the importance of preservation.

7) High intensity lighting shall be avoided within or adjacent to designated CTS breeding or aestivation habitat. Downcast lighting with cutoffs and minimal spill shall be used for outdoor areas to avoid negative effects to CTS.

8) All construction personnel shall receive training session, conducted by a qualified biologist (approved by the U.S. Fish and Wildlife Service and California Department of Fish and Game), that describes the California tiger salamander and its habitat, the specific measures that are being implemented to conserve the species and habitat, and the boundaries of the area of permitted disturbance.

9) The project applicant shall provide all new residents with pamphlets explaining the importance of maintaining control of pets and avoiding sensitive habitat areas. Fencing shall be placed around Pond 18 in order to prevent impacts to CTS from people and pets.

10) The project applicant shall contract with a qualified biologist (U.S. Fish and Wildlife Service and California Department of Fish and Game approved) to prepare and implement a salvage plan prior to and during construction activities to minimize disturbance and take of California tiger salamanders. The salvage plan shall be submitted to the U.S. Fish and Wildlife Service and California Department of Fish and Game for review and approval.. A final report of the project applicant's compliance with the salvage plan shall be submitted to the County within 90 days of the completion of all planned development on the project site.

MM 3.3-2b Prior to directly or indirectly impacting any protected California tiger salamander habitat identified in the habitat impact assessment prepared pursuant to implementation of mitigation measure **MM 3.3-2a**, compensatory mitigation land providing similar or better habitat for California tiger salamanders shall be allocated either through a mitigation bank, through the dedication of land (open space easements) on the project site (including the creation of replacement habitat as necessary), or at a qualifying off-site location. Currently, there are no mitigation banks for California tiger salamanders in the vicinity of the project site. However, should one become available, the project applicant may choose to purchase appropriate credits as approved by the U.S. Fish and Wildlife Service and California Department of Fish and Game to offset the loss of any California tiger salamander habitat. The amount of mitigation credits/land required would be determined by the U.S. Fish and Wildlife Service and California Department of Fish and Game. However, temporary impacts are usually mitigated at a 1:1 ratio of preserved habitat acreage to impacted acreage, and permanent direct impacts are usually mitigated at a 2:1 ratio of preserved habitat acreage to impacted acreage. Creation of additional breeding habitat (breeding pond) is recommended to promote long-term success of the local population of CTS.

If no mitigation bank is available, the County of Monterey shall require that the applicant establish habitat mitigation (on-site or off-site) of at least equal value as the area impacted at a ratio determined by the U.S. Fish and Wildlife Service and California Department of Fish and Game. The applicant would be required to contract with a qualified biologist to prepare and implement a long-term management, operations, and monitoring plan in order to establish the success criteria and management

requirements for the mitigation area. Breeding success of mitigation land may be achieved through natural dispersal means; however, it may also necessitate inoculation with native California tiger salamanders relocated from the existing breeding site. The mitigation area shall be preserved and protected within open space placed in a conservation easement, with a mechanism recorded in deed to provide funding for protection and management in perpetuity.

MM 3.3-2c Prior to construction of any stormwater detention basins or other water features on the project site (other than mitigation land), the County of Monterey shall require that the project applicant design detention basins to drain rapidly after a storm event so that these water features minimize attracting breeding of non-native California tiger salamanders and other invasive species, such as bullfrogs. Proposed stormwater design features and strategies shall be subject to review and approval by the U.S. Fish and Wildlife Service and California Department of Fish and Game in addition to the Monterey County Water Resources Agency. Stormwater system design shall be part of an approved stormwater pollution prevention program (SWPPP).

Implementation of the above mitigation measures would require avoidance, preservation, and protection of California tiger salamanders and their habitat. The above measures require a qualified biologist to prepare a Biological Assessment and a salvage plan to meet the requirements and performance standards of the U.S. Fish and Wildlife Service and California Department of Fish and Game. For impacts that cannot be avoided, compensatory mitigation land providing similar or better habitat for California tiger salamanders shall be allocated either through a mitigation bank or through the dedication (and potential creation) of land and habitat on- or off-site. In addition, the design of stormwater detention basins shall be designed to rapidly drain runoff as to not attract non-native and/or invasive species. Implementation of the above mitigation measures would reduce impacts to California tiger salamanders breeding, aestivation, and movement habitat to a **less than significant** level by avoiding the impact or providing/creating appropriate compensatory habitat values in consultation with the appropriate resource and permitting agencies.

Potential Disturbance Biological Communities that Support Special-Status Animal Species

Impact 3.3-3 Implementation of the proposed project would result in temporary disturbance and direct alteration of the project site, which potentially provides foraging, hibernating, reproduction (breeding, rearing), nesting, and roosting opportunities for special-status animal species. This would be considered a **potentially significant impact**. Specific impacts to nesting special-status bird species are discussed in **Impact 3.3-7**.

Wetland, riparian, coast live oak woodland/savanna, coastal scrub, and annual grassland biological communities on the project site provide a variety of foraging, hibernating, and reproduction opportunities for special-status species. The silvery legless lizard may occur in areas with sandy or loose loam soils under the sparse oaks found in the grassland vegetation on the project site. The two-striped garter snake may be found in the riparian habitat on the project site. Seasonal wetland habitat that provides temporary pool-like habitat may be suitable for western spadefoot toad and Coast Range newt species. In addition, ephemeral drainages on the project site may provide habitat for the coast horned lizard. Hollows in oak trees provide potential roosting habitat for special-status bat species on the project site. **Table 3.3-2** provides a summary of special-status species that may occur on-site during different life-cycle stages.

TABLE 3.3-2
SPECIAL-STATUS SPECIES WITH POTENTIAL TO OCCUR ON THE PROJECT SITE

SPECIES	LIFE-CYCLE STAGE SUPPORTED ON PROJECT SITE: FORAGING, HIBERNATING, REPRODUCTION (BREEDING, REARING), NESTING, ROOSTING
American badger (*Taxidea taxus*)	Foraging, Reproduction
American peregrine falcon (*Falco peregrinus anatum*)	Foraging
Bell's sage sparrow (*Amphispiza belli belli*)	Foraging, Nesting
California horned lark (*Eremophila alpestris actia*)	Foraging, Nesting
California red-legged frog (*Rana aurora draytonii*)	Hibernating, Nesting, Reproduction
Coast (California) horned lizard (*Phrynosoma coronatum frontale*)	Foraging, Hibernating, Reproduction
Coast Range newt (*Taricha torosa torosa*)	Reproduction
Cooper's hawk (*Accipiter cooperi*)	Foraging, Nesting
Ferruginous hawk (*Buteo regalis*)	Foraging
Golden eagle (*Aquila chrysaetos*)	Foraging
Lawrence's goldfinch (*Carduelis lawrencei*)	Foraging, Nesting
Lewis's woodpecker (*Melanerpes lewis*)	Foraging, Nesting
Long-eared owl (*Asio otus*)	Foraging, Nesting
Monterey dusky-footed woodrat (*Neotoma fuscipes luciana*)	Foraging, Reproduction
Montery (Salinas) ornate shrew (*Sorex ornatus salaries*)	Foraging, Reproduction
Northern harrier (*Circus cyaneus*)	Foraging, Nesting
Olive-sided flycatcher (*Contopus cooperi*)	Foraging, Nesting
Pallid bat (*Antrozous pallidus*)	Foraging, Reproduction, Roosting
Prairie falcon (*Falco mexicanus*)	Foraging
Sharp-shinned hawk (*Accipiter striatus*)	Foraging
Silvery legless lizard (*Anniella pulchra pulchra*)	Foraging, Hibernating, Reproduction
Southwestern pond turtle (*Clemmys marmorata pallida*)	Foraging, Hibernating, Reproduction
Two-striped garter snake (*Thamnophis hammondii*)	Foraging, Hibernating, Reproduction

SPECIES	LIFE-CYCLE STAGE SUPPORTED ON PROJECT SITE: FORAGING, HIBERNATING, REPRODUCTION (BREEDING, REARING), NESTING, ROOSTING
Western spadefoot toad (*Spea hammondii*)	Foraging, Hibernating, Reproduction
White-tailed kite (*Elanus leucurus*)	Foraging, Nesting

According to the Vesting Tentative Map, approximately 600 acres (69 percent) of the project site would be designated as open space and remain viable habitat for foraging, hibernating, and reproduction of special-status species. However, construction activities that affect the habitats discussed above may result in a loss of habitat or direct loss of special-status species. Implementation of mitigation measures **MM 3.3-2a** and **MM 3.3-2b** would ensure that upland grasslands and pond habitat are protected and/or replaced. Implementation of mitigation measures **MM 3.3-6a** and **MM 3.3-6b** would ensure that oak woodland foraging and roosting values are protected and/or replaced. The designation of 600 acres of open space combined with implementation of mitigation measures **MM 3.3-2a, MM 3.3-2b, MM 3.3-6a,** and **MM 3.3-6b** would reduce the potential loss of foraging, nesting, and reproduction habitat. However, potential indirect and direct impacts to habitat used by special-status bats and mammals may still occur. These impacts are discussed in more detail below.

Special-Status Bats

The project site contains oak woodland habitat that may provide roosting habitat for special-status species of bats, such as the pallid bat (*Antrozous pallidus*). Removal of mature oak trees would directly impact special-status bats if present at the time of removal, and removal of the oak woodland habitat would indirectly impact special-status bats by reducing the amount of available habitat, which would be considered a **potentially significant impact**. The following mitigation measure has been provided to reduce the impact on roosting habitat for special-status bats to a **less than significant** level.

Mitigation Measure

MM 3.3-3a Prior to removal or disturbance of oak trees, the project applicant shall contract with a qualified biologist to conduct pre-construction surveys for potential bat roost sites within 100 feet of the area of site disturbance. Pre-construction surveys shall occur during the time when bats would be expected to be present and active (i.e., early April) in order to determine whether or not roosting bats are present. If no evidence exists that bats are roosting, then no further action is required. Any and all survey results shall be submitted to Monterey County Planning Department to assess and verify condition compliance. If roosting bats are determined to be present, the following mitigation measure shall be implemented:

1) Roosting sites maintained within open space areas shall be protected during construction by construction fencing, providing a minimum 100-foot buffer from areas of disturbance.

2) Signage shall be provided identifying areas of protected habitat to inform construction personnel and recreationalists as to the presence of protected species and habitat and the importance of preservation.

Special-Status Mammals

As noted above, the proposed project will impact riparian and grassland habitats. Riparian vegetation provides nesting habitat for the special-status Monterey dusky-footed woodrat. Grasslands provide habitat for American badger species to make their dens. Construction activities that result in the disturbance or removal of either riparian and/or grassland habitat may directly impact nesting habitat for the Monterey dusky-footed woodrat and American badger, respectively. In addition, increased development may result in indirect impacts to these special-status mammal species through the introduction of domestic pets, which may be predators or harass the mammals; increased nighttime lighting may affect behavior movement patterns and increase the risk of predation; and increased noise levels and traffic may result in nest abandonment. Therefore, the proposed project's effect on nesting habitat for special-status mammal species would be considered a **potentially significant impact**. The following mitigation measures have been provided to reduce this impact to a less than significant level.

Mitigation Measure

MM 3.3-3b Prior to removal or disturbance of riparian and grassland habitat on the project site, the project applicant shall contract with a qualified biologist to conduct pre-construction surveys for the presence of the following special-status mammal species and their nesting sites: the Monterey dusky-footed woodrat (and their nests) and American badger (and their dens). Pre-construction surveys shall occur during the time when these species would be expected to be present. If no evidence exists that either species is present, then no further action is required. If species or nests/dens are determined to be present, the following mitigation steps shall be taken.

1) Nesting habitat area maintained within open space areas shall be protected during construction by construction fencing, providing a minimum 100-foot buffer from areas of disturbance.

2) For impacts to nesting habitat for Monterey dusky-footed woodrat that cannot be avoided due to engineering and site constraints, the project applicant shall contract with a qualified biologist to dismantle the

nests prior to construction to assure that no animals are taken during construction.

3) For impacts to natal habitat for the American badger, temporary protective buffers shall be established by a qualified biologist to avoid direct take of this mammal species.

All survey results and recommendations shall be submitted to Monterey County to assess and verify condition compliance.

Implementation of the above mitigation measures would require avoidance, preservation, and protection of nesting habitat for special-status bat and mammal species as feasible. Pre-construction surveys for potential roost sites for special-status bat species, nest sites for Monterey dusky-footed woodrat, and den sites for American badger shall be conducted by a qualified biologist with results submitted to Monterey County Planning Department. For impacts that cannot be avoided through design, replacement roosting sites shall be provided, Monterey dusky-footed woodrat nests shall be dismantled by a qualified biologist prior to construction, and protective butters shall be established to avoid direct take of the American badger. Implementation of the above measures would reduce the impact to nesting habitat for special-status bat and mammal species to a **less than significant** level.

Potential Loss of Riparian and Wetland Habitat

Impact 3.3-4 Implementation of the proposed project would result in the construction of buildings, roads, and other facilities that would in turn result in the loss of riparian and wetland habitat. This would be considered a **significant impact.**

Implementation of the proposed project would result in the construction of buildings, roads, trails, and other facilities that may result in a loss of riparian and non-jurisdictional wetland habitat as shown in **Figures 3.3-3a** and **3.3-3b**. Sensitive riparian and wetland habitats were identified on the project site as shown in **Figures 3.3-1a, 3.3-1b,** and **3.3-2**. The recent substantial decline of riparian and wetland communities throughout the state has increased concerns regarding plant and wildlife species associated with such communities; therefore, state and federal agencies have adopted policies to arrest further loss. The CDFG and USACE have adopted "no-net-loss" policies for riparian and wetland habitat.

Riparian Habitat

Generally, impacts to riparian habitat are measured based on the acreage of riparian tree cover to be removed or disturbed. Riparian is defined as on, or pertaining to, the banks of a stream. Riparian vegetation is defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on and occurs because of, the stream itself" (WRA 2007a). Removal of riparian vegetation requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFG. In addition, riparian habitat is considered suitable habitat for a

number of special-status species including the two-striped garter snake. Development of Lots #1 through #15, as well as a proposed trail across Harper Creek, would result in the disturbance or removal of riparian vegetation, which would be considered a **significant impact**.

Mitigation Measure

MM 3.3-4a Existing riparian habitat areas shall be avoided and protected where feasible. The following performance-based mitigation and management steps shall be taken to avoid disturbance or removal of habitat and associated special-status species (plant and animal) and to create or restore additional habitat if necessary:

1) The site plan or final improvement plans shall be modified to relocate Lots #1 through #15 and associated improvements in order to avoid riparian habitat and to include the riparian habitat within open space easements. Any plan modifications are subject to review and approval by Monterey County Planning Department.

2) During construction avoided riparian habitat shall be protected using construction fencing, providing a minimum 100-foot buffer from areas of disturbance where feasible. No construction activity shall be allowed beyond exclusionary fence lines, and the exclusionary fences are to be monitored on a daily basis while work is being performed adjacent to these resources.

3) Signage shall be provided identifying protected areas to inform construction personnel and recreationalists as to the presence of the protected habitat and the importance of preservation.

4) Impacted habitat shall be replaced through restoration activities or mitigation bank credit purchase so that there will be no net-loss of riparian habitat. Should mitigation consist of restoration, a Riparian Mitigation and Monitoring Plan shall be prepared, submitted to the County for review, and implemented during construction. .

Wetland Habitat

According to the 2007 Biological Assessment and verified wetland delineation, none of the wetlands on-site (other than the perennial waters of El Toro Creek, addressed separately) were determined to be jurisdictional as defined by the USACE (WRA 2007a, 2007b). However, these wetlands may be considered waters of the State by the Regional Water Quality Control Board**.** Although the wetland habitat on the project was determined to be non-jurisdictional, this habitat is an important biological community that supports special-status plant and animal species such as the western spadefoot toad.

Development of several lots and roadway improvements would directly result in the loss or disturbance of wetland habitat, which would be considered a **significant impact**. However, implementation of the following mitigation measure would reduce this impact to a **less than significant** level.

Mitigation Measure

MM 3.3-4b Prior approval of final improvement plans on or near Lots #91 through #93, Lots #104 through #107, Ferrini Ranch Road at the north end of Parcel A, Lots #138, #141, and #142, and the roadway between Lots #29 and #31, the grading areas shall be resurveyed by a qualified biologist to document and confirm the area of disturbance to wetland habitat. Where wetlands or wetland habitat would be disturbed by construction activities, the following performance-based mitigation and management steps shall be taken to reduce the loss of wetland habitat, avoid disturbance or removal of associated special-status species (plant and animal), and create additional habitat:

1) Where feasible, the site plan/improvement plans shall be modified to relocate individual lots or improvements in order to avoid wetland habitat and to include the wetland habitat within open space easements. Any plan modifications are subject to review and approval by Monterey County Planning Department.

2) Existing wetland habitat shall be restored, maintained, and protected within open space areas and placed under conservation easements in perpetuity.

3) For impacts to non-jurisdictional wetland habitat that cannot be avoided due to engineering and site constraints, the project applicant shall identify an area of the project site as created wetland habitat, for long-term management, in an amount at least equal to the area disturbed or impacted resulting in "no net loss" of wetland area. . The project applicant shall contract with a qualified biologist to prepare a Wetland Mitigation and Management Plan in accordance with the requirements of the Regional Water Quality Control Board. The Wetland Mitigation and Management Plan shall include the following:

   - Target areas for creation/restoration.
   - A complete biological evaluation of the existing resources on the target areas.
   - Specific creation and/or restoration plans for each target area.

- Performance standards for success that will illustrate that the compensation ratios are met.
- A monitoring plan including schedule and annual report format.
- Detailed management measurements.

The project applicant shall submit the Wetland Mitigation and Management Plan to the County Planning Department for approval prior to engaging in mitigation activities (including mitigation land acquisition). The land utilized to satisfy this mitigation measure shall be protected through a fee title or conservation easement in perpetuity. Additionally, the project applicant is responsible for the cost of the conservation easement or fee title and establishment of a maintenance plan for mitigation areas. Resources within the on-site preserve can be assumed to partially fulfill this requirement when the conservation easement for this area is established. Mitigation monitoring will be continuous until the performance standards identified in the Wetland Mitigation and Management Plan are consistently met for five consecutive years.

4) During construction, protective construction fencing shall be used, providing a minimum 100-foot buffer from areas of disturbance. No construction activity shall be allowed beyond exclusionary fence lines, and the exclusionary fences are to be monitored on a daily basis while work is being performed adjacent to these resources. If any soils or materials enter the riparian or wetland habitats, all construction shall be halted until the County is consulted. Construction shall re-commence upon authorization.

5) Signage shall be provided identifying protected areas to inform construction personnel and recreationalists as to the presence of the protected habitat and the importance of preservation.

Implementation of the above mitigation measures would require avoidance, preservation, and protection of riparian and wetland habitats as feasible. A Riparian Mitigation and Management Plan shall be prepared and includes details for restoration of the riparian habitat. For impacts to wetland habitat that cannot be avoided, the project applicant shall identify an area of project site as wetland habitat, for long-term management, in an amount equal to or greater than the area disturbed or impacted. A Wetland Mitigation and Management Plan shall be prepared and implemented in accordance with the requirements of the Regional Water Quality Control Board. Implementation of the above mitigation measures would reduce the impact to wetland and riparian habitats to a **less than significant** level.

Potential Disturbance of Waters of the U.S.

Impact 3.3-5 Implementation of the proposed project would result in construction activities in the vicinity of approximately 2,099 linear feet (0.17 acres) of perennial waters that are considered waters of the U.S. under Section 404 of the Clean Water Act, which are subject to permit approval from the U.S. Army Corps of Engineers. The pedestrian bridge over Harper Creek will result in fill to waters of the U.S.; therefore, this would be considered a **significant impact.**

Implementation of the proposed project would require placement of fill material into waters of the U.S. However, implementation of the following mitigation measure would reduce this impact to a **less than significant** level.

MM 3.3-5 The project applicant shall ensure that the project will result in no net loss of waters of the U.S. by providing mitigation through impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as determined in the CWA Section 404/401 permits.

Compensatory mitigation may consist of (a) obtaining credits from a mitigation bank; (b) making a payment to an in-lieu fee program that will conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities; these programs are generally administered by government agencies or nonprofit organizations that have established an agreement with the regulatory agencies to use in-lieu fee payments collected from permit applicants; and/or (c) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This last type of compensatory mitigation may be provided at or adjacent the impact site (i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). The project proponent/permit applicant retains responsibility for the implementation and success of the mitigation project.

Evidence of compliance with this mitigation measure shall be provided prior to construction and grading activities for the proposed project.

Implementation of the above mitigation would reduce impacts to wetlands and other waters of the U.S. to a **less than significant level**.

Loss of Sensitive Coast Live Oak Woodland Habitat and Oak Trees

Impact 3.3-6 Implementation of the proposed project would result in permanent alteration of site conditions that may result in the loss of coast live oak woodland habitat and in the removal of a maximum of 921 coast live oak trees from the project site. This would be considered a **significant impact**.

According to the Biological Assessment, approximately 49 percent of the project site contains oak woodlands and/or oak savanna (WRA 2007a). These areas are dominated by open to nearly closed canopies of coast live oak (*Quercus agrifolia*) trees. According to the Forest Management Plan, approximately 24 acres are classified as having dense canopies and approximately 412 acres are classified as having moderate canopies. Oak woodlands are provided special protection under Section 21083.4 of the Public Resources Code and local policies that address SB 1334. An oak woodland is any acre with a native oak species in the genus *Quercus* that has a diameter at breast height (dbh) of 5 inches or greater and is not subject to timber harvest or exempt pursuant to Section 21083.4(d) of the Public Resources Code.

Within the coast live oak woodland habitat, there are approximately 29,300 native oak trees with diameters (at breast height) greater than 6 inches on the property (Staub 2006). The site is dominated with coast live oaks on the steeper north-facing slopes, with some valley oaks (*Quercus lobata*) at the gentle flats and toe slopes of the valley bottoms. According to the Forest Management Plan, approximately 632 to 921 trees would be removed during construction based on approximate limits of grading for construction of roads, driveways, and building pads (Staub 2006, 2010). However, the actual final number of trees to be removed cannot be determined until final site plans for all lots are prepared. Approximately 20 to 25 percent of the trees estimated to be removed are suffering from extensive decay, breakage, and/or low vigor. No trees with diameters greater than 24 inches (at breast height) would be removed if careful construction methods were implemented and some portions of the roadways were constructed to be less than the standard 20-foot width. Removal of a maximum of 921 trees would represent less than 3.2 percent of the total trees currently estimated on the project site.

Although the largest blocks of continuous forest cover would be preserved, some fragmentation of forest resources would occur with development of the proposed project and tree removal will be required. In addition, the final tree removal count may vary somewhat from these preliminary estimates due to realignment of roadways and actual placement building envelopes. Tree and oak woodland removal would be considered a **significant impact**. The following mitigation measures are required to ensure that removal of coast live oak trees is kept at a minimum, that trees are replanted after construction, that remaining trees are protected during construction activities, and that project mitigation complies with requirements of the Public Resources Code.

Mitigation Measures

MM 3.3-6a Prior to issuance of grading permits, improvement plans shall be reviewed by a certified arborist and County planning staff. Plans shall be field verified and modified as feasible and practicable considering engineering constraints, to preserve as many healthy trees as possible and to minimize impacts on trees to be retained. Design and construction recommendations provided in the Forest Management Plan and Supplemental Forester's Report, prepared by Staub Forestry and Environmental Consulting in September 2006 and March 2010, respectively, shall be implemented during the final design of the roadways, trails, utilities, and individual building envelopes. Tree removal and replacement plans shall be prepared by a qualified professional forester or arborist and shall be subject to review and approval by the County of Monterey Planning Department. The Monterey Agricultural Commissioner's Office shall be contacted prior to removing any oak tree in order to comply with current Sudden Oak Death quarantine requirements.

The tree removal and replacement plan shall address removal of trees within any acre of land with a 5-inch dbh or greater native oak species consistent with Section 21083.4(b) of the Public Resources Code. The mitigation measures required by the County of Monterey include the following:

1) Replant on-site an appropriate number of trees for 50 percent of the direct impact at a 1:1 ratio (approximately 460 trees). Maintenance and monitoring of plantings shall be kept in place by the project applicant and/or property owners association (POA) for seven years. Replanting as required by this measure may be used to restore former oak woodlands, and replanting shall be located in areas that will not be compromised by excessive tree density.

2) The project applicant shall contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of Section 1363 of the Fish and Game Code, for the purpose of purchasing oak woodlands conservation easements, as specified under paragraph (1) of subdivision (d) of that section and the guidelines and criteria of the Wildlife Conservation Board. This measure shall apply to the remaining 50 percent of impact, equivalent to approximately 7 acres of oak woodland removal.

All protected coast live oak (*Quercas agrifolia*) trees with diameters at breast height less than 24 inches that are proposed for removal shall be replaced on a 1:1 basis in accordance with Section 21.64.260 of the

Monterey County Zoning Code. Frequently, replanting at a 3:1 ratio is recommended in order to achieve a successful replacement ratio of 1:1. However, grassland habitat on the project site is considered to be at least as ecologically valuable as the oak woodland habitats. Therefore, replanting of coast live oaks at a 1:1 ratio is recommended on the project site in order to ensure there is no excessive loss of grassland habitat.

Tree replacement shall be the same species as removed and should be local native stock. Existing volunteer seedlings on the project site may be transplanted to provide suitable replacement planting stock of known local origin. If replanting stock is not transplanted from on-site sources, the replanting stock shall be grown from local native seed stock in sizes no greater than 5 gallons, with 1-gallon, D40 Treepot size or smaller preferred to ensure the highest replanting success rate. Trees removed shall be replanted on the same lot(s) outside areas subject to development. Trees removed due to infrastructure improvements (i.e., roadways) shall be replanted on designated open space parcels or easements.

MM 3.3-6b Prior to commencement of construction activities, protective fencing shall be erected along the driplines of each protected tree or group of trees to be preserved. No construction activities or storage of equipment or construction materials shall occur within the protective fence line. No soil may be removed from and no fill of additional soil exceeding 2 inches shall occur within the dripline or against the base of any tree, unless it is part of approved construction and approved on the improvement plans.

Implementation of the above mitigation measures would require preparation of site-specific tree removal and replacement plans prior to issuance of grading permits to ensure the loss of oak woodlands and individual coast live oak trees is minimized and that removed trees are replanted in accordance with Section 21.64.260 of the *Monterey County Zoning Code* and Section 21083.4 of the Public Resources Code. In addition, during construction activities, protective fencing shall be installed along the dripline of protected trees or group of trees to be preserved in order to minimize damage to remaining trees. Therefore, the impact to sensitive oak woodland habitat would be reduced to a **less than significant** level.

Potential Loss of Protected Avian Species and Habitat

Impact 3.3-7 Implementation of the proposed project would result in temporary and direct disturbance to nesting raptors and migratory birds. This would be considered a **potentially significant impact.**

Habitat within the project site provides suitable foraging opportunities for many avian species, including special-status bird species (see **Table 3.3-2**). Raptors and raptor nests are considered to be a special resource by federal and state agencies and are protected under the Migratory Bird Treaty Act (MBTA) and California Code of Regulations. All migratory birds are also protected under the MBTA. Future development within the project site may affect suitable habitat for these avian species.

Protocol-level burrowing owl surveys were conducted by Denise Duffy and Associates in March 2008. These surveys did not detect any burrowing owls on the project site. However, as long as habitat that supports burrowing owls exists, the species could move onto the project site. If they moved on-site, construction activities associated with the proposed project may directly impact individually species or indirectly impact burrowing owl habitat, which would be considered a **potentially significant impact**. In addition, construction activities that require disturbance of trees or other vegetation containing active nests could cause direct impact to nesting raptors and migratory birds. Disturbance of active nests within the project site would be considered a **significant impact**. Construction could also result in noise, dust, increased human activity, and other indirect impacts to nesting raptors or migratory bird species in the project vicinity. Potential nest abandonment and mortality to eggs and chicks, as well as stress from loss of foraging areas, would also be considered a **significant impact**. Implementation of the following mitigation measure would reduce this impact.

Mitigation Measure

MM 3.3-7 The project applicant shall conduct all construction or tree removal outside the active nesting seasons (typically February 1 through August 31) to the extent feasible and practicable. In areas where construction will occur during the active nesting season, the project applicant shall retain a qualified biologist to conduct a focused survey for the presence or absence of burrowing owls and active nests of raptors and migratory birds within and in the vicinity of the construction area. Surveys shall be conducted no more than 30 days prior to ground disturbance and provided to Monterey County Planning Department for verification of condition compliance.

If burrowing owls or active nests are located during preconstruction surveys, the following mitigation steps shall be taken:

1) During construction, exclusion fencing shall be maintained, providing a minimum 300-foot buffer from areas where burrowing owls have been identified. For construction activities proposed near active nests of other migratory birds, buffer/exclusion zones (no ingress of personnel or equipment at a minimum radius of 100 feet around the nest) shall be established or the construction schedule altered. The buffer zones shall remain in place until the nests are abandoned or the biologist deems disturbance potential to be minimal. No action is necessary if construction will occur during the non-breeding season (between August 1 and November 1).

2) Signage shall be provided identifying areas of buffers to inform construction personnel and recreationalists as to the presence of protected species and habitat and the importance of preservation.

3) For impacts to burrowing owls that cannot be avoided due to engineering and site constraints, the project applicant shall contract with a qualified biologist to relocate the owls through the use of one-way doors over burrows as approved by the CDFG during the non-nesting season (March through August). For active nests that cannot be avoided, the USFWS and/or CDFG (as appropriate) shall be notified regarding the status of the nests and agency recommendations regarding nest avoidance measures implemented.

Implementation of the above mitigation measures would reduce impacts to raptors and migratory birds and burrowing owls to a **less than significant** level by limiting the exposure to construction activities.

Wildlife Corridors

Impact 3.3-8 Implementation of the proposed project would result in disturbance and construction activity in the vicinity of the State Route 68/El Toro Creek Bridge undercrossing, which is considered to be a significant route of safe passage for both small and large mammals, amphibians, and reptiles moving between Fort Ord lands and the Sierra de Salinas or Santa Lucia ranges. This would be considered a **potentially significant impact.**

Proposed Lots #1 through #5 and Lots #13 through #15 are located adjacent to the El Toro Creek undercrossing, which is considered to be a significant wildlife corridor for mammals, amphibians, and reptiles moving between Fort Ord lands and the Sierra de Salinas or Santa Lucia ranges. Development on Lots #1 through #5 and #13 through #15 may discourage, interrupt, or otherwise impact the use of this wildlife corridor.

State Route 68 and Toro Park Estates development are major barriers for wildlife species attempting to travel between Fort Ord and the project site. The noise and vehicular

movement along State Route 68, the sound barrier wall along Toro Park Estates, and the 1,400-foot-wide band of development discourage movement of wildlife. Existing corridors for wildlife are limited to El Toro Creek, the Portola Drive overpass, and possibly culverts that run beneath State Route 68. The El Toro Creek undercrossing is located on the western parcel of the project site adjacent to proposed Lots #1 through #5 and #13 through #15.

El Toro Creek is bordered by riparian vegetation which offers cover and shade for daytime movements, and the creek itself is shallow and usually flowing slowly enough for mammals to wade through it. A small seasonal tributary to El Toro Creek also joins at this location and provides additional cover and opportunity for wildlife movement. Therefore, El Toro Creek provides good opportunity for many species to move between Fort Ord and the open space provided on the project site and to the south. According to WRA, a corridor width of approximately 300 to 400 feet with a variety of habitats provides protected movement corridors and staging areas for wildlife moving from higher open space in the mountains to the lower valleys.

The proposed project would dedicate approximately 600 acres as permanent open space. Specifically the large valley floor would remain primarily undeveloped, as would the grassland and oak woodland habitat areas located between Lots #30 through #38 and Lots #40 through #44. These areas contain woodland and aquatic habitats that support a variety of species.

Noise generated by construction activities associated with development of residential units on Lots #1 through #5 and Lots #13 through #15 may discourage wildlife from using the El Toro Creek undercrossing. However, this noise would be temporary and wildlife movement would likely return to the area upon completion of construction. Restricting access to or from the El Toro Creek undercrossing would also limit use of this safe wildlife corridor. Access could be restricted due to lack of maintenance of vegetation on either side of the undercrossing and if development was permitted to allow solid barrier fencing that limits the amount of area wildlife would have to move from the El Toro Creek undercrossing to the open space area to the south. These impacts of project development would be considered a **potentially significant impact**.

Mitigation Measures

MM 3.3-8a Consistent with mitigation measure MM 3.3-4a, the project applicant shall revise the site plan in the vicinity of El Toro Creek to remove or relocate development away from the riparian corridor to allow sufficient wildlife movement and access and preserve other biological resources and habitat.

MM 3.3-8b CC&Rs shall be established for the subdivision that limit the use and installation of solid barrier fencing beyond the building envelopes and yard areas on Lots #1 through #5 and #13 through #15.

MM 3.3-8c Prior to recordation of the final map, the Monterey County Planning Department shall require the project applicant to submit for review and approval an Open Space Management Plan (OSMP). The OSMP shall identify the area to be placed under the open space easement, scenic corridor easement, designated B-6 areas, allowed uses, maintenance management procedures, and timing. The plan shall identify all sensitive areas and specific management requirements for each area. This shall include, but not be limited to, maintaining open space areas located on both sides of the undercrossing and along State Route 68 in the vicinity of the undercrossing so that species moving north–south through the project site have an intact corridor through which to pass. The small portion of the project site located north of State Route 68 shall be reclassified RC-VS-D-S (Resource Conservation with Visual Sensitivity, Design Control, and Site Plan review overlays), with a scenic conservation easement. All maintenance plans shall be made part of the project's OSMP. As part of the OSMP, a Property Analysis Record (PAR) shall be used to calculate the endowment required to fund the OSMP in perpetuity.

Implementation of the above mitigation measures would minimize restriction of access to the El Toro Creek undercrossing in order to ensure movement of wildlife to and from the undercrossing. This would reduce the proposed project's effect on the wildlife corridor to a **less than significant** level. No further mitigation measure would be necessary.

Conflicts with Adopted Habitat Conservation Plan

The proposed project is not located within an area associated with an adopted Habitat Conservation Plan. Therefore, there would be **no impact** associated with a Habitat Conservation Plan.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Effect on Special-Status Species and Sensitive Habitats

Impact 3.3-9 Buildout of the proposed project, combined with buildout of reasonably foreseeable development in the vicinity of the project site, would result in disturbance to special-status species and sensitive habitats throughout the region. However, implementation of mitigation measures presented within this section, **MM 3.3-1** through **MM 3.3-8c**, would reduce the overall contribution to cumulative biological resource impacts resulting from buildout of the proposed project. Therefore, this would be considered a **less than significant cumulative impact.**

As presented in the impact discussions above (see Impacts 3.3-1 through 3.3-8), implementation of the proposed project would result in a disturbance to special-status

species and sensitive habitats. When these impacts are combined with biological resources impacts associated with reasonably foreseeable development in the vicinity of the project site, the disturbance to special-status species and sensitive habitats is likely to be compounded and considered a cumulative impact. However, implementation of mitigation measures presented within this section, **MM 3.3-1** through **MM 3.3-8c**, would reduce the overall contribution to cumulative biological resource impacts resulting from buildout of the proposed project. Therefore, the proposed project's contributions to the cumulative loss and/or restriction of biological resources in the region are considered **less than significant**.

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