



# **LIVE OAK ASSOCIATES, INC.**

an Ecological Consulting Firm

**BIOLOGICAL CONSTRAINTS ANALYSIS  
ASSESSOR'S PARCEL NUMBERS  
223-031-024, 223-031-025, and 223-031-027  
GONZALES, CALIFORNIA**

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## EXECUTIVE SUMMARY

Live Oak Associates, Inc. conducted an investigation of the biological resources of a 771-acre parcel (APN 223-031-024, 223-031-025, and 223-031-027) in Gonzales, Monterey County, California in order to assess possible regulatory constraints to future site development. The site is located east of Highway 101, between Fanoe Road and Iverson Road.

The site consists primarily of agricultural fields that have been farmed by the Fanoe family for 80 to 90 years. At the time of the survey, portions of the fields consisted of mature crops, others were disced, and some were planted with grass to stabilize the soils. Irrigation canals run around and through this site, and catch-ponds and a small reservoir, used solely for agricultural purposes, were scattered throughout the site. Development in the form of residences was present in the western half of the agricultural fields. Contaminated areas were also present near the residences and in the northeastern corner of the farm.

The site provides limited habitat for a number of special status plant and animal species. Such species include two California species of special concern, the California tiger salamander (*Ambystoma californiense*) and the western burrowing owl (*Athene cunicularia*). Neither of these species was observed on the site, but both could arguably occur there from time to time. Issues related to the federally endangered and state threatened San Joaquin kit fox are also discussed in this report. While development of the site is not expected to result in significant impacts to the San Joaquin kit fox, the resource agency may choose to argue to the contrary.

Potential breeding and estivation habitat for the California tiger salamander (CTS) is present in and around a catch-pond (located in the south central portion of the site) and the reservoir. Presence/absence surveys are recommended before developmental planning would be undertaken to determine an appropriate set back should CTS be found on-site. Monterey County generally follows the recommendation of the CDFG and USFWS and wildlife biologists regarding mitigation for sensitive species.

Some of the same burrows (ground squirrel) that provide potential estivation habitat for CTS also provide potential nesting habitat for the western burrowing owl (BUOW). Pre-construction surveys for burrowing owls are recommended, so that protective buffers could be established around active nests that may be present at the time of construction. The loss of burrowing owl habitat due to site development may require that compensatory or replacement habitat be set aside.

## 1.0 INTRODUCTION

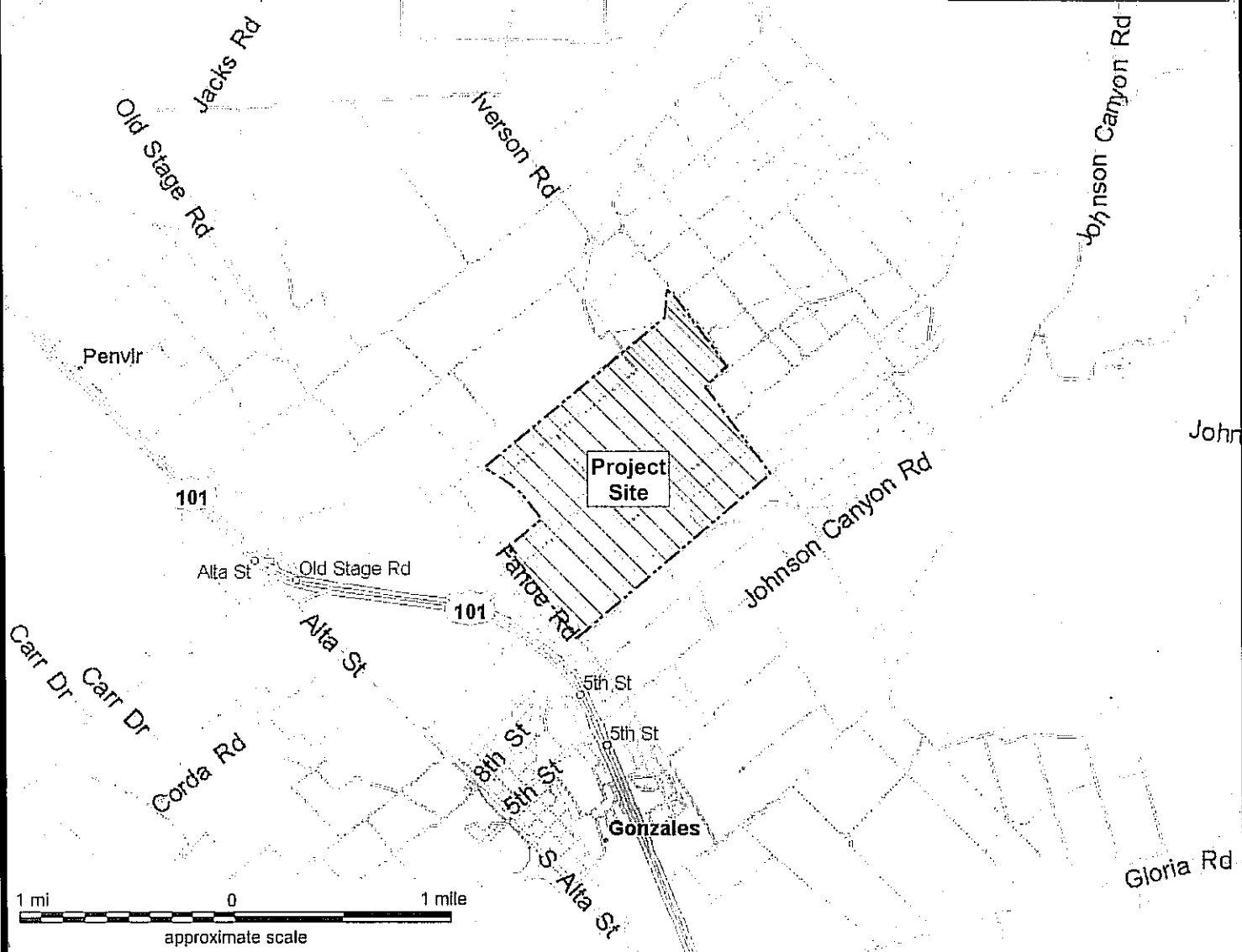
The technical report that follows discusses biological constraints to possible development of a property (APN 223-031-024, 223-031-025, and 223-031-027) located within the City of Gonzales, Monterey County, California (Figure 1). The 771-acre site is bordered on the west by Fanoe Road, on the east by Iverson Road, and on the north and south by agricultural fields. The site can be found in Sections 16, 17, 20 and 21 of Township 16 south, Range 5 east (Figure 2).

The objective of this report is to identify possible constraints to future site development related to sensitive biotic resources, significant biotic habitats, regional fish and wildlife movement corridors, and existing local, state and federal natural resource protection laws regulating land use. Provisions of the California Environmental Quality Act (CEQA), the Federal Clean Water Act (CWA), the State and Federal Endangered Species Acts (FESA and CESA respectively), California Fish and Game Code, and California Water Code could greatly affect project costs, depending on the natural resources present on the parcel.

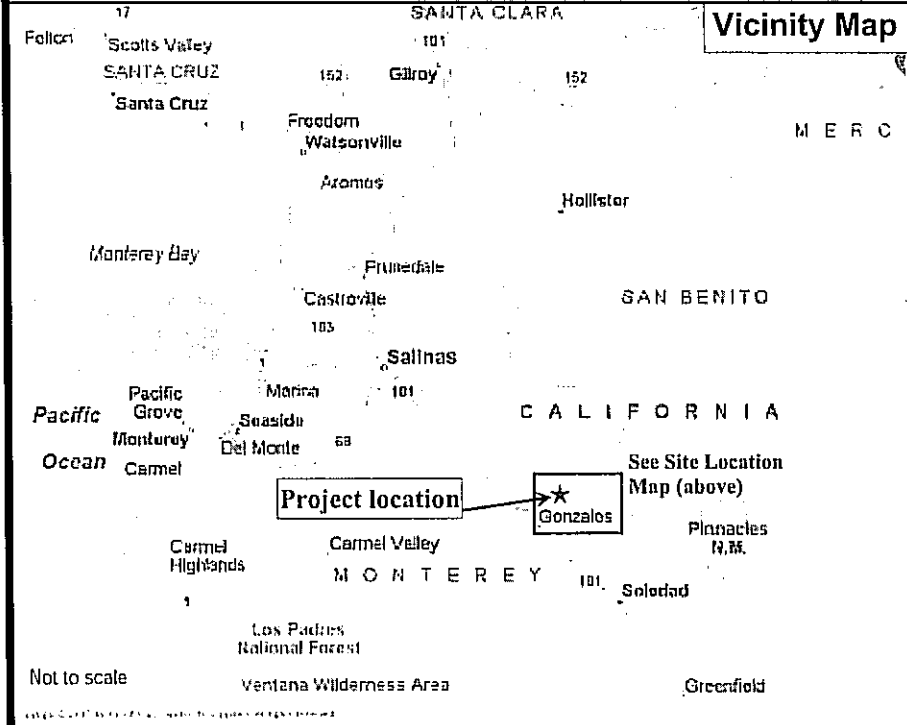
A number of state and federally listed plant and animals, as well as other special status animal species (i.e. candidate species for listing and California species of special concern), have been documented within 15 miles of the project site. These species include the Congdon's Tarplant (*Hemizonia parryi ssp. congdonii*), and the Indian valley bush mallow (*Malacothammus aboriginum*), both of which have been noted within five miles of the project site; the San Joaquin kit fox (*Vulpes macrotis mutica*), which has been documented within 15 miles of the site; and the western burrowing owl and California tiger salamander, each of which have been documented within one mile of the site. This report evaluates the site's suitability for these and other species.

CEQA is also concerned with project impact on riparian habitat, wildlife movement corridors, fish and wildlife habitat, and jurisdictional wetlands, as well as project compliance with special ordinances and state laws protecting regionally sensitive biotic resources, and approved habitat conservation plans. Therefore, this report addresses the relevance of each of these issues to eventual site development.

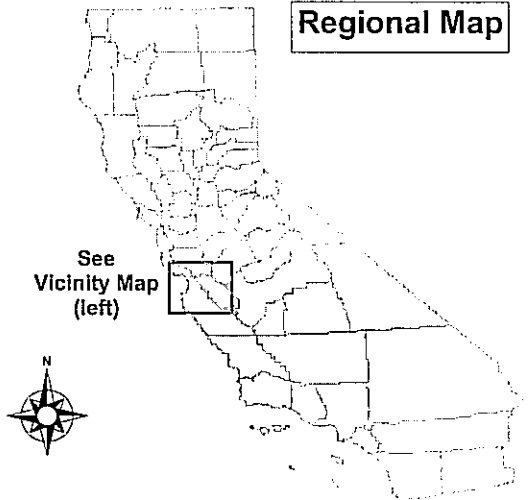
**Site Location Map**




**Vicinity Map**



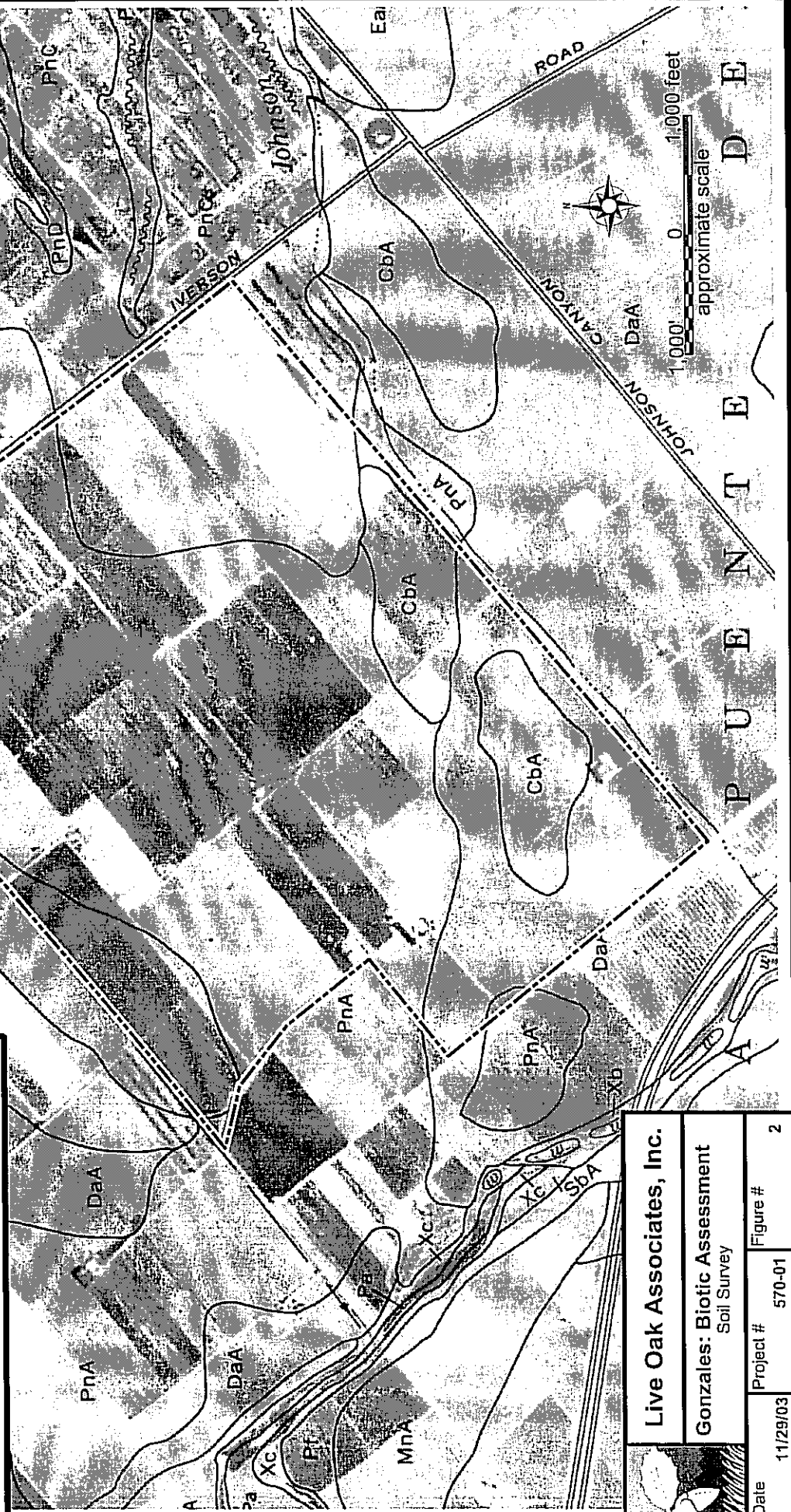
**Regional Map**



 <b>Live Oak Associates, Inc.</b>		
<b>Gonzales: Biotic Assessment</b> Site / Vicinity Map		
Date	Project #	Figure #
11/29/03	570-01	1

**LEGEND**

- PnC Placentia sandy loam, 2 to 9%
- PnA Placentia sandy loam, 0 to 2%
- DaA Danville sandy clay loam, 0 to 2%
- CbA Chualar loam, 0 to 2%



**Live Oak Associates, Inc.**

**Gonzales: Biotic Assessment  
Soil Survey**

Date	11/29/03	Project #	570-01	Figure #	2
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The constraints analysis, as discussed in Section 3.0 of this report, is based on the known and potential biotic resources of the study area as discussed in Section 2.0 of this report. Sources of information used in the preparation of this analysis included: (1) the *California Natural Diversity Data Base* (CDFG 2003), (2) the *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001), (3) current listings from Special Plants and Animals (CDFG 2002), and (4) manuals and references related to plants and animals of Monterey County.

Melissa Denena (wetland biologist/botanist) and Michele Korpos (wildlife biologist) conducted a field survey on the site on November 19, 2003. This survey consisted of driving the perimeter and canal maintenance roads scanning the site for all biotic resources and noting in a field notebook what was seen. Areas that had not been directly disturbed as a result of the agricultural practices were walked in a meandering fashion so as to provide as much visual coverage of the site as possible. Information gathered in the field was used to identify plant communities and characterize the botanical and wildlife resources occurring on the site and in the region.

Detailed surveys for sensitive biological resources were not conducted for this study. The level of effort was sufficient to locate and establish the general extent of wetland and special status species habitat that might be present, but was not sufficient to establish wetland boundaries or the extent of actual use of on-site habitats by special status species. Field surveys conducted for this study were sufficient to assess the significance of biological constraints associated with the site, and to assess the need for more detailed study that could be warranted if sensitive biotic resources were identified in this first round of surveys. Delineating all wetlands that may be present or mapping the extent of all endangered species habitat present would only be warranted preliminary to detailed site planning.

## 2.0 EXISTING CONDITIONS

The study area is located on the floor of the Salinas Valley with elevations ranging from approximately 150 National Geodetic Vertical Datum (NGVD) in the western portion of the site and slowly sloping to 270 feet NGVD in the eastern portion of the site. The Fanoë family has farmed the majority of the site for the past 80 to 90 years. A number of irrigation canals run through the site and around its borders, which eventually connect to a slough located west of the site. There were also a number of catch-ponds and reservoirs scattered throughout the site. The site also contains an area where contaminated soils were dumped in the past, along with underground and above ground gasoline and diesel tanks and an approximate 500 square foot (0.01 acres) dump that was covered in the early 1980's. A total of eight structures (houses and barns) are located in the western portion of the site along with associated wells that pump from approximately 900 feet. Therefore, farming activities over the years has substantially disturbed the site.

Four soil series are represented on the site (see also Table 1 below). Like most soils of the Salinas Valley, the soils of the project site consist of alluvium derived primarily from granitic and schistose rock (NRCS 1978). This area has been used primarily for agricultural uses although more intense development is becoming common. Of the four soil series that occur on the site, none are considered to be hydric and only one has hydric inclusions. The Placentia sandy loam with 0% to 2% slopes, which is the dominant soil type on the project site, is not overall a hydric soil, but contains hydric inclusions where depressions are present. This means that in areas that were naturally at a lower elevation than the surrounding upland, hydric inclusions could occur. The remaining three soil types of the site are not considered to be hydric.



<b>TABLE 1. SOILS OF THE STUDY AREA (from NRCS 1978).</b>				
<b>Soil Series/Soil</b>	<b>Map Symbol</b>	<b>Parent Material</b>	<b>Surface Permeability</b>	<b>Hydric</b>
<b>Chualar Series</b> Chualar loam, 2%-5% slopes	CbA	Alluvium of granitic and schistose rock	Moderately slow	No
<b>Danville Series</b> Danville sandy clay loam, 0%-2% slopes	DaA	Alluvium of granitic and schistose rock	Slow	No
<b>Placentia Series</b> Placentia sandy loam, 0%-2% slopes	PnA	Alluvium of granitic and schistose rock	Very Slow	Hydric inclusions in depressions
<b>Placentia Series</b> Placentia sandy loam, 0%-2% slopes	PnC	Alluvium of granitic and schistose rock	Very Slow	No

The Salinas Valley has a Mediterranean climate with warm to hot dry summers and cool winters. Annual precipitation in the general vicinity of the site is highly variable from year to year. Average annual rainfall is approximately 17 inches, almost 85% of which falls between the months of October and March.

Stormwater runoff readily infiltrates into the sandy soils, but when field capacity has been reached or an impervious hardpan layer encountered, gravitational water drains into the irrigation canals, which flows into the slough off-site, either as shallow groundwater or as surface sheet flow. Natural drainages in the form of swales and channels are absent from the site.

Like the site itself, surrounding lands have been highly modified for agricultural production and low-quality rangelands, or otherwise developed as roads, individual residences, residential subdivisions, and commercial structures. Natural biotic habitats do not occur in the immediate vicinity of the site. Therefore, due to the lack of connectivity between open space and the site, many sensitive plant and animal species occurring in these natural lands would have great difficulty accessing the site, even if habitat suitable for them were present.

## 2.1 BIOTIC HABITATS

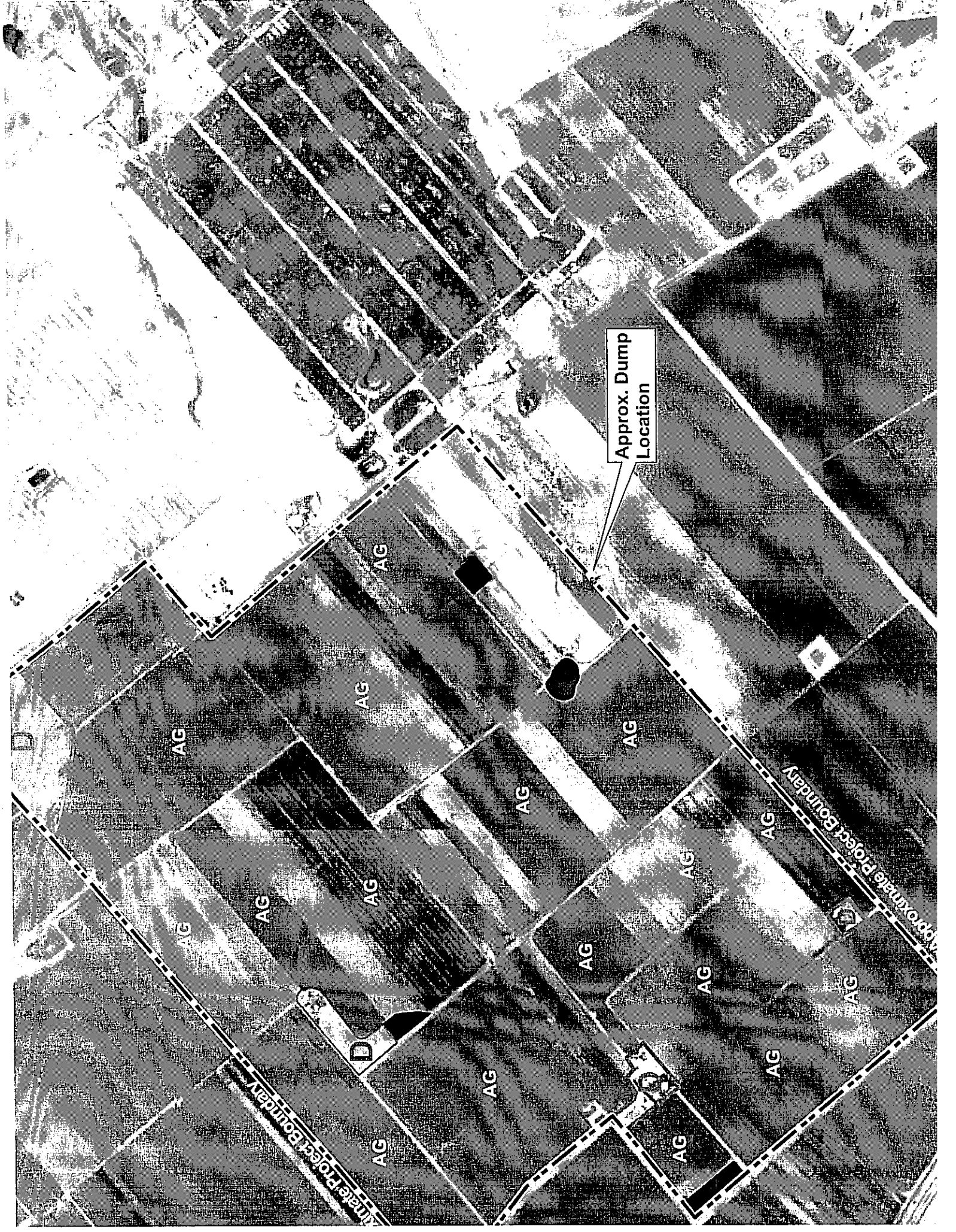
Two biotic habitats were identified on the study area. For purposes of this report, these biotic habitats have been defined as agricultural lands and aquatic (Figure 3). There are also developed portions of the site along with contaminated areas.

### 2.1.1 Agricultural Lands

The vast majority of the study area was being used for agricultural purposes. Crops that have recently been planted include broccoli, cauliflower, and a variety of lettuce species. At the time of the survey the majority of the site had recently been disced. Other areas were planted with the various crops or a grass species to stabilize the soil before planting. Natural vegetation was sparse to absent from this area. The only plant species observed in this habitat, besides what had been planted, was cheeseweed (*Malva parviflora*) and sowthistle (*Sonchus* sp.) Michael Fanoie stated that Round-Up and Rodeo were used as pesticides on the site to keep certain areas free of unwanted vegetation.

Compared to more natural habitats, managed agricultural lands provide relatively low habitat value for wildlife due to the lack of understory vegetation that would typically provide food and cover. Annual management practices for the agricultural lands would eliminate breeding and foraging habitat for many small birds and mammals native to the region.

Although none were observed, a number of reptile species would potential occur in this habitat. The sparse cover described above, the numerous rodent burrows observed throughout this habitat, and an occasionally large rodent population, make the site suitable for at least one native species of lizard, the northwestern fence lizard (*Sceloporus occidentalis longipes*), and several species of snake, including gopher snakes (*Pituophis melanoleucus*), and common kingsnakes (*Lampropeltis getulus*).



Approx. Dump  
Location

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Approximate Project Boundary

Approximate Project Boundary

Approximate Project Boundary

Several avian species were observed on or near the agricultural lands of this site during the field survey. Some of the resident species observed include killdeer (*Charadrius vociferous*), and Anna's hummingbird (*Calypte anna*). A red-tailed hawk (*Buteo jamaicensis*) was observed perched on a wire over the site, as was an American kestrel (*Falco sparverius*), they were possibly foraging for rodents. Other raptor species potentially resident in the area would include white-tailed kites (*Elanus caeruleus*), northern harriers (*Circus cyaneus*), and red-shouldered hawks (*Buteo lineatus*). Both barn owls (*Tyto alba*) and great horned owls (*Bubo virginianus*) possibly forage over the grassy fields of the site. Winter visitors to the site could include ferruginous hawks (*Buteo regalis*), rough-legged hawk (*Buteo lagopus*), merlins (*Falco columbarius*), and Say's phoebe (*Sayornis saya*), which was observed during site visit.

Small mammals occur in agricultural lands such as those of the site, but populations would be highly variable depending on the condition of the fields. Freshly plowed or cultivated fields barren of vegetation provide little cover for most terrestrial vertebrates. Because portions of this site had not obviously been disced recently, small mammal populations seemed to be substantial in areas, especially around the undisturbed catch-ponds. In particular, California ground squirrels (*Spermophilus beecheyi*) were very abundant. Judging from the number of burrows present, Botta's pocket gophers (*Thomomys bottae*) were probably also numerous. Other small mammals likely to be present in this field include deer mice (*Peromyscus maniculatus*), California voles (*Microtus californicus*), and possibly black-tailed hares (*Lepus californicus*). Not only do the small mammals inhabiting the site attract predators such as snakes and raptors described above, but larger mammals as well. Gray foxes (*Urocyon cinereoargenteus*) and coyotes (*Canis latrans*) would be common to this site. Tracks of bobcat (*Lynx rufus*), fox and coyote were observed around the area of the south central catch-pond during the site visit.

### **2.1.2 Aquatic**

There were a number of irrigation canals that ran through or around the site. These drainages eventually flow into a slough located to the west of the site. This slough appears to percolate into the soil (off-site) before reaching a larger body of water, such as the Salinas River; therefore, these man-made canals do not appear to have taken over the function of a historic

drainage. There were also four catch-ponds located in the western half of the site; one in the northwestern corner, one along Fanoe Road where the road turns, one in the south-central portion, and one in the north-central portion near three residences. These ponds are used to catch run-off from the adjacent agricultural crops. According to Michael Fanoe, these ponds are “cleaned out” annually by the farmer. The pond in the north-central portion had recently been “cleaned out” and resembled the disced agriculture fields (bare of vegetation with disturbed soils). Finally, there is one reservoir located directly east of the catch-pond in the south-central portion of the site. This reservoir is used to pump water for the crops.

Vegetation in these areas was overall sparse. The irrigation canals consisted of areas that were completely barren of vegetation to areas of relatively dense vegetation. Grasses observed in the canals included Mediterranean barley (*Hordeum marinum*), Bremudagrass (*Cynodon dactylon*), and rabbitsfoot grass (*Polypogon monspeliensis*). Forbs observed included cheeseweed, sonchus, panicked willow-herb (*Epilobium ciliatum*), wild fennel (*Foeniculum vulgare*), wild radish (*Raphanus sativus*), Russian thistle (*Salsola iberica*), black mustard (*Brassica nigra*), and hirschfeldia (*Hirschfeldia incana*). A species of cactus (*Opuntia* sp.) was also observed scattered in this area. The catch-ponds were dominated by tule (*Scirpus*) and the reservoir was almost completely absent of vegetation.

The sparse vegetation of the catch-ponds and reservoir provides moderate foraging habitat and marginal nesting habitat for more common resident avian species (e.g., killdeer), and they provide moderate foraging habitat for wintering avian species such as the Say’s phoebe. However, the aquatic areas do not provide any nesting habitat for, say, red-tailed hawks or other species that utilize tall trees to roost in. Barn owls and great-horned owls likely forage around the aquatic areas. The catch-ponds could provide important stop-over habitat for many migrant species moving north from Mexico and Central America during the spring or moving south from the Pacific Northwest and Canada during the fall (e.g., Say’s phoebe), especially when vegetation is allowed to grow.

The aquatic areas of the site provide habitat for many of the same mammal species occurring in the agricultural lands, but the slightly greater vegetative cover would facilitate larger populations, as well as the presence of some additional species. For example, Virginia

opossums (*Didelphis virginiana*), striped (*Mephitis mephitis*), and raccoons (*Procyon lotor*) could all occur in this habitat. As noted previously, coyotes, foxes, and bobcat tracks were observed in these aquatic areas. Crawdads (sp?) were observed in the reservoir, and the reservoir's banks were riddled with California ground squirrel (*Spermophilus beecheyi*) burrows and gopher mounds. The reservoir and the south-central catch-pond are potential habitat areas for the CTS (discussed further in Section 3.3.1 below).

### **2.1.3 Developed and Contaminated Areas**

The project site consisted of developed areas along with areas that have been contaminated by gasoline and diesel fuel. Six residential houses exist in the western portion of the site, along with a large storage structure and barn associated with the residence along Fanoe Road where the road turns. At this same residence, an above ground diesel tank and underground gasoline tanks exist. There are also above ground diesel tanks located at the residence, which was formally used as a dairy, in the north-central portion of the site. The developed areas were minimally landscaped with species such as eucalyptus (*Eucalyptus* sp.) and oleander (*Nerium oleander*).

An area approximately 15 acres in size in the northeastern corner of the site has been categorized as contaminated (Michael Fanoe, pers. comm.). Apparently, diesel- and gasoline-contaminated soils were previously dumped in this area as recent as three years ago, 2000. The level of contamination surrounding the actual diesel and gasoline tanks, if any exists, is unknown. There is also an area, approximately 6,000 cubic feet (10'x50'x12'--0.01 acres), along the south-central boundary that was used by Michael Fanoe as a dump. A hole was opened in an access road, and the debris was covered with soil (approximately 1980); therefore, it is currently indistinguishable from the surrounding areas.

The dairy farm located directly to the east of the site allows manure to flow through the site's drainages. A culvert flows under Iverson Road along the eastern boundary, close to the southeastern corner of the site, which connects the two properties. The adjacent property (dairy) has the capability of pumping their run-off before it reaches the Fanoe property, although, they are not currently doing so (Michael Fanoe, pers. comm.).

Vegetation in these areas was extremely sparse. As stated above, surrounding the residential houses, some landscaped species were present. Wildlife species would not be expected to be common in these areas. The avian species found in the above habitats would likely pass through these areas, and may periodically nest in the few trees on the site. Mammals expected to occur in this habitat include domestic cats (*Felis catus*) and dogs (*Canis familiaris*) and the small rodents mentioned in the above habitats.

## 2.2 SPECIAL STATUS PLANTS AND ANIMALS

Several species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered “rare” and are vulnerable to extirpation as the state’s human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.2 state and federal laws have provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as “candidates” for such listing. Still others have been designated as “species of special concern” by the CDFG. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened or endangered (CNPS 2001). Collectively, these plants and animals are referred to as “special status species.”

A number of special status plants and animals occur in the vicinity of the study area. Nine U.S.G.S. 7.5 minute quadrangles were used in the search for special status plants and animals in the vicinity of the study area. These quads included Gonzales, Natividad, Mount Harlan, Paicines, Mount Johnson, Soledad, Palo Escrito Peak, Rana Creek, and Chualar. These species, and their potential to occur in the study area, are listed in Table Two on the following pages. The locations of nearby sightings of special status species have been shown in Figures 4 and 5. Sources of information for this table included *California's Wildlife, Volumes I, II, and III* (Zeiner et al. 1988), *California Natural Diversity Data Base* (CDFG 2003),

*Endangered and Threatened Wildlife and Plants (USFWS 2002), Annual Report on the Status of California State Listed Threatened and Endangered Animals and Plants (CDFG 2002), and The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (CNPS 2001).*



**TABLE 2. LIST OF SPECIAL-STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY**

PLANTS (adapted from CDFG, 2003 and CNPS, 2001)

*Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act*

Species	Status	Habitat	*Occurrence in the Study Area
Monterey Spineflower ( <i>Chorizanthe pungens</i> var. <i>pungens</i> )	FT, CNPS 1B	Found in maritime chaparral, cismontane woodlands, coastal dunes and scrub, and sandy valley and foothill grasslands at elevations of 3-450 meters.	<b>Absent.</b> Habitat suitable for this species was absent from the site. Annual, blooms March-June.
Robust Spineflower ( <i>Chorizanthe robusta</i> var. <i>robusta</i> )	FE, CNPS 1B	Openings in cismontane woodlands and sandy/gravelly coastal dunes and scrub at 3-300 meters.	<b>Absent.</b> Habitat suitable for this species was absent from the site. The robust spineflower is known from four extended occurrences. Annual, blooms March-September.

*Other special status plants listed by CNPS*

Species	Status	Habitat	*Occurrence in the Study Area
Carmel Valley Malacothrix ( <i>Malacothrix saxatilis</i> var. <i>arachnoidea</i> )	CNPS 1B	Rocky chaparral at elevations of 25-235 meters.	<b>Absent.</b> Habitat suitable for this species was absent from the site. The Carmel Valley malacothrix is known from approximately ten occurrences. Perennial, blooms March-December.
Hooked Popcorn-Flower ( <i>Plagiobothrys uncinatus</i> )	CNPS 1B	Sandy chaparral, cismontane woodlands, and valley and foothill grasslands at elevations of 300-730 meters.	<b>Absent.</b> Habitat suitable for this species was absent from the site. The site is located well below expected elevation. Annual, blooms April-May.
Congdon's Tarplant ( <i>Centromadia parryi</i> ssp. <i>congdonii</i> )	CNPS 1B	Alkaline valley and foothill grasslands at 1-230 meters.	<b>Unlikely.</b> Habitat suitable for this species was minimal on the site. There were few areas of natural habitat remaining around the catchment ponds. Also, Michael Fanoie stated that these areas are altered annually and according to the soil survey, the soils are only considered to be moderately alkaline (NRCS 1978). Nearest documented occurrence is 2 miles NW of the site (CDFG 2003). Annual, blooms June-November.
Pinnacles Buckwheat ( <i>Eriogonum nortonii</i> )	CNPS 1B	Sandy chaparral and valley and foothill grasslands, often in areas that have been burned, at elevations of 300-975.	<b>Absent.</b> Habitat suitable for this species was absent from the site. The site is located well below expected elevation. Known from approximately 20 occurrences. Annual, blooms May-June.
Shining Navarretia ( <i>Navarretia nigelliformis</i> ssp. <i>radians</i> )	CNPS 1B	Cismontane woodland, valley and foothill grasslands, and vernal pools at elevations of 200-1000 meters.	<b>Absent.</b> Habitat suitable for this species was absent from the site. The site is located well below expected elevation. Annual, blooms May-July.
Napa False Indigo ( <i>Amorpha californica</i> var. <i>napensis</i> )	CNPS 1B	Openings in broadleaved upland forests, cismontane woodlands, and chaparral at elevations of 150-2000.	<b>Absent.</b> Habitat suitable for this species was absent from the site. Very few shrubs were found. The site is located well below expected elevation. Deciduous shrub, blooms March-July.

**TABLE 2. LIST OF SPECIAL-STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY  
cont.**

*Other special status plants listed by CNPS (cont.)*

Species	Status	Habitat	*Occurrence in the Study Area
Wooley-Headed Lessingia ( <i>Lessingia hololeuca</i> )	CNPS 3	Broadleaved upland forests, lower montane coniferous forests, coastal scrub, and clay/serpentine valley and foothill grasslands at elevations of 15-305 meters.	<b>Absent.</b> Habitat suitable for this species was absent from the site. Annual, blooms June-October.
Indian Valley Bush Mallow ( <i>Malacothamnus aboriginum</i> )	CNPS 1B	Chaparral and rocky cismontane woodlands, often in areas that have been burned, at elevations of 150-1700 meters.	<b>Absent.</b> Habitat suitable for this species was absent from the site. Very few shrubs were found. The site is located well below expected elevation. Nearest documented occurrence 1.75 miles NE of the site (CDFG 2003). Deciduous shrub, blooms March-October.
Carmel Valley Bush Mallow ( <i>Malacothamnus palmeri</i> var. <i>involutus</i> )	CNPS 1B	Chaparral, cismontane woodland, and coastal scrub at 30-1100 meters.	<b>Absent.</b> Habitat suitable for this species was absent from the site. Very few shrubs were found. Deciduous shrub, blooms May-October.
Monterey Manzanita ( <i>Arctostaphylos montereyensis</i> )	CNPS 1B	Fewer than 10 occurrences; chaparral (maritime), cismontane woodlands, and sandy coastal scrub at elevations of 30-730 meters.	<b>Absent.</b> Habitat suitable for this species was absent from the site. Very few shrubs were found. Evergreen shrub, blooms February-March.

**ANIMALS (adapted from CDFG 2003 and USFWS 2002)**

*Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act*

Species	Status	Habitat	*Occurrence in the Study Area
Smith's Blue Butterfly ( <i>Euphilotes enoptes smithi</i> )	FE	Most commonly associated with coastal dunes & coastal sage scrub plant communities in Monterey & Santa Cruz Counties. Hostplant: <i>erigonum latifolium</i> and <i>erigonum parvifolium</i> are utilized as both larval and adult foodplants.	<b>Absent.</b> No suitable habitat for this species occurs on the site.
California Red-legged Frog ( <i>Rana aurora draytonii</i> )	FT, CSC	Rivers, creeks and stock ponds of the Sierra foothills and coast range, preferring pools with overhanging vegetation.	<b>Absent.</b> No suitable habitat exists on site.
Peregrine Falcon ( <i>Falco peregrinus</i> )	FE, CE	Individuals breed on cliffs in the Sierra or in coastal habitats; occurs in many habitats of the state during migration and winter.	<b>Possible.</b> The site provides potential foraging habitat for transients and migrating birds.
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	FE, CE, CP	Breeds near lakes, streams, or other bodies of water. Usually forages over these bodies of water.	<b>Possible.</b> Potential forager, but no nesting habitat on site.

**TABLE 2. LIST OF SPECIAL-STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY cont.**

*Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act (cont.)*

Species	Status	Habitat	*Occurrence in the Study Area
San Joaquin Kit Fox ( <i>Vulpes macrotis nutica</i> )	FE, ST	Open or low vegetation with loose soils. Requires underground dens to raise pups, avoid predators, and regulate temperature. Dens are often provided by ground squirrels.	<b>Unlikely.</b> Because of the site's isolation from contiguous habitat, it is unlikely a kit fox could find its way to the site. Kit fox have historically been observed approximately 15 miles (east and south) from the site.

*Federal Candidate Species and State Species of Special Concern*

Species	Status	Habitat	*Occurrence in the Study Area
Western Spadefoot ( <i>Scaphiopus hammondi</i> )	FSC	Breeds in rainpools that remain for $\geq 3$ weeks. Prefers alluvial soils.	<b>Unlikely.</b> Because the reservoir contains crawdads, Western spadefoot would not breed in there. Furthermore, there are no recorded observations of this species in the vicinity of the site.
California Tiger Salamander ( <i>Ambystoma californiense</i> )	FC, CSC	Vernal pools and stock ponds of central California.	<b>Possible.</b> Estivation habitat is present on site, and the reservoir and south-central catch-pond could well provide breeding habitat. CTS were observed (2 adults and over 100 larvae) less than 1 mile from the site in sedimentation ponds located at the Johnson Canyon Road Landfill. Recommend presence/absence surveys.
Western Pond Turtle ( <i>Clemmys marmorata</i> )	CSC	Open slow-moving water of rivers and creeks of central California with rocks and logs for basking.	<b>Absent.</b> No suitable habitat exists on site.
White-tailed Kite ( <i>Elanus caeruleus</i> )	CSC	Open grasslands and agricultural areas throughout central California.	<b>Likely.</b> Suitable foraging habitat exists on site for this species. None were observed during surveys, but the species is expected to occur at times on site.
Northern Harrier ( <i>Circus cyaneus</i> )	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	<b>Likely.</b> The site and surrounding lands provide foraging habitat, but marginal nesting habitat.
Merlin ( <i>Falco columbarius</i> )	CSC	This falcon, which breeds in Canada, winters in a variety of California habitats, including grasslands, savannahs, wetlands, etc.	<b>Possible.</b> Winter migrants may pass through the site from time to time.
Burrowing Owl ( <i>Athene cunicularia</i> )	CSC	Found in open, dry grasslands, deserts and ruderal areas. Requires suitable burrows. This species is often associated with California ground squirrels.	<b>Possible.</b> 1998 observation of 2-3 adults at the Johnson Canyon Landfill, approximately 1 mile from the project site. However, no owls or their sign (feathers, white wash or pellets) were observed during site visit.
California Horned Lark ( <i>Eremophila alpestris actia</i> )	CSC	Short-grass prairie, annual grasslands, coastal plains, open fields.	<b>Possible.</b> The site provides suitable foraging and nesting habitat.

**TABLE 2. LIST OF SPECIAL-STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY  
cont.**

*Federal Candidate Species and State Species of Special Concern (cont.)*

Species	Status	Habitat	*Occurrence in the Study Area
Loggerhead Shrike ( <i>Lanius ludovicianus</i> )	CSC	Nests in tall shrubs and dense trees, forages in grasslands, marshes, and ruderal habitats.	<b>Possible.</b> The site and surrounding lands provide foraging habitat, but no nesting habitat.
Tricolored Blackbird ( <i>Agelaius tricolor</i> )	CSC	Breeds near fresh water in dense emergent vegetation, though found year-round in open fields and on dairy farms.	<b>Unlikely.</b> The project site only occasionally supports dense vegetation in and around the catch-ponds. The closest observation (1998) occurred in Paicines, more than 20 miles away.
Black Swift ( <i>Cypseloides niger</i> )	CSC	Migrants and transients found throughout many habitats of state.	<b>Possible.</b> Migrants and transients may forage on the site during migration. Breeding habitat is absent.
Vaux's Swift ( <i>Chaetura vauxi</i> )	CSC	Migrants and transients move through the foothills of the western Sierra in spring and late summer. Some individuals breed in region.	<b>Possible.</b> Migrants and transients may forage on the site during migration. Breeding habitat is absent.
Townsend's Big-eared Bat ( <i>Plecotus townsendii townsendii</i> )	CSC	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats of the state.	<b>Unlikely.</b> Marginal foraging habitat occurs on site and marginal roosting habitat may be present in the buildings on site.
California Mastiff Bat ( <i>Eumops perotis californicus</i> )	CSC	Forages over many habitats, requires tall cliffs or buildings for roosting.	<b>Unlikely.</b> Marginal foraging habitat occurs on site and marginal roosting habitat may be present in the buildings on site.
Pallid Bat ( <i>Antrozous pallidus</i> )	CSC	Grasslands, chaparral, woodlands, and forests of California; most common in dry rocky open areas providing roosting opportunities.	<b>Unlikely.</b> Marginal foraging habitat occurs on site and marginal roosting habitat may be present in the buildings on site.
Ringtail ( <i>Bassariscus astutus</i> )	CP	Brushy and wooded areas, preferring to live along watercourses in lower to middle elevations.	<b>Absent.</b> No suitable habitat is present on site for this species.

**Explanation of Occurrence Designations and Status Codes**

- \*Present:** Species observed on the site at time of field surveys or during recent past.
- Likely:** Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
- Possible:** Species not observed on the site, but it could occur there from time to time.
- Unlikely:** Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient
- Absent:** Species not observed on the site, and precluded from occurring there because habitat requirements not met.

**Status Codes**

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPE	Federally (Proposed) Endangered	CR	California Rare
FC	Federal Candidate	CSC	California Species of Special Concern
FSC	Federal Species of Concern	CNPS	California Native Plant Society Listing
FSS	U.S. Forest Service Sensitive Species	1A	Plants Presumed Extinct in California
		1B	Plants Rare, Threatened, or Endangered in California and elsewhere.
		2	Plants Rare, Threatened, or Endangered in California, but more common elsewhere.

5 mile radius

INDIAN VALLEY BUSH MALLOW

CONGDON'S TARPLANT

Project Site

BURROWING OWL

CALIFORNIA TIGER SALAMANDER

101

CONGDON'S TARPLANT

CALIFORNIA TIGER SALAMANDER

United States Highway 101

CONGDON'S TARPLANT

CONGDON'S TARPLANT



approximate scale



Live Oak Associates, Inc.

Gonzales: Biotic Assessment  
Special Status Species

Date 11/29/03

Project # 570-01

Figure # 4

Salinas

10 mile radius

San Joaquin  
Kit Fox

Project  
Site

Upper State Highway 101

101

101

San Joaquin  
Kit Fox

San Joaquin  
Kit Fox

10 miles

approximate scale



Live Oak Associates, Inc.

Gonzales: Biotic Assessment  
San Joaquin Kit Fox Observations

Date

11/29/03

Project #

570-01

Figure #

4

### **2.3 JURISDICTIONAL WATERS**

Jurisdictional waters include rivers, creeks, drainages with a defined bed and bank that may carry at most ephemeral flows, lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG) and the California Regional Water Quality Control Board (RWQCB) (see Section 3.2.4 of this report for additional information).

Jurisdictional waters are presumed to be absent from the site and its immediate vicinity. However, a formal delineation would need to be conducted to ensure that the Corps would in fact, not claim the various farm drainages noted on-site.

### 3.0 CONSTRAINTS ANALYSIS

As noted in Section 1.0 of this report wetlands, special status plants and animals (i.e. threatened and endangered species, candidate species for threatened or endangered status, species of special concern, etc.), and animal movement corridors are all biotic resource issues that may be regulated according to provisions of federal and state laws. These issues can affect how a property is used or developed. The discussion below addresses possible constraints to the development of the subject parcel (APN 223-031-024, 223-031-025, and 223-031-027) that are associated with sensitive biological resources occurring on the site or on adjoining lands. This discussion recognizes that not all impacts are significant and, therefore, establishes the criteria by which significance is determined. The discussion also examines state and federal laws that determine how sensitive habitats are developed.

#### 3.1 SIGNIFICANCE CRITERIA

General plans, area plans, and specific projects are subject to the provisions of the California Environmental Quality Act (CEQA). The purpose of CEQA is to assess the impacts of proposed projects on the environment before they are constructed. For example, site development may require the removal of some or all of its existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Animals adapted to humans, roads, buildings, pets, etc. may replace those species formerly occurring on a site. Plants and animals, which are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed. These impacts may be considered significant or not. According to *Guide to the California Environmental Quality Act* (Remy et al. 1999), “‘Significant effect on the environment’ means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest.” Specific project impacts to biological resources may be considered “significant” if they will:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional



plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan (Remy et al. 1999).

Furthermore, CEQA Guidelines Section 15065 states that a project may trigger the requirement to make a “mandatory findings of significance” if “the project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory.”

## **3.2 RELEVANT GOALS, POLICIES, AND LAWS**

### **3.2.1 Threatened and Endangered Species**

State and federal “endangered species” legislation has provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state

and federal endangered species acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as “species of special status.” Permits may be required from both the CDFG and USFWS if activities associated with a proposed project will result in the “take” of a listed species. “Take” is defined by the state of California as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” (California Fish and Game Code, Section 86). “Take” is more broadly defined by the federal Endangered Species Act to include “harm” (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFG and the USFWS are responding agencies under the California Environmental Quality Act (CEQA). Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

### **3.2.2 Migratory Birds**

State and federal law also protect most birds. The Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

### **3.2.3 Birds of Prey**

Birds of prey are also protected in California under provisions of the State Fish and Game Code, Section 3503.5, 1992), which states that it is “unlawful to take, possess, or destroy any birds in the order *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.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by the CDFG.

### **3.2.4 Wetlands and Other “Jurisdictional Waters”**

Natural drainage channels and wetlands are considered “Waters of the United States” (hereafter referred to as “jurisdictional waters”). The filling or grading of such waters is regulated by the U.S. Army Corps of Engineers (USACE) by authority of Section 404 of the Clean Water Act (Wetland Training Institute, Inc. 1991). The extent of jurisdiction within drainage channels is defined by “ordinary high water marks” on opposing channel banks. Wetlands are habitats with soils which are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated intermittently or permanently saturated by water), and wetland hydrology according to methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987).

All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE (Wetland Training Institute, Inc. 1990). Such permits are typically issued on the condition that the applicant agrees to provide mitigation, which results in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The RWQCB is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit. All projects requiring federal money must also comply with Executive Order 11990 (Protection of Wetlands).

The California Department of Fish and Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1603 of the California Fish and Game Code (CDFG 1995). Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented which protects the habitat values of the drainage in question.

### 3.3 POTENTIAL CONSTRAINTS TO FUTURE SITE DEVELOPMENT

Although a site development plan was not available at the time this report was prepared, the analysis below assumes that most or all of the site between Fanoe Avenue and Iverson Avenue would be developed.

#### 3.3.1 Potential Constraints to Development from the Possible Presence of Special Status Species.

The site provides no habitat for special status plant species (see Table 2). State and federal laws protecting special status plants will not be relevant to development of the site.

The site provides limited habitat for special status animal species. Species potentially affected by eventual site development, or otherwise of concern to state and federal resource agencies are discussed below:

1. California Tiger Salamander. Suitable breeding and estivation habitat does occur on site. Breeding could well occur in the reservoir or any of the catch-ponds on site (especially the south-central catch-pond). If CTS occur on site, they would likely represent a remnant population. While CTS are known to travel up to a mile or more from breeding habitat, the breeding population is generally assumed to be in greater concentration nearer to a pond or other suitable water source. It is highly unlikely that the CTS found less than a mile away from the site (at the Johnson Canyon Road Landfill) would be able to traverse the highly disturbed landscape between their breeding sedimentation ponds and the water sources on the site. Therefore, due to the somewhat limited habitat available and the site's isolation from other CTS populations, if a population of CTS were located on the site and should suffer local extinction, there is no nearby population of CTS that could recolonize this pond. Presence/absence surveys for CTS during this winter season are recommended to determine if, in fact, this species is resident on-site.

2. Western Burrowing Owl. As noted in Table 2, the western burrowing owl and its sign were not observed on the site. The site, however, provides a considerable amount of suitable habitat for this species in the form of numerous California ground squirrel burrow complexes. One or

more burrowing owls may occasionally utilize the site, considering the proximity of previously known owls within one mile of the site. Breeding pairs may establish nest burrows on the site during the spring. Pre-construction surveys are generally advisable so that mortality to adults and young in their nest burrows is avoided. Construction activities resulting in mortality to burrowing owls would be a violation of state and federal law. Pre-construction surveys should occur within 30 days of the onset of any construction activities. During the breeding season, any nesting pairs discovered must be protected from harm by the establishment of suitable buffers around the nest burrow, usually in consultation with the California Department of Fish and Game. The Department may also propose the preservation of suitable nesting and foraging habitat offsite as a mitigation measure. If pre-construction surveys locate resident owls onsite outside of the nesting season (September through January), then these owls can often be passively relocated or evicted according to a relocation/eviction plan acceptable to the Department.

3. San Joaquin Kit Fox. The site provides possible foraging habitat and marginal denning habitat for the San Joaquin kit fox, a small canid species that occurs sparingly in Monterey County. At the time this report was written, there were no kit fox sightings within 10 miles of the site. However, there are three historic records within approximately 15 to 20 miles of the site. Row crops, orchards and vineyards are extensive between the study area and rangeland to the east and south where kit foxes could occur. Should kit foxes move through these farmed areas to the study area, they would potentially forage on the large number of ground squirrels on-site. Because the site is periodically disced, the on-site prey base for the kit fox is periodically disturbed. Therefore, the site does not provide suitable foraging habitat for the kit fox continuously throughout the year.

Development of the site is not expected to result in significant impacts to kit fox individuals or their habitat. Kit fox are not expected to occur on-site due to the extensive farming of the site and region, lack of sightings in the region, and distance to a known population. As noted above, the site has very limited foraging or denning opportunities and the site would not act as a travel corridor, as regional populations of kit fox are only known from the south (15-20 miles).

The U.S. Fish and Wildlife Service has shown considerable interest in the protection of identified kit fox habitat in the region during recent years. This interest has been the result of relatively recent sightings establishing that this species is present in rangeland habitats of Monterey County (south of the site), even if in relatively low numbers. It is possible the Service and CDFG may consider the study area suitable for the kit fox. Even though there is no evidence the species has historically or is currently using the site.

4. Other Special Status Species. Other special status species occurring on the site do so incidental to home range and migratory movements. Most would use the site infrequently at most. Site development would clearly deprive various raptor species of foraging habitat. Such habitat is still regionally abundant, and the loss of such habitat on site would probably not be regionally significant. The EIR prepared for any project considered for the site may, however, consider habitat loss for some species as cumulatively significant. However, due to the highly impacted nature of this site and the low probability of special status species occurring on site, it is not likely that a finding of significance would be warranted.

### **3.3.2 Potential Constraints to Development from the Presence of Riparian Habitats and Other Sensitive Habitats**

Riparian habitats and other sensitive habitats are absent from the site. The entire site consists of man-altered lands in the form of agricultural lands, irrigation canals, catch-ponds, a small reservoir, and developed/contaminated areas.

### **3.3.3 Potential Constraints to Development from the Presence of Jurisdictional Waters**

Waters of the United States and other possible jurisdictional waters (i.e. those subject to the jurisdiction of the state of California) are assumed to be absent from the site. The irrigation canals do not appear to be connected to any Waters of the United States. These canals are man-made and flow into a slough located to the west of the site. This slough appears to percolate into the soils before reaching the Salinas River, thereby making the aquatic habitats of the site isolated. In general the United States Army Corps of Engineers (USACE) do not claim waters similar to the waters located on the site; although, if the existing drainages have taken over the functions of historic drainages of the area, they could claim jurisdiction. The

USACE evaluates projects such as this one on a case by case basis. A wetland delineation would need to be conducted followed by a field visit with the USACE.

It is our professional opinion that due to the fact that the aquatic habitat of the site is man-made and continually managed, as well as isolated, the USACE is not likely to claim jurisdiction.

#### **3.3.4 Potential Constraints to Development Resulting from on-site Wildlife Movements**

The project site does not appear to constitute a “movement corridor” for native wildlife, although a number of species potentially move within it and through it. Although the site is not considered an important movement corridor due to the fact that farmland does not facilitate movement, especially for terrestrial animals, the Salinas River Valley is considered an important migrational corridor for certain species (e.g., southern steelhead). Eventual site development would have an adverse effect on home range and dispersal movements of native wildlife now using habitats where site development is to eventually occur. Many migratory species that now pass through the study area are neo-tropical migrant birds that are likely to pass through and over the site even when it is eventually converted to some developed use such as houses. A considerable amount of open space lands in the project vicinity will continue to be used by native species for home range and dispersal movements. Therefore, the development of this site would not alter wildlife corridors of the region.

#### **3.3.5 Potential Constraints to Development from Local Ordinances and Habitat Conservation Plans (HCPs)**

Site development would not conflict with any known local ordinances. No Habitat Conservation Plans have been prepared or even considered for the Gonzales area.

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