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ALTAMONT MOTORSPORTS PARK BIOLOGICAL EVALUATION REPORT

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1. INTRODUCTION

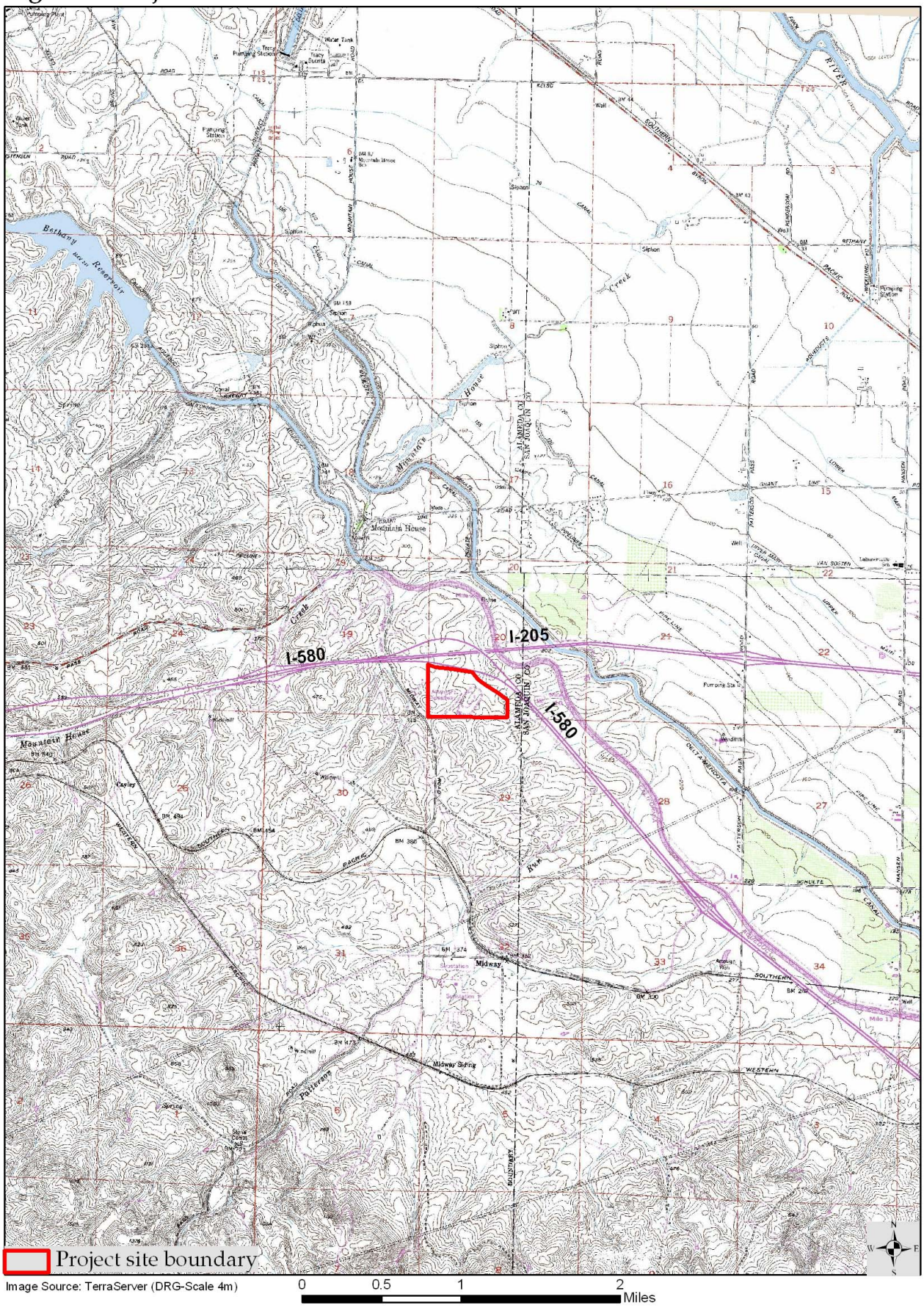
The Altamont Motorsports Park (project site) is 83-acres in size and is located approximately 10 miles east of the City of Livermore in the eastern portion of Alameda County. The project site is located immediately south of the Interstate (I)-580/1-205 interchange. As shown in **Figure 1**, **Project Site Location**, the site is generally bordered by I-580 to the north and east. The project site is bordered to the west and south by several residences and large expanses of undeveloped land.

Altamont Motorsports Park opened in 1963 as a dirt oval raceway and was paved and reconfigured in 1966. Currently, 35-acres (of the 83-acre facility) are developed with a paved racetrack, a pit/paddock area, grandstands, and other supporting infrastructure. The proposed project includes rezoning the site from "A-General Agriculture" to "P-Planned Development" (to provide for the continued use of the facility), the installation of a patio cover over the existing bleachers, the placement of two mobile homes on the site, and the installation of signage (to be viewed from I-580).

This Biological Evaluation Report describes the existing biological characteristics of the project site and provides an analysis of potential impacts to sensitive biological resources from the implementation of the proposed project. The report includes discussions of field survey methodologies; characterization and extent of onsite plant communities; special-status plant and wildlife species occurring or potentially occurring on the project site; opportunities the project site provides for wildlife movement; and jurisdictional and sensitive habitats on the site. The report is organized into the following sections:

1. Introduction
2. Methodology
3. Results
4. Potential Impacts and Recommended Measures
5. Conclusions

Figure 1: Project Site Location



2. METHODOLOGY

Database Review

The latest version of the California Natural Diversity Data Base (CNDDB) was reviewed for the project quadrangle (i.e., Midday) and the surrounding Byron Hot Springs, Clifton Court Forebay, Union Island, Tracy, Lone Tree Creek, Ceder Mountain, Mendenhall Springs, and Altamont USGS 7.5-minute quadrangles. This database review included an approximately 10 mile radius around the project site. In addition, the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants was reviewed for the project quadrangle. The database reviews served to identify special-status plant and wildlife species that have been documented in the project area to assist in determining if these species might be present on the project site.

Reconnaissance-Level Field Survey

On July 11, 2007, Josh Phillips of Pacific Biology and John Vollmar of Vollmar Consulting conducted a reconnaissance-level field survey of the project site. Mr. Phillips served as the lead wildlife biologist and Mr. Vollmar served as the lead botanist. The primary objectives of the field survey included (1) identifying and characterizing onsite plant communities; (2) evaluating the potential of these plant communities/habitats to support special-status plant and wildlife species; and (3) determining the extent of other sensitive biological resources present. Meandering transects were walked to achieve 100 percent visual coverage of the project site. All plant and wildlife species observed were identified and recorded.

3. RESULTS

3.1 General Biological Characteristics of the Project site and Surrounding Area

The topography of the project site is characterized by gently rolling hills and elevations vary by approximately 100 feet from the highest and lowest locations on the property. Approximately 35-acres of the 83-acre project site contain racetrack associated uses and infrastructure. The remainder of the project site is characterized by non-native, annual grasses and sparsely vegetated areas used for parking during race events. A large population of California ground squirrels (*Spermophilus beecheyi*) is present and a high-density of burrows of this small mammal occurs throughout the project site. A detention pond is located in the northern portion of the project site. The biological characteristics of the project site are discussed in further detail in **Section 3.2 Plant Communities** and representative photographs of the project site are included in **Appendix A**.

The area surrounding the project site is characterized by very sparse development and large expanses of undeveloped land. Similarly to the project site, the surrounding area is characterized by rolling hills vegetated with annual grasses. The California Aqueduct is located to the north and east of project site (north of I-205 and east of I-580).

3.2 Plant Communities

The dominant plant community on the project site is California annual grassland. A seasonal pond supporting emergent vegetation and riparian-associated tree species is also present. The biological characteristics of these plant communities are discussed below and their location is shown on **Figure 2, Plant Communities and Land Uses**. As the developed portions of the project site provide limited wildlife value, these areas are not further discussed in this report.

(i) California Annual Grassland

The project site is dominated by annual, non-native grasses. The dominant grass species present are soft chess (*Bromus hordeaceus*) and ripgut brome (*Bromus diandrus*). Shortpod mustard (*Hirschfeldia incana*) also occurs in varying densities throughout the grassland. Characteristic of disturbed habitats, the site contains low botanical diversity. The west-central portion of the project site is used as a parking area during race events; vegetation within this portion of the project site is more heavily disturbed and characterized by areas of bare dirt and sparse, low-growing annual grasses.

(ii) Seasonal Detention Pond

A seasonal detention pond (approximately 200 feet by 75 feet in size) is located in the northern portion of the project site. A small area of willow trees (*Salix* sp.) occur along the eastern edge of the pond, a single cottonwood tree (*Populus fremontii*) occurs on the western edge of the pond, and cattails (*Typha latifolia*) occur in portions of the outer edge of the pond. The pond was completely dry at the time of the field survey conducted on July 11, 2007. However, given the presence of willow, cottonwood, and cattails, it is assumed that the pond has a subsurface water source. The pond contains a water outflow which drains to the north into a swale (which then drains to a culvert under I-580). Based on the height of the water outflow, it is assumed that the pond reaches a maximum depth of approximately 3 to 4 feet.

A small swale is located immediately to the southeast of the seasonal pond. This swale conveys surface runoff to the pond from upslope areas to the south. The swale contains wetland associated vegetation including rabbitsfoot grass (*Polypogon monspeliensis*) and curly dock (*Rumex crispus*), as well as Italian ryegrass (*Lolium multiflorum*), a non-native grass found in both wetland and upland areas.

3.3 Sensitive Plant Communities

The California Department of Fish and Game (CDFG) Wildlife and Habitat Data Analysis Branch has developed a *List of California Terrestrial Natural Communities* (CDFG 2003). The most recent version of this list, dated September 2003, is derived from the CNDDB and is intended to supersede all other lists developed from the CNDDB. The primary purpose of the CNDDB classification is to assist in the characterization of the rarity of various plant communities. For the purposes of this analysis, plant communities denoted on the list as "high priority for inventory in CNDDB" in the September 2003 version are considered to be "sensitive".

Based on this classification, none of the plant communities occurring on the project site are considered to be sensitive plant communities by the CDFG. Several willows and a single cottonwood tree are present around the seasonal pond. However, given the limited extent of this habitat, it does not constitute an intact willow riparian scrub or woodland plant community and, therefore, for the purposes of this report is not considered to be a sensitive plant community. As sensitive plant communities do not occur on the project site, they are not further discussed in this report.

Figure 2: Plant Communities and Land Uses

3.4 Special-Status Plant Species

For the purposes of this report, special-status plants include those species that are state or federally listed as Rare, Threatened or Endangered; federal candidates for listing; proposed for state or federal listing; or included on Lists 1, 2, 3, or 4 of the CNPS Inventory of Rare and Endangered Plants of California (CNPS Inventory).

The review of the CNDDB identified 36 special-status plant species that have been documented within approximately 10 miles of the project site. A list of these special-status plant species is included in **Appendix B** and the location of documented special-status plant species occurring within approximately 2.5 miles of the project site is shown in **Figure 3**. The field survey was conducted outside of the blooming period of locally occurring special-status plant species and, therefore, it was not possible to conduct a focused search for special-status plants. However, for the reasons discussed below, it is considered unlikely that any special-status plant species occur on the project site.

An evaluation of the suitability of the project site to support special-status plant species was conducted during the field survey. This included evaluating the overall botanical value of the project site and a search for the microhabitat conditions associated with locally occurring special-status plant species. The project site is in a disturbed condition, has very low plant diversity, and is considered of low botanical value. Large portions of the project site are developed while large portions of the undeveloped area are used for parking during race events or contain fill soils. The relatively less disturbed portions of the site are botanically uninteresting and contain a very low plant diversity (typified by the occurrence of two species of non-native grasses and shortpod mustard). Additionally, the project site lacks habitat features associated with many locally-occurring special-status plant species such as serpentine soils, vernal pools, or rock outcrops.

3.5 Special-Status Wildlife Species

For the purposes of this report, special-status wildlife species include those that are state or federally listed as Threatened or Endangered, proposed for listing as Threatened or Endangered, designated as state or federal candidates for listing, a federal Bird of Conservation Concern, a state Species of Special Concern, a state Fully Protected Animal, or that may otherwise be considered "rare" under Section 15380 of the CEQA Guidelines.

Review of the CNDDB identified 30 special-status wildlife species that are known to occur in the project area. These species are identified in **Table 1, Special-Status Wildlife Species Documented in the Project Area**, along with their regulatory status, habitat requirements, and an evaluation of their potential to occur on the site. The location of documented special-status wildlife species occurring within approximately 2.5 miles of the project site is shown in **Figure 3**.

Three wildlife species listed as federally-Threatened (**California tiger salamander**, **California red-legged frog**, and **San Joaquin kit fox)** have been documented near the project site and have potential to occur on the site based on the presence of suitable habitat. Additionally, **Swainson's hawk**, a state-listed Threatened species, could forage on the site (although suitable nesting habitat for the species is absent). **Burrowing owl**, a federal Bird of Conservation Concern and a California Species of Special Concern, was observed on the site and actively uses the site for nesting. Other special-status wildlife species potentially occurring on the site include **San Joaquin whipsnake**, **coast horned lizard**, **western spadefoot**, **white-tailed kite**, **California horned lark**, **loggerhead shrike**, **San Joaquin pocket mouse**, and **American badger**. Potential project-related impacts to these observed or potentially occurring special-status wildlife species are discussed later in this report.

Table 1
Special-Status Wildlife Species Documented in the Project Area

Common and Scientific Name	Status		Habitat Requirements	Potential On-Site Occurrence
	Federal	State		
Invertebrates				
Longhorn fairy shrimp *Branchinecta longiatenna*	FE	--	Vernal pools and other seasonal pools with sparse vegetation.	***Not Expected*:** no suitable habitat present.
Vernal pool fairy shrimp *Branchinecta lynchi*	FE	--		
Midvalley fairy shrimp *Branchinecta mesovallensi*	--	*		
Curved-foot hygrotus diving beetle *Hygrotus curvipes*	--	*	Found in a variety of aquatic habitats including vernal pools, stock ponds, and ditches; associated with alkaline conditions; known only from Alameda and Contra Costa Counties.	***Not Expected:*** the onsite seasonal pond does not contain the alkaline conditions generally associated with the species – salt tolerant vegetation not present and no fringing of salt around pond; documented approximately 2 miles north of the project site (CNDDB).
Amphibians and Reptiles				
Western pond turtle *Actinemys marmorata*	--	CSC	Aquatic habitats including ponds, streams, and irrigation ditches. Requires basking sites such as partially submerged logs, vegetation mats, or open mud banks. Also requires suitable upland egg laying sites.	***Not Expected:*** aquatic habitat is limited to the seasonal pond (which is dry during the summer).
California tiger salamander *Ambystoma californiense*	FT	CSC	Needs underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.	***Potential:*** the seasonal pond provides potentially suitable breeding habitat and the surrounding grassland habitat (with abundant ground squirrel burrows) provides suitable upland habitat; closest documented occurrence is approximately 1.5 miles northwest of the project site (CNDDB).

Common and Scientific Name	Status		Habitat Requirements	Potential On-Site Occurrence
	Federal	State		
Silvery legless lizard *Anniella pulchra pulchra*	--	CSC	Sandy or loose loamy soils under sparse vegetation; soil moisture is essential and the species prefers soils with a high soil content.	***Not Expected:*** marginal habitat given disturbed nature of project site; large portions of undeveloped land used for parking and has compacted soils; low soil moisture and water table in upland portions of project site; closest documented occurrence is approximately 5 miles south of the project site (CNDDB).
San Joaquin whipsnake *Masticophis flagellum ruddocki*	--	CSC	Inhabits open, dry habitats with little or no tree cover. Found in valley grassland and saltbrush scrub; needs mammal burrows for refuge and oviposition sites. Occurs in the San Joaquin Valley.	***Potential:*** suitable habitat present including abundant small mammal burrows; documented approximately 1 mile south of the project site (CNDDB).
Alameda whipsnake *Masticophis lateralis euryxanthus*	FT	CT	Inhabits south-facing slopes and ravines where shrubs form a vegetative mosaic with oak trees and grasses.	***Not Expected*****:** no suitable habitat present; outside of expected range.
Coast horned lizard *Phrynosoma coronatum*	--	CSC	Most common in lowlands along sandy washes with scattered low bushes.	***Potential*****:** preferred habitat not present as no washes or other sandy soils are present and site generally lacks scattered low bushes; however, the species has been documented approximately 0.5 mile north of project site (CNDDB) and some potentially suitable habitat is present.
California red-legged frog *Rana draytonii*	FT	CSC	Lowlands and foothills in or near long lasting sources of deep water.	***Potential*****:** the pond provides suitable aquatic habitat. When the pond is dry, suitable summer habitat is present within the small grove of willows, small mammal burrows within the surrounding grassland, and cracks within the pond's bottom; there are numerous documented occurrences of the species in the surrounding area, of which the closest is approximately 0.4 miles north of project site – based on aerial photography this documented occurrence appears to have a hydrologic connection to the onsite seasonal pond.

Common and Scientific Name	Status		Habitat Requirements	Potential On-Site Occurrence
	Federal	State		
Foothill yellow-legged frog *Rana boylii*	--	CSC	Partly-shaded, shallow streams and riffles with a rocky substrate.	***Not Expected*:** no suitable habitat present.
Western spadefoot *Spea hammondii*	--	CSC	Vernal pools or other seasonal water features required for breeding; primarily within grassland habitats.	***Potential*:** the pond provides potentially suitable breeding habitat and surrounding grassland provides suitable burrowing habitat; closest documented occurrence is approximately 7 miles south of the project site (CNDDB).
Birds				
Tricolored blackbird (nesting colony) *Agelaius tricolor*	BCC	CSC	Nests in freshwater marshes and riparian scrub.	***Not Expected**:* very limited nesting habitat present given small extent of willows.
Burrowing owl (burrow sites) *Athene cunicularia*	BCC	CSC	Forages and nests in grasslands and open scrub with small mammal burrows.	***Observed:*** a total of 8 burrowing owls (including adults and juveniles) were observed during the field survey; successful nesting occurred at a minimum of three burrow sites; suitable habitat is present throughout all undeveloped portions of the site; there are numerous documented occurrences of the species in immediately surrounding areas (CNDDB).
Golden eagle (nesting and wintering) *Aquila chrysaetos*	BCC	CSC	Nests and winters in rolling foothills, mountain areas, sage–juniper flats, and deserts; nests on cliff-walled canyons and large trees in open areas.	***Not Expected:*** no suitable nesting or wintering habitat present; given the relatively small size of site, the species is not expected to forage onsite.
Ferruginous hawk (wintering) *Buteo regalis*	--	CSC	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon-juniper habitats; does not nest in California.	***Not Expected:*** the species does not nest in California but does occur as a winter migrant; suitable large perching trees not present, but could occasionally forage on the site.
Swainson's hawk (nesting and foraging) *Buteo swainsoni*	BCC	CT	Forages in grassland and agricultural areas; nests in riparian areas or in large isolated oaks or other trees in agricultural areas.	***Potential:*** the species is known to nest in the project area and given the presence of suitable habitat could forage on the site; onsite nesting habitat is considered marginal as no trees of suitable size are present; closest documented nest is located approximately 2.7 miles northeast of the project site (CNDDB).

Common and Scientific Name	Status		Habitat Requirements	Potential On-Site Occurrence
	Federal	State		
Northern harrier (nesting) *Circus cyaneus*	--	CSC	Inhabits coastal salt and freshwater marshes. Nests and forages in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge. Nests are large mounds of sticks in wet areas.	***Not Expected:*** suitable nesting habitat is not present; could occasionally forage on the project site.
White-tailed kite (nesting) *Elanus leucurus*	--	CFP	Usually nests in large bushes or trees, often in isolated stand, surrounded by open foraging habitat.	***Potential:*** the small willow grove associated with the seasonal pond provides potentially suitable nesting habitat.
California horned lark (nesting) *Eremophilia alpestris actia*	--	CSC	Short-grass prairie, "bald hills", mountain meadows, open coastal plains, fallow grain fields, alkali flats.	***Potential:*** suitable nesting habitat present; documented nesting approximately 1.3 miles north of the project site (CNDDB).
Prairie falcon (nesting) *Falco mexicanus*	BCC	CSC	Inhabits dry open terrain, either level or hilly. Breeding sites located on cliffs.	***Not Expected:*** suitable nesting habitat is not present; could occasionally forage on the project site.
Bald eagle (nesting and wintering) *Haliaeetus leucocephalus*	FT	SE	Most nests within 1 mile of water; nests in large, old growth, or dominant live tree with open branches, especially ponderosa pine; roosts communally in winter.	***Not Expected:*** no suitable nesting or wintering habitat present; given the relatively small size of the site and distance from large body of water, the species is not expected to forage onsite.
Loggerhead shrike (nesting) *Lanius ludovicianus*	BCC	CSC	Grassland with scattered shrubs, trees, fences, or other perches.	***Potential:*** suitable nesting habitat present; documented nesting approximately 2.7 miles north of the project site (CNDDB).
Mammals				
Pallid bat *Antrozous pallidus*	--	CSC	Deserts, grasslands, woodlands and forests. Most common in open dry habitats with rocky areas for roosting; also known to roost in oak woodlands.	***Not Expected:*** suitable roosting habitat not present.
Berkeley kangaroo rat *Dipodomys heermanni berkeleyensis*	--	--	Open grassy hilltops and open spaces in chaparral and blue oak/grey pine woodlands; requires fine, deep, well-drained soil for burrowing.	***Not Expected:*** suitable habitat is not present; project site is outside of the species' expected range.
Hoary bat *Lasiurus cinereus*	--	CSC	Roosts in dense foliage of medium to large trees; prefers open habitats or habitat mosaics	***Not Expected:*** suitable roosting habitat not present.
San Joaquin pocket mouse *Perognathus inornatus inornatus*	--	*	Typically found in grasslands and blue oak savannahs; requires friable soils.	***Potential:*** suitable habitat present; documented approximately 0.25 miles southeast of the project site (CNDDB).

Common and Scientific Name	Status		Habitat Requirements	Potential On-Site Occurrence
	Federal	State		
American badger *Taxidea taxus*	--	CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils.	***Potential:*** suitable burrow habitat present.
San Joaquin kit fox *Vulpes macrotis mutica*	FT	CT	Annual grasslands or grassy open stages with scattered shrubby vegetation.	***Potential*****:** suitable denning and foraging habitat present; there are numerous documented occurrences of the species in the immediately surrounding area, with the closest being 0.3 mile south of the project site (CNDDB).

STATUS KEY:

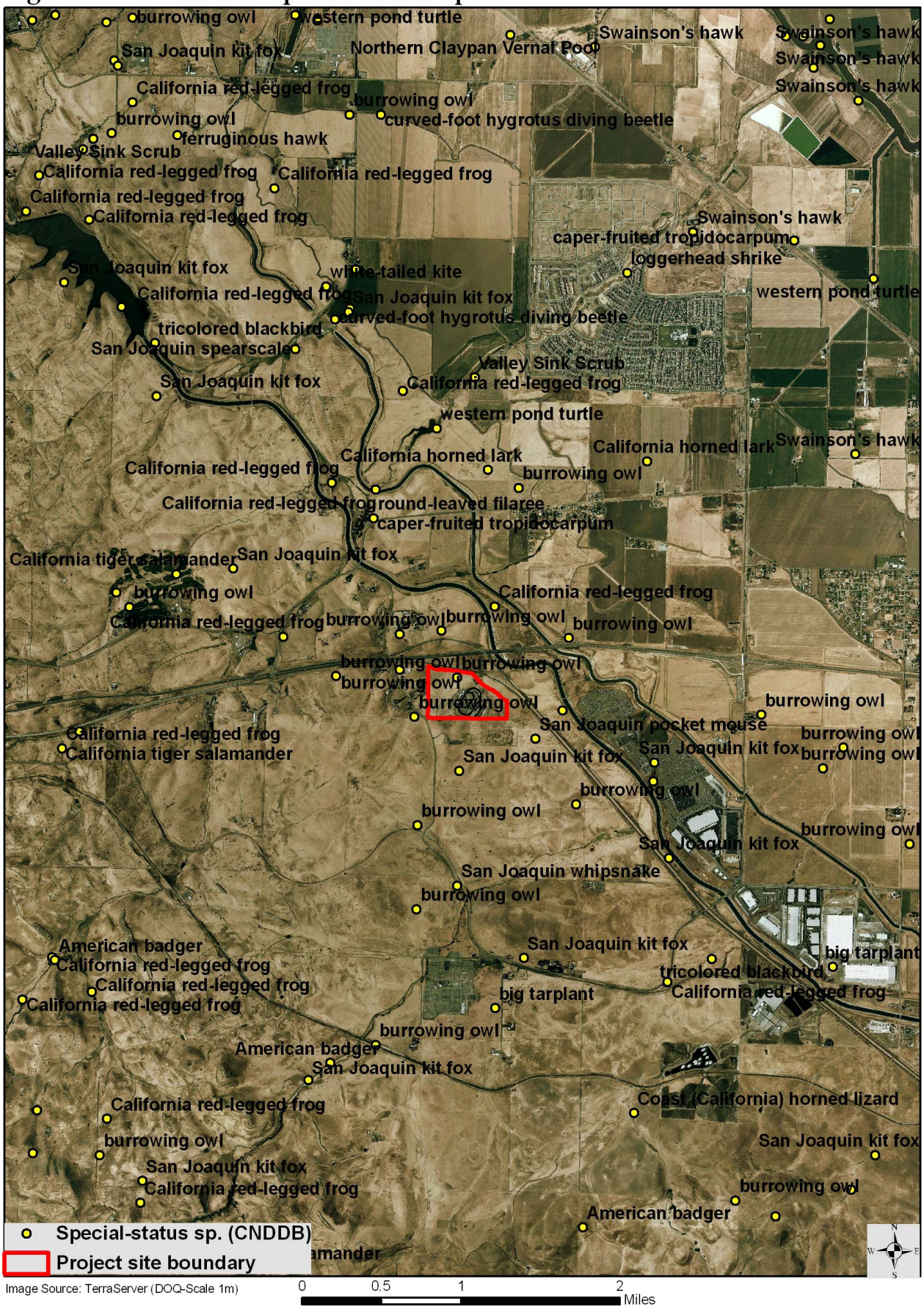
Federal

FE: Federally Endangered
FT: Federally Threatened
BCC: Bird of Conservation Concern

State

CT: California Threatened
CSC: California Species of Concern
**: California Special Animal*

Figure 3: Documented Special-Status Species



3.6 Jurisdictional Resources

U.S. Army Corps of Engineers

Wetlands, creeks, streams, and permanent and intermittent drainages are generally subject to the jurisdiction of the ACOE under Section 404 of the Federal Clean Water Act. The ACOE has jurisdiction up to the "ordinary high water mark" of rivers, creeks, and streams that are considered "Waters of the U.S." as defined by the Clean Water Act. If adjacent wetlands occur, the limits of jurisdiction extend beyond the ordinary high water mark to the outer edge of the wetlands. Wetlands are defined by ACOE as "those areas that are inundated or saturated by surface or groundwater at a frequency or duration to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." (Environmental Laboratory 1987). The presence and extent of wetland areas in this region of the country are normally determined by examination of the vegetation, soils, and hydrology of a site according to the methods outlined in the Corps Wetland Delineation Manual of 1987 (Environmental Laboratory 1987) and the Regional Arid West Supplement (Corps 2006). The Corps definition of wetlands requires that all three wetland identification parameters be met.

A jurisdictional wetland delineation has not been conducted on the project site, but the field survey did include a search for wetland/aquatic features potentially under the jurisdiction of the ACOE. The seasonal pond and associated swale contain some wetland-associated vegetation and could be considered wetlands and/or Other Waters of the U.S. and fall under ACOE jurisdiction. The location of these features is shown in **Figure 2**. The pond drains to the north into a culvert under I-205; should the pond have a hydrologic connection to a Waters of the U.S., the pond and associated swale would likely be jurisdictional under Section 404 of the federal Clean Water Act.

California Department of Fish and Game

Pursuant to Section 1602-1603 of the California Fish and Game Code, the California Department of Fish and Game (CDFG) regulates any activity that may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. The CDFG also has jurisdiction if the activity may substantially adversely affect an existing fish and wildlife resource. Accordingly, the pond is expected to fall under the jurisdiction of the CDFG. As the CDFG asserts jurisdiction to the edge of any riparian-associated vegetation, CDFG jurisdiction would include the pond and associated willows and cottonwood tree.

3.7 Wildlife Movement Corridors

Wildlife movement corridors are described as pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or human induced factors such as urbanization.

The project site is located in an area characterized by sparse development and large expanses of open space. Wildlife can currently move throughout the project site and without restriction to adjacent open space areas to the west and south. I-580 and I-205 may pose some hindrance to wildlife movement to the north and east, but given the presence of culverts under these roadways and lighter traffic levels at night (when most wildlife movement occurs), wildlife movement is not expected to be substantially restricted in these directions.

However, wildlife movement corridors typically occur where there is some restriction to wildlife movement where the corridor provides connectivity between two patches of large open space areas. As such, established wildlife movement corridors often include creeks, riparian zones, woodlands or other habitat feature which provide a movement pathway and cover between open space areas. These types of habitat features associated with established movement corridors are not present on the project site. Additionally, there are no regional or migratory wildlife corridors that have been identified by the County or state resource agencies as occurring on the project site. Consequently, the project site is not considered to be part of an established wildlife movement corridor. As the site is not part of an established wildlife movement corridor, related issues are not further discussed in this report.

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4. POTENTIAL IMPACTS AND MITIGATION MEASURES

The project site has actively been used as a racetrack since 1963. Ongoing activities, including the use of the grassland area for parking, could have adverse affects on sensitive biological resources. These activities have historically occurred and would not be altered by the proposed project. As such, they are considered part of the existing biological condition of the project site and related adverse affects on biological resources are not analyzed in this report.

The following section provides a discussion of the potential project-related impacts to biological resources and recommends future actions and/or measures to address these potential impacts. Please see **Section 1, Introduction**, for a discussion of the project components for which associated impacts are analyzed.

4.1 Special Status Plant Species

Based the quality and types of habitat present, it is considered unlikely that any special-status plant species occur on the project site. However, in the absence of conducting appropriately timed surveys for special-status plant species, the possible occurrence of special-status plants on the project site cannot be completely eliminated.

Recommended Measure

1(A) Appropriately timed surveys for locally occurring special-status plant species should be conducted prior to the commencement of construction activities occurring on undeveloped lands. These surveys should occur during the peak blooming period of the target species (spring and early summer). Should any special-status plant species be identified, the location of the proposed mobile homes and signage should be relocated to avoid the construction-related loss of special-status plants.

4.2 Special Status Wildlife Species

(i) Federally-Listed and/or State-Listed Wildlife Species

California tiger salamander (*Ambystoma californiense*), **Federally Threatened, California Species of Special concern**. California tiger salamander (CTS) breed/develop in seasonal pools and ponds, but otherwise spend most of their post-metamorphic lives in widely dispersed underground retreats (e.g., small mammal burrows). Following the onset of fall or winter rains, CTS emerge from upland sites on rainy nights to migrate to breeding ponds. Breeding migrations have been recorded at distances of up to 1.3 miles between upland habitat and breeding ponds (Sweet 1998). CTS require relatively long-lasting pools for completing

metamorphosis and studies have shown that larvae metamorphosed and left the breeding pond 60 to 94 days (8.6 to 13.4 weeks) after the eggs have been laid (Feaver 1971).

The project site is located within the range of the Central Population of California tiger salamander, within the East Bay Region, but is not located within a designated Critical Habitat unit (Federal Register 2005). Based on the CNDDB, the closest documented occurrence of CTS to the project site is located approximately 1.5 miles northwest of the project site.

The onsite seasonal pond provides potentially suitable breeding habitat. The pond was dry at the time of the field survey conducted on July 11, 2007. However, given the presence of cattails around the pond's outer margin, the pond likely had recently dried. As such, it is reasonable to assume that the pond holds water for sufficient duration to facilitate CTS breeding and larvae metamorphosis. The surrounding grasslands contain abundant ground squirrel burrows and provide suitable upland habitat for CTS.

Given the known of occurrence of CTS near the project site, the presence of suitable breeding habitat, and the presence of suitable upland habitat, the species has potential to breed and occupy upland habitat on the project site. Additionally, should CTS breed within 1.3 miles of the project site, in the absence of physical barriers to movement, these CTS could disperse and occupy upland habitat on the project site. Should the species be present, the placement of mobile homes and the installation of signage could result in the loss of CTS from upland habitats. Additionally, any activities that could adversely affect the seasonal pond could result in the loss of breeding habitat and/or individual salamanders.

Recommended Measures

2(A) A California Tiger Salamander Site Assessment Report should be prepared in accordance with the Interim Guidance on Site Assessments and Field Surveys for Determining Presence or a Negative finding of the California Tiger Salamander (USFWS 2003). Based on this document, the USFWS will provide guidance on how to proceed. For the reasons discussed above, it should be assumed that the USFWS will conclude that the species could occur on the project site.

2(B) Protocol-level surveys for CTS may be conducted to determine if the species is present on the project site. These surveys include two years of aquatic larvae surveys and a drift fence study in the intervening winter. Alternatively, measure 2(C) could be implemented with USFWS approval.

2(C) Alternatively to measure 2(B), the presence of CTS on the project site could be assumed. This would include assuming that CTS breed in the seasonal pond and occupy all surrounding grassland areas as upland habitat while not breeding. The proposed project includes the loss of some upland habitat associated with the placement of mobile homes and the installation of signage. To compensate for the loss of upland CTS habitat, the USFWS generally requires a mitigation ratio of 3:1. Mitigation could be achieved through the purchase of credits at a USFWS-approved mitigation bank or through the placement of a conservation easement over occupied CTS habitat.

2(D) In the absence of a negative survey finding (see 2B), measures to ensure the protection (including water quality) of the seasonal pond as CTS breeding habitat should be implemented.

California red-legged frog *(Rana draytonii)***, Federally Threatened, California Species of Special Concern.** The California red-legged frog (CRLF) breeds in streams, deep pools, backwaters within streams and creeks, ponds, marshes, sag ponds, dune ponds, lagoons, and stock ponds. Breeding adults are often associated with deep (greater than 0.7 meter [2 feet]) still or slow moving water and dense, shrubby riparian or emergent vegetation (Hayes and Jennings 1988), but frogs have been observed in shallow sections of streams and ponds that are devoid of vegetative cover. Breeding generally occurs November through March and larvae undergo metamorphosis 3.5 to 7 months after hatching (Jenning and Hayes 1990). The CRLF also utilizes non-aquatic habitats for refuge and dispersal. Sheltering habitat for CRLF is potentially all aquatic, riparian, and upland habitats within the range of the species and includes any landscape features that provide cover, such as existing animal burrows, boulders or rocks, organic debris, and industrial debris (USFWS 2002). The species has also been documented dispersing through areas with sparse vegetative cover and dispersal patterns are considered to be dependent on habitat availability and environmental conditions (N. Scott and G. Rathbun *in litt.* 1998).

The project site is located within the range of the CRLF, but is not located within a designated Critical Habitat unit (Federal Register 2006). Based on the CNDDB, the closest documented occurrence of CRLF is located approximately 0.4 mile north of the project site; this occurrence appears to have a hydrologic connection to the onsite seasonal pond. There are also other occurrences of CRLF within 1-mile of the project site (CNDDB).

The onsite seasonal pond provides suitable aquatic CRLF habitat. During summer months when the pond is dry, CRLF could shelter within the associated willows, within cracks in the pond bottom, within small mammal burrows in the surrounding grasslands, or potentially disperse to other nearby aquatic habitats.

Given the known occurrence of CRLF near the project site, the presence of suitable aquatic habitat, and the presence of suitable summer/refuge habitat, the species has potential to occur on the project site. Should the species be present, the placement of mobile homes and the installation of signage could result in the loss of CRLF from upland habitats. Additionally, any activities that could adversely affect the seasonal pond could also result in the loss of occupied habitat and/or individual CRLF.

Recommended Measures

3(A) A California Red-Legged Frog Site Assessment Report should be prepared in accordance with the USFWS Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog (August 2005). Based on this document, the USFWS will provide guidance on how to proceed. For the reasons discussed above, it should be assumed that USFWS will conclude that the species could occur on the project site.

3(B) Protocol-level surveys for CRLF may be conducted to determine if the species is present on the project site. The survey protocol requires that 8 individual surveys be conducted, including six surveys within the breeding season (January 1-June 30) and two surveys during the non-breeding season (July 1-September 30). Alternatively, measure 3(C) could be implemented with USFWS approval.

3(C) Alternatively to measure 3(B), the presence of CRLF on the project site could be assumed. This would include assuming that CRLF occupy the seasonal pond when water is present and all surrounding grassland areas during the dry

summer months. The proposed project includes the loss of some upland habitat associated with the placement of mobile homes and the installation of signage. To compensate for the loss of upland CRLF habitat, the USFWS generally requires a mitigation ratio 3:1. Mitigation could be achieved through the purchase of credits at a USFWS-approved mitigation bank or through the placement of a conservation easement on occupied CRLF habitat.

3(D) In the absence of a negative survey finding (see 3B), measures to ensure the protection (including water quality) of the seasonal pond as CRLF aquatic habitat should be implemented.

San Joaquin kit fox (*Vulpes macrotis mutica*), **Federally Threatened, California Threatened**. The San Joaquin kit fox currently occurs in several plant communities in the northern portion of its range, including grasslands, scrublands, and agricultural land where uncultivated land is maintained. The species uses dens for temperature regulation, shelter, reproduction, and escape from predators. Kit fox may dig their own dens but often modify and use dens constructed by other animals such as ground squirrels, badgers, and coyote. The species may also use human-made structures (e.g., culverts, abandoned pipelines) as dens. Kit fox often change dens and numerous dens may be used throughout the year. Actively used dens may not always show sign of use.

The project site is located in the northern range of the San Joaquin kit fox. Critical habitat for the species has not been designated by the USFWS. Based on the CNDDB, the closest documented occurrence of San Joaquin kit fox is located approximately 0.3 mile south of the project site. Numerous other documented occurrences of the species occur in the surrounding project area (CNDDB).

The project site contains potential den sites and suitable foraging habitat for San Joaquin kit fox. Numerous potential dens of adequate size (i.e., den entrances of 8 to 10 inches) occur on the project site. Several of these potential dens are of the characteristic shape (i.e., higher than wide) as those often used by the species (photographs are included in **Appendix A**). Some of these potential dens appeared to be originally excavated by ground squirrels but enlarged by a larger mammal. Ground squirrels are abundant on the site, which provide a suitable prey base for San Joaquin kit fox.

Given the known of occurrence of San Joaquin kit fox near the project site, the presence of suitable den habitat, and an abundant prey base, the species has potential to occur on the project site. Should the species be present, the placement of mobile homes and the installation of signage could result in the loss of an occupied den and associated animals and/or the loss of kit fox foraging habitat.

Recommended Measures

4(A) A San Joaquin kit fox Early Evaluation should be prepared in accordance with the USFWS San Joaquin Kit Fox Protocol for the Northern Range (June 1999). Based on this document, the USFWS will provide guidance on how to proceed. For the reasons discussed above, it should be assumed that USFWS will conclude that the species could occur on the project site.

4(B) Based on the Early Evaluation, the USFWS may require protocol surveys to be conducted on the project site and the surrounding area. These surveys are required to be conducted between May 1 and November 1 and include 10 nights of spotlight surveys and the use of scent stations.

4(C) Should the proposed project include the direct loss of potential den site(s) or construction in the vicinity of potential den site(s), preconstruction clearance surveys would be required. Additionally, the USFWS will require other measures to ensure that no loss or harassment of kit fox occurs during construction activities.

4(D) To compensate for the loss of kit fox habitat, the USFWS generally requires a mitigation ratio 3:1. Mitigation could be achieved through the purchase of credits at a USFWS-approved mitigation bank or through the placement of a conservation easement on kit fox habitat.

Swainson's hawk (*Buteo swainsoni*), **Federal Bird of Conservation Concern**, **California Threatened**. Swainson's hawk nest in the Central Valley and other parts of California but migrate to wintering grounds in South America. Nesting generally occurs in scattered trees along riparian systems adjacent to suitable foraging areas, such as grassland, fallow fields, or alfalfa or grain fields supporting rodent populations.

Suitable nesting habitat for Swainson's hawk is not present on the project site given the lack of developed riparian areas or trees of adequate size. However, suitable foraging habitat (including abundant ground squirrels) is present. Given the rarity of this hawk species, the CDFG has developed recommendations to protect suitable Swainson's hawk foraging habitat within a 10-mile radius of an active nest (i.e., a nest used during one or more of the last 5 years) (CDFG 1994). Based on a review of the CNDDB, the closest documented "active" Swainson's hawk nest is located 2.7 miles northeast of the project site. This nesting occurrence (CNDDB Occurrence #1229) was documented in 2003 and is assumed to be currently active by the CDFG.

The proposed project would result in the loss of a small area of Swainson's hawk foraging habitat associated with the placement of two mobile homes and the installation of signage. The CDFG may require compensation for this foraging habitat.

Recommended Measures

5(A) The acreage of Swainson's hawk foraging habitat to be developed should be quantified.

5(B) As recommended by the CDFG (CDFG 1994), the applicant should mitigate for the loss of suitable Swainson's hawk foraging habitat at a ratio of 0.75:1. These lands may be protected through fee title acquisition or a conservation easement on lands which provide suitable Swainson's hawk foraging habitat.

(ii) Other Special-Status Wildlife Species

Burrowing owl (*Athene cunicularia*), **Federal Bird of Conservation Concern**, **California Species of Special Concern**. A total of eight burrowing owls were observed on the project site during the field survey conducted on July 11, 2007. Adult and juvenile owls were observed, indicating that the species successfully nests on the project site. Evidence of nesting was observed at three separate burrows indicating that at least three nesting pairs inhabit the site. However, as a focused burrowing owl census was not conducted, and given the size of the site, additional nesting pairs may occur. The CNDDB also contains a record of the species nesting on the project site, as well as numerous other documented occurrences of the species nesting in immediately surrounding areas.

The proposed project would result in the loss of a small area of burrowing owl habitat associated with the placement of two mobile homes and the installation of signage. These activities could result in the loss or noise-related abandonment of an active burrowing owl nest. Should these activities occur outside of the nesting season, they could result in the abandonment of an occupied burrow by a resident or wintering burrowing owl.

Recommended Measures

6(A) Within 14 days prior to construction activities, a qualified biologist should conduct a survey to determine if burrowing owl is present at the site, and the nesting status of the individuals at the site. If nesting is not occurring, construction work can proceed after any owls have been evacuated from the construction footprint using CDFG-approved burrow closure procedures and after alternative burrow sites have been provided in accordance with the CDFG Staff Report on Burrowing Owl Mitigation (October 1995). If nesting is occurring, construction work within 500 feet shall be delayed until fledglings have left the nest. Limits of construction to avoid an active nest should be established in the field with flagging, fencing, or other appropriate barrier, and construction personnel should be instructed on the sensitivity of nest areas. A biological monitor should serve as a construction monitor during those periods when construction activities would occur near active nest areas to ensure that no inadvertent impacts on these nests occur.

6(B) A minimum of 6.5 acres of foraging habitat should be maintained on the project site per burrowing owl pair (or resident single bird). To assure that this occurs, a census of the number of nesting pairs on the project site should be conducted during the peak breeding season (April 15 to July 15). If it is determined that the proposed project would reduce foraging habitat for each nesting pair to below 6.5 acres, then the purchase/protection of additional burrowing owl habitat may be required.

White-tailed kite (*Elanus leucurus*), **California Fully Protected; California horned lark** (*Eremophilia alpestris actia*), **California Species of Special Concern**; and **loggerhead shrike** (*Lanius ludovicianus*), **Federal Bird of Conservation Concern**, **California Species of Special Concern**. These special-status bird species could nest on the project site based on the presence of suitable habitat and documented nesting occurrences in the project area. If present, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season.

Recommended Measure

7(A) Within two weeks of the commencement of construction activities that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically February through August in the project region), the applicant should have surveys conducted by a qualified biologist (e.g., experienced with the nesting behavior of bird species of the region). The intent of the surveys would be to determine if active nests of special-status bird species or other species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the construction zone or within 300 feet (500 feet for raptors) of the construction zone. The surveys should be timed such that the last survey is concluded no more than one week prior to initiation of construction work. If ground disturbance activities are delayed, then additional pre-construction surveys will be conducted such that no more

than one week will have elapsed between the last survey and the commencement of ground disturbance activities.

If active nests are found in areas that could be directly affected or subject to prolonged construction-related noise, clearing and construction within 300 feet of the nest (500 feet for raptors), or at a distance deemed sufficient by the qualified biologist, should be postponed or halted until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest should be established in the field with flagging, fencing, or other appropriate barrier, and construction personnel should be instructed on the sensitivity of nest areas. The biologist should serve as a construction monitor during those periods when construction activities would occur near active nest areas to ensure that no inadvertent impacts on these nests will occur.

San Joaquin whipsnake (*Masticophis flagellum ruddocki*), **California Species of Special Concern**. Suitable habitat for this species is present, including dry habitat with no tree cover and abundant small mammal burrows. This species is known to occur in the immediate project area and has been documented approximately 1-mile south of the project site (CNDDB). If present, construction activities associated with the placement of the mobile homes and installation of signage could result in the loss of individual San Joaquin whipsnake.

Recommended Measure

8(A) Prior to the commencement of construction, temporary fencing (designed to prevent entry of San Joaquin whipsnake) should be installed around the perimeter of all proposed construction areas. Capture and translocation of San Joaquin whipsnake should be conducted by a qualified biologist. All animals removed from the construction zone would be relocated to suitable habitats outside of the proposed disturbance boundaries. The translocation process should be conducted until it is determined that all special-status animal species have been removed from the disturbance boundary. This measure should not be implemented until the disturbance zone is determined to not contain San Joaquin kit fox or burrowing owl (see Measures 4 and 6, above).

Coast horned lizard (*Phrynosoma coronatum*), **California Species of Special Concern**. Suitable habitat for this species is present and the species has been documented approximately 0.5-mile north of the project site (CNDDB). If present, construction activities associated with the placement of the mobile homes and the installation of signage could result in the loss of individual coast horned lizard.

Recommended Measure

9(A) Prior to the commencement of construction, temporary fencing (designed to prevent entry of coast horned lizard) should be installed around the perimeter of all proposed construction areas. Capture and translocation of coast horned lizard should be conducted by a qualified biologist. All animals removed from the construction zone would be relocated to suitable habitats outside of the proposed disturbance boundaries. The translocation process should be conducted until it is determined that all special-status animal species have been removed from the disturbance boundary. This measure may be conducted concurrently with measure 8(A). This measure should not be implemented until

the disturbance zone is determined to not contain San Joaquin kit fox or burrowing owl (see Measures 4 and 6, above).

Western spadefoot (*Spea hammondii*), **California Species of Special Concern**. The seasonal pond provides potentially suitable breeding habitat for this species and suitable burrowing habitat occurs in the immediately surrounding area. This species generally does not disperse far from aquatic habitat. As the proposed project does not include any construction activities in or near the seasonal pond, no construction-related loss of individual spadefoot or habitat is anticipated. However, any activities that could indirectly affect the seasonal pond could result in the loss of breeding habitat and/or individual spadefoot.

Recommended Measure

10(A) Surveys should be conducted to determine if western spadefoot breed in the seasonal pond. In the absence of a negative survey finding, measures should be incorporated into the project to maintain or improve water quality within the pond.

San Joaquin pocket mouse (*Perognathus inoratus inoratus*), **Special Animal**. Suitable habitat for this species is present and the species has been documented approximately 0.25 miles southeast of the project site (CNDDB). If present, construction activities associated with the placement of the mobile homes and the installation of signage could result in the loss of individual San Joaquin pocket mouse.

Recommended Measure

11(A) Prior to the commencement of construction, temporary fencing (designed to prevent entry of San Joaquin pocket mouse) should be installed around the perimeter of all proposed construction areas. Trapping and translocation of San Joaquin pocket mouse should be conducted by a qualified biologist. All animals removed from the construction zone would be relocated to suitable habitats outside of the proposed disturbance boundaries. The translocation process should be conducted until it is determined that all special-status animal species have been removed from the disturbance boundary. This measure may be conducted concurrently with measure 8(A) and 9(A). This measure should not be implemented until the disturbance zone is determined to not contain San Joaquin kit fox or burrowing owl (see Measures 4 and 6, above).

American Badger (*Taxidea taxus*), **California Species of Special Concern**. This species is known to occur in the project area and burrows of suitable size occur throughout the project site. If present, construction activities associated with the placement of the mobile homes and the installation of signage could result in the loss of individual American badger.

Recommended Measure

12(A) Prior to the commencement of construction, all burrows within the disturbance boundaries should be inspected for sign of use by American badger. If sign of the species is observed, then humane exclusion from burrows may be conducted when young are not present. Construction may proceed when the disturbance boundary is determined to not contain American badger.

4.3 Jurisdictional Resources

The pond and associated swale are potentially under the jurisdiction of the ACOE and CDFG. As these features would not be directly affected by the proposed project, no permits from these regulatory agencies would be required. However, construction-related activities could still result in erosion and other adverse affects to the seasonal pond.

Recommended Measure

13(A) Best Management Practices should be implemented during construction to prevent erosion or other adverse affects to the seasonal pond. These may include silt fencing and the storage and maintenance of construction equipment away from the pond.

5.0 CONCLUSIONS

Based on the presence of suitable habitat and documented occurrences in the project area, three federally-listed wildlife species have potential to occur on the project site, including California tiger salamander, California red-legged frog, and San Joaquin kit fox. As the proposed project includes activities that could result in the loss or harassment of these species, consultation with the USFWS should be initiated.

The proposed project could also result in the loss or harassment of other special-status wildlife species, including burrowing owl (which is known to nest on the project site), Swainson's hawk, white-tailed kite, California horned lark, loggerhead shrike, San Joaquin whipsnake, coast horned lizard, western spadefoot, San Joaquin pocket mouse, and American badger. The measures recommended in this report would address potential impacts to these species.

The occurrence of special-status plant species on the project site is considered unlikely. However, in the absence of focused rare plant surveys conducted during the appropriate blooming period, the potential occurrence of special-status plants cannot be completely eliminated. In the event that a population(s) of special-status plants is found during the recommended surveys, given the size and disturbed condition of the project site, it is expected that the location of the mobile homes and signage could be adjusted to avoid the loss of special-status plants.

The project site has actively been used as a racetrack since 1963. Ongoing activities, including the use of the grassland area for parking, could have adverse affects on sensitive biological resources. These activities have historically occurred and would not be altered by the proposed project. As such, they were considered part of the existing biological condition of the project site and related adverse affects on biological resources were not analyzed in the report.

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APPENDIX A – SITE PHOTOGRAPHS

Photo 1: Annual grassland; northwest view

Photo 2: Annual grassland; east view

Photo 3: Annual grassland parking area, pond in background; view northeast

Photo 4: Seasonal Pond; east view

Photo 5: Seasonal Pond; west view

Photo 6: Mammal burrow

Photo 7: Mammal burrow, higher than wide (typical of kit fox den shape)

Appendix B: Special-Status Plant Species Occurring in the Project Region

California Department of Fish and Game
Natural Diversity Database
CNDDB Wide Tabular Report

Name (Scientific/Common)	CNDDB Ranks	Other Lists	Listing Status	Total EO's	Element Occ Ranks						Population Status		Presence		
					A	B	C	D	X	U	Historic >20 yr	Recent <=20 yr	Pres. Extant	Poss. Extirp.	Extirp.
Allium sharsmithiae Sharsmith's onion	G2 S2.3	CNPS: 1B.3	Fed: None Cal: None	8 S:3	1	0	1	0	0	1	1	2	3	0	0
Amsinckia grandiflora large-flowered fiddleneck	G1 S1.1	CNPS: 1B.1	Fed: Endangered Cal: Endangered	8 S:4	0	1	0	0	0	3	0	4	4	0	0
Amsinckia lunaris bent-flowered fiddleneck	G2 S2.2	CNPS: 1B.2	Fed: None Cal: None	50 S:1	0	0	0	0	0	1	0	1	1	0	0
Astragalus tener var. tener alkali milk-vetch	G1T1 S1.1	CNPS: 1B.2	Fed: None Cal: None	67 S:2	0	0	0	0	2	0	1	1	0	2	0
Atriplex cordulata heartscale	G2? S2.2?	CNPS: 1B.2	Fed: None Cal: None	58 S:2	0	1	0	0	0	1	0	2	2	0	0
Atriplex depressa brittlescale	G2Q S2.2	CNPS: 1B.2	Fed: None Cal: None	52 S:14	4	5	3	0	0	2	0	14	14	0	0
Atriplex joaquiniana San Joaquin spearscale	G2 S2.1	CNPS: 1B.2	Fed: None Cal: None	84 S:21	1	5	6	2	0	7	1	20	21	0	0
Balsamorhiza macrolepis var. macrolepis big-scale balsamroot	G3G4T2 S2.2	CNPS: 1B.2	Fed: None Cal: None	25 S:1	0	0	0	0	1	0	0	1	0	0	1
Blepharizonia plumosa big tarplant	G1 S1.1	CNPS: 1B.1	Fed: None Cal: None	48 S:22	3	9	3	0	0	7	4	18	22	0	0
California macrophyllum round-leaved filaree	G3 S3.1	CNPS: 1B.1	Fed: None Cal: None	93 S:8	0	1	0	0	0	7	6	2	8	0	0
Campanula exigua chaparral harebell	G2 S2.2	CNPS: 1B.2	Fed: None Cal: None	31 S:2	2	0	0	0	0	0	0	2	2	0	0
Caulanthus coulteri var. lemmonii Lemmon's jewelflower	G4T2 S2.2	CNPS: 1B.2	Fed: None Cal: None	48 S:3	0	0	0	0	0	3	3	0	3	0	0
Centromadia parryi ssp. congdonii Congdon's tarplant	G4T3 S3.2	CNPS: 1B.2	Fed: None Cal: None	76 S:1	0	1	0	0	0	0	0	1	1	0	0
Cirsium fontinale var. campylon Mt. Hamilton thistle	G2T2 S2.2	CNPS: 1B.2	Fed: None Cal: None	40 S:3	0	2	1	0	0	0	1	2	3	0	0
Cordylanthus mollis ssp. hispidus hispid bird's-beak	G2T2 S2.1	CNPS: 1B.1	Fed: None Cal: None	29 S:1	0	1	0	0	0	0	0	1	1	0	0

Name (Scientific/Common)	CNDDB Ranks	Other Lists	Listing Status	Total EO's	Element Occ Ranks						Population Status		Presence		
					A	B	C	D	X	U	Historic >20 yr	Recent <=20 yr	Pres. Extant	Poss. Extirp.	Extirp.
Cordylanthus palmatus palmate-bracted bird's-beak	G1 S1.1	CNPS: 1B.1	Fed: Endangered Cal: Endangered	24 S:1	0	1	0	0	0	0	0	1	1	0	0
Coreopsis hamiltonii Mt. Hamilton coreopsis	G2 S2.2	CNPS: 1B.2	Fed: None Cal: None	22 S:3	0	1	0	0	0	2	1	2	3	0	0
Deinandra bacigalupii Livermore tarplant	G1 S1.2	CNPS: 1B.2	Fed: None Cal: None	3	0	0	1	0	0	2	0	3	3	0	0
Delphinium californicum ssp. interius Hospital Canyon larkspur	G3T2? S2?	CNPS: 1B.2	Fed: None Cal: None	11 S:3	0	0	0	0	0	3	3	0	3	0	0
Delphinium recurvatum recurved larkspur	G2 S2.2	CNPS: 1B.2	Fed: None Cal: None	79 S:4	1	0	0	0	0	3	2	2	4	0	0
Eschscholzia rhombipetala diamond-petaled California poppy	G1 S1.1	CNPS: 1B.1	Fed: None Cal: None	10 S:4	1	1	0	0	1	1	2	2	3	1	0
Fritillaria falcata talus fritillary	G2 S2.2	CNPS: 1B.2	Fed: None Cal: None	17 S:2	2	0	0	0	0	0	1	1	2	0	0
Helianthella castanea Diablo helianthella	G3 S3.2	CNPS: 1B.2	Fed: None Cal: None	82 S:2	0	0	1	0	0	1	0	2	2	0	0
Hesperolinon sp. nov. "serpentinum" Napa western flax	G2 S2.1	CNPS: 1B.1	Fed: None Cal: None	39 S:2	2	0	0	0	0	0	0	2	2	0	0
Hibiscus lasiocarpus rose-mallow	G4 S2.2	CNPS: 2.2	Fed: None Cal: None	130 S:8	0	0	2	0	0	6	5	3	8	0	0
Legenere limosa legenere	G2 S2.2	CNPS: 1B.1	Fed: None Cal: None	61 S:1	0	0	0	0	0	1	0	1	1	0	0
Lilaeopsis masonii Mason's lilaeopsis	G3 S3.1	CNPS: 1B.1	Fed: None Cal: Rare	146 S:9	1	3	3	0	0	2	1	8	9	0	0
Limosella subulata Delta mudwort	G4?Q S2.1	CNPS: 2.1	Fed: None Cal: None	42 S:2	0	2	0	0	0	0	0	2	2	0	0
Madia radiata showy madia	G2 S2.1	CNPS: 1B.1	Fed: None Cal: None	41 S:2	0	0	0	0	0	2	2	0	2	0	0
Malacothamnus hallii Hall's bush mallow	G1Q S1.2	CNPS: 1B.2	Fed: None Cal: None	32 S:1	0	1	0	0	0	0	0	1	1	0	0

Name (Scientific/Common)	CNDDB Ranks	Other Lists	Listing Status	Total EO's	Element Occ Ranks						Population Status		Presence		
					A	B	C	D	X	U	Historic >20 yr	Recent <=20 yr	Pres. Extant	Poss. Extirp.	Extirp.
Phacelia phacelioides Mt. Diablo phacelia	G1 S1.2	CNPS: 1B.2	Fed: None Cal: None	16 S:1	0	0	0	0	0	1	1	0	1	0	0
Plagiobothrys glaber hairless popcorn-flower	GH SH	CNPS: 1A	Fed: None Cal: None	9 S:1	0	0	0	0	0	1	1	0	0	1	0
Senecio aphanactis rayless ragwort	G3? S1.2	CNPS: 2.2	Fed: None Cal: None	35 S:2	0	1	0	0	0	1	1	1	2	0	0
Symphyotrichum lentum Suisun Marsh aster	G2 S2.2	CNPS: 1B.2	Fed: None Cal: None	139 S:1	0	0	0	0	0	1	1	0	1	0	0
Trifolium depauperatum var. hydrophilum saline clover	G5T2? S2.2?	CNPS: 1B.2	Fed: None Cal: None	19 S:1	0	0	0	0	0	1	1	0	1	0	0
Tropidocarpum capparideum caper-fruited tropidocarpum	G1 S1.1	CNPS: 1B.1	Fed: None Cal: None	19 S:9	0	0	0	0	7	2	9	0	2	3	4