Biota Report

For:

Approximately 314.31 Acres Located in the Northeast Corner Houghton Road and Highway 99

Section 7, T.31S, R.28E, M.D.M.

County of Kern, State of California

Prepared For:

99 Houghton, LLC 50 South Jones Blvd. #101 Las Vegas, NV 89107

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McIntosh & Associates Project No. 06-012

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I. INTRODUCTION

This Biota Report has been prepared by McIntosh & Associates at the request of 99 Houghton, LLC, and is intended for use as a reference document to assist in the early phases of project planning. The report is intended to provide information concerning the presence, or potential presence of sensitive habitats or species at the project site, assess potential impacts, and recommend avoidance and mitigation measures, if necessary.

A. Project Description

99 Houghton, LLC is proposing a General Plan Amendment and Zone Change to allow for industrial development within this property. According to the County of Kern Zoning Map, the project site is currently zoned A (Exclusive Agriculture). The project site has a General Plan land use designation of R-IA (Resource-Intensive Agriculture). The General Plan Amendment will amend the land use designation from R-IA to LI (Light Industrial), and SI (Service Industrial), and the Zone Change is from A to M-1 (Light Industrial), and M-2 (Medium Industrial).

B. Project Location and Setting

The approximately 314.31-acre property is located south of the Bakersfield City limits within a portion of Section 7, Township 31 South, Range 28 East, M.D.B.&M. within the Gosford and Conner U.S. Geological Survey (USGS) 7.5-minute quadrangles. More specifically, the subject site is situated south of DiGorgio Road and north of Houghton Road, between Highway 99 and Highway 204 (Union Ave) (refer to Figures 1 and 2). The property is identified as Assessor's Parcel Number 185-140-06-00-7. Zoning and land use designations of the properties located adjacent to the property are provided in Table 1.

Historically, the site has been used for agricultural production and storage purposes. A portion of the subject property is within Agricultural Preserve 13, but is not under a Williamson Act contract. Agricultural operations have previously taken place on a majority of the site and have primarily consisted of growing alfalfa, according to the County of Kern GIS Online Mapping system. The property is mostly vacant with a structure located in the eastern portion of the site. The structure appears to be used as a storage building and is associated with agricultural activities. Much of the fallowed or past alfalfa fields on the property were being grazed by sheep at the time of the biological surveys. The eastern portion of the property was recently tilled wheat. Existing onsite and surrounding land uses are evident in the 2006 aerial photograph in Figure 3 and Survey Results Map, Figure 4.



Table 1 Adjacent Property Zoning and Land Use

	Adjacent Property Zoning and Land Use					
T LOCATION T COUNTY OF KAM ZONIOO		Metropolitan Bakersfield General Plan				
North	A-1 (Limited Agriculture) A (Exclusive Agriculture)	R-IA (Resource-Intensive Agriculture) LMR (Low Medium Density Residential)				
East	A (Exclusive Agriculture) A-1 (Limited Agriculture) E(10) RS (Estate 10 acres Residential Suburban Combining) M-2 PD (Medium Industrial, Precise Development Combining) CH (Highway Commercial)	R-IA (Resource-Intensive Agriculture) RR (Rural Residential) SI (Service Industrial) HC (Highway Commercial)				
South	A (Exclusive Agriculture) C-2 PD (General Commercial, Precise Development Combining)	R-IA (Resource-Intensive Agriculture) RR (Rural Residential) HC (Highway Commercial)				
West	A (Exclusive Agriculture) A-1 (Limited Agriculture)	PT (Public Transportation) R-IA (Resource-Intensive Agriculture)				

The topography of the project site is relatively flat, ranging from 330 to 340 feet above mean sea level (msl) and sloping slightly from northwest to southeast. Soil types identified within the project site consist of fine sandy loam, most or all of which have been disturbed through agricultural production. Habitats observed within the approximately 314.31-acre site include disked agriculture (row crops) and ruderal (disturbed) vegetative communities.

One agricultural sump contained a few plant species indicative of wetlands, but due to regular maintenance activities and clearing, it is not considered a sensitive natural community. A second agricultural sump located in the eastern portion of the property appeared to no longer function as an agricultural sump and was filled with non-native grasses and forbs, and discarded debris. It did not contain wetland plant species and is not considered a sensitive vegetative community. Lined and unlined irrigation ditches occur at various locations throughout the subject property, but due to regular maintenance do not provide sensitive habitat. Other than these sites, potential wetland, riparian or other aquatic habitat was not identified within the project site.

Trees suitable for raptor nesting exist at the eastern project boundary along Union Avenue. Owl pellets were observed under the Eucalyptus (Eucalyptus globulus) and fan palm trees (Washingtonia filifera). (please refer to Figure 3). Additional spieces observed on the project site and adjacent properties: Mulberry (morus alba), Ash (Fraxinus sp), Cypress (Cupressus sp), Eucalyptus, ornamental pine (Pinus sp), pecan (Carya illinoinensis) and fan palm trees.



C. Purpose of Biota Report

The purpose of this Biota Report is to document the condition and sensitivity of the natural resources currently existing on or near the proposed project site, and to evaluate the potential impacts of the proposed project on these resources. The focus of this study is on sensitive natural communities and special-status species, and identifies biological constraints, if any, associated with the proposed project. Where appropriate, mitigation measures are recommended to avoid, minimize, or compensate for impacts to natural resources resulting from implementation of the proposed project. The information presented in this report is based on review of pertinent literature and onsite investigations of the project area.

D. Methods

A search of the California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDB) was conducted to identify reported occurrences of specialstatus plant and animal species and sensitive habitats within the Gosford and Conner quadrangles (CNDDB 2006), as well as the ten surrounding quadrangles (Rosedale, Oildale, Oil Center, Stevens, Lamont, Millux, Weed Patch, Conner SW, Coal Oil Canyon, and Mettler). The results of the CNDDB inquiry were subsequently reviewed to evaluate the potential for occurrence of special-status species within or near the project site. The California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (Skinner 1994) was also reviewed to provide information on rare plants anticipated to occur in the twelve quadrangles. A species list was also obtained from the U.S. Fish and Wildlife Service (USFWS) website for sensitive species potentially occurring within the project area. Additional literature searches included McIntosh & Associates project files for previous projects in the vicinity and the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) and Final Environmental Impact Report (MBHCP 1993). Vegetation and habitat types were classified based on CDFG's Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986), when applicable. Definitions of special-status species are included in Appendix A.

In addition to the review of pertinent literature, site surveys were conducted on October 31, November 1, and December 5, 2006 to determine the location and extent of plant communities and sensitive habitats, and the potential for occurrences of sensitive plant and wildlife species at the project site. Survey methodologies included meandering pedestrian transects through all present habitat types. Botanical survey techniques followed CNPS recommended guidelines, modified as appropriate for agricultural land uses (CNPS 2001). Photographs of the project area taken during field surveys are included in Appendix B.

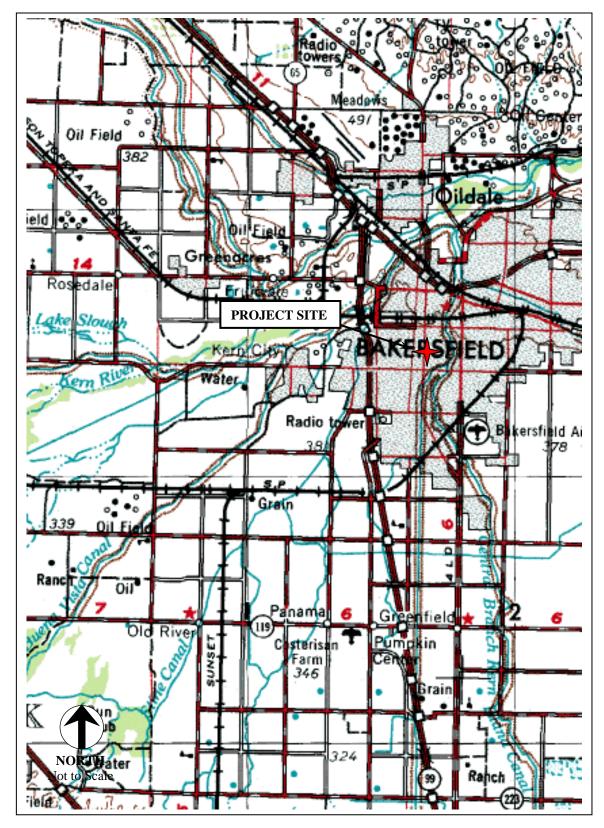


Figure 1 Vicinity Map



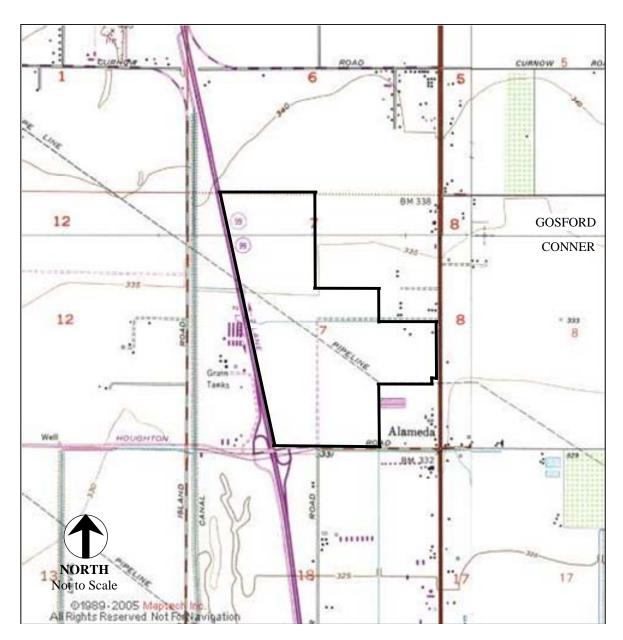


Figure 2 Location Map



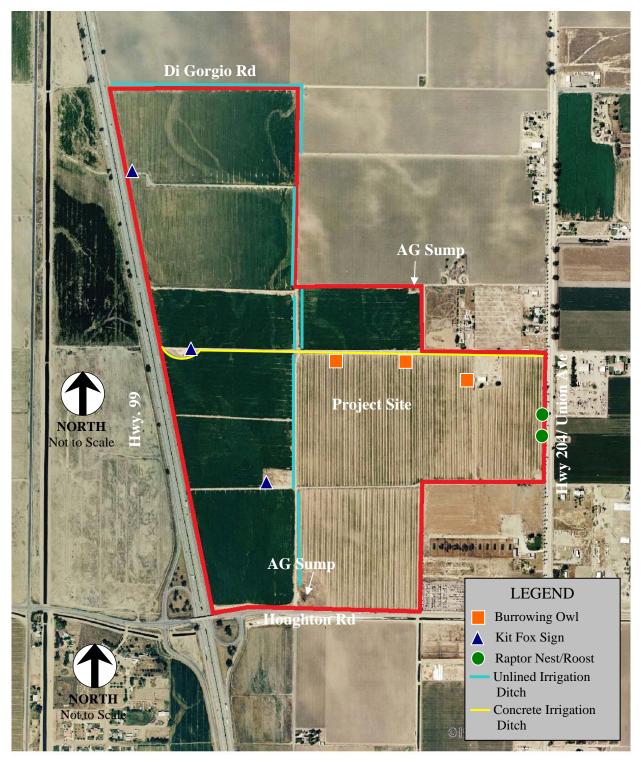


Figure 3 Survey Results Map



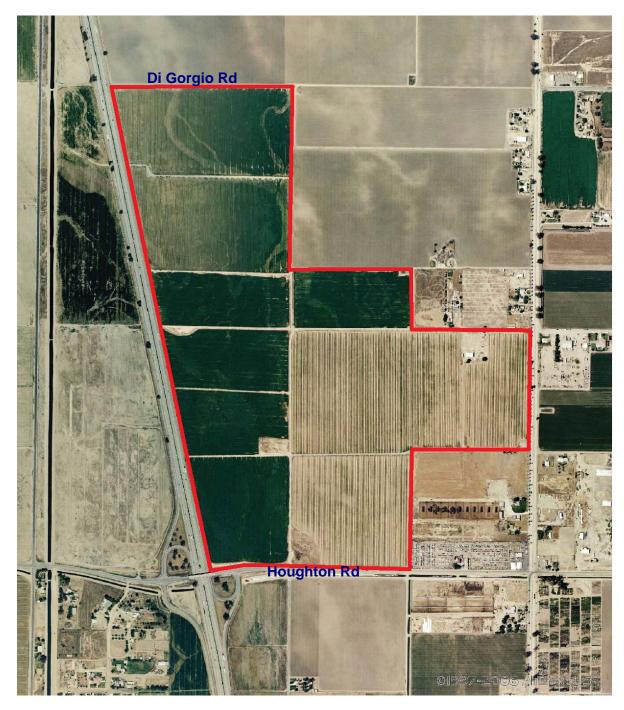


Figure 4 2003 Project Site Aerial



II. EXISTING CONDITIONS

A. Climate

The southern San Joaquin Valley climate is considered Mediterranean and is characterized by hot, dry summers and cool, wet winters. The average precipitation regime usually begins in September, peaking January through March, and ending May in wet years, March in dry. The highest annual rainfall recorded in Bakersfield was 13.32 inches with a record low of 1.87 inches. Bakersfield receives an average 6.24 inches of rainfall annually. The few days with temperatures below freezing typically occur during the months of December and January. The mean January temperature is 47.9°F, with an extreme low of 19°F. The mean temperature of July is 83.8°F with an extreme high of 115°F (Western Regional Climate Center 2006). The mean elevation of Bakersfield is 400 feet above msl. A thick, persistent ground fog often occurs throughout the area during the winter months.

B. Soil Conditions

The soil unit occurring within the proposed project site is Kimberlina fine sandy loam, as mapped by the Environmental Data Resources (EDR) report for the subject property (EDR 2006). Kimberlina fine sandy loam (0 to 1 percent slopes), typically has a brown fine sandy loam surface layer approximately 10 inches thick. The underlying material is light brownish gray and pale brown sandy loam to a depth of approximately 60 inches. Contrasting inclusions of this soil unit are Milagro fine sandy loam, Cajon loamy sand, and saline-sodic areas. Similar inclusions are Wasco sandy loam and areas with sandy clay loam, sandy loam, or coarse sandy loam surface textures.

Kimberlina fine sandy loam is a very deep, well-drained soil on alluvial fans. Permeability of this soii is moderately rapid and the available water capacity is high. Runoff is very slow and the hazard of water erosion and wind erosion are both slight (NRCS 2004).

C. Plant Communities and Habitat Types

Habitat types found within the proposed project area include Agricultural and Ruderal. The majority of the project site has been under agricultural production and/or has undergone soil disturbance activities such as disking, scraping, or tilling. Due to ongoing agricultural practices including sheep grazing, much of the site is vegetated with non-native plant species. Each of the habitat types observed within the project site is described below with a discussion of the plants and wildlife known to occur within them. Plant species observed within the site are listed in Appendix E and a list of wildlife identified during the field surveys is provided in Appendix F.

1. Agricultural

The primary habitat type within the project site is agricultural, specifically row crop production. Although agriculture is technically not considered a habitat type, it has been



identified during the field survey as such. Historically, the entire site has been in agricultural production of such crops as wheat and alfalfa. At the time of the biological surveys for this report the fallow and previous alfalfa fields were being actively grazed by sheep and grain crops in the eastern portions of the project site had been recently tilled (refer to Figure 4). Ruderal species occur along the edges of the dirt access roads, along the banks for the irrigation ditches, and throughout the fallowed and old alfalfa fields. The active and fallowed agricultural fields can be expected to provide cover and food for a number of rodents such as mice, rabbits, and gophers. These species, in turn, provide a prey source for foraging raptors and other predators. Wildlife species or their sign observed within the agricultural portions of the project site include California ground squirrel (Spermophilus beecheyii), Brewer's blackbird (Euphagus cyanocephalus), cattle egret (Bubulcus ibis), American kestrel (Falco sparverius), song sparrow (Melospiza melodia), and Botta's pocket gopher (Thomomys bottae).

2. Ruderal

Ruderal habitat has been significantly altered by agriculture, construction, landscaping, or other land-clearing types of activities. Ruderal habitats often occur in abandoned agricultural fields, along roadsides, near developments, and in other areas experiencing ground surface disturbance.. Ruderal vegetation is found scattered throughout the project site, but is typified along the paved perimeter roadways, dirt access roads, the fallowed and old alfalfa fields, and the banks of the irrigation ditches. Representative plant species within ruderal areas of the project site were pigweed (Amaranthus retroflexus), puncture vine (Tribulus terrestris), saltgrass (Distichlis spicata), Bermuda grass (Cynodon dactylon), nutsedge (Cyperus esculentus), cheeseweed (Malva parviflora), lamb's quarters (Chenopodium album), foxtail barley (Hordeum murinum ssp. glaucum), and filaree (Erodium cicutarium). Wildlife species identified by sight or sign within the ruderal habitat of the property include covote (Canis latrans), Botta's pocket gopher, California whiptail (Aspidoscelis tigris munda), desert cottontail (Sylvilagus audubonii), northern harrier (Circus cyaneus), sharp-shinned hawk (Accipiter striatus), California ground squirrel, killdeer (Charadrius vociferus), and American kestrel.

D. Sensitive Habitats

No sensitive habitat types were observed within the project site at the time of the field surveys. As previously mentioned, one agricultural sump at the southern boundary contained a few wetland-indicative plant species, but due to regular maintenance activities and clearing, it is not considered a sensitive natural community. A second agricultural sump, located in the eastern portion of the property, appeared to no longer function as an agricultural sump and was filled with non-native grasses and forbs, and discarded debris. It did not contain wetland plant species and is not considered a sensitive vegetative community. Lined and unlined irrigation ditches occur at various locations throughout the subject property, but due to regular maintenance do not provide sensitive habitat. Other than these sites, potential wetland, riparian or other aquatic habitat was not identified within the project site.



E. Migration corridors

Due to the disturbed nature of the entire site, no wildlife migration corridors or travel corridors were identified within or in association with the proposed project site. Land use on properties surrounding the project site are rural residential or under other agricultural use.

F. Special-status Species

Special-status species are plants and animals that are either listed as endangered or threatened under the Federal or California Endangered Species Acts, rare under the California Native Plant Protection Act, or considered to be rare (but not formally listed) by resource agencies, professional organizations (e.g., Audubon Society, CNPS, The Wildlife Society), and the scientific community. Special-status species are defined in Appendix A.

Prior to conducting field surveys of the project area, searches were conducted of the CNDDB for the Gosford, Conner, Rosedale, Oildale, Oil Center, Stevens, Lamont, Millux, Weed Patch, Conner SW, Coal Oil Canyon, and Mettler USGS quadrangles. Additionally, these twelve quadrangles were searched within the CNPS electronic inventory. The USFWS website was also queried for a list of species potentially occurring within the Gosford and Conner quadrangles. The species lists in the MBHCP and draft Kern County Valley Floor Habitat Conservation Plan (KCVFHCP) were reviewed as well. Nineteen special-status plant species and twenty-eight special-status wildlife species were identified by the CNDDB as occurring within the twelve quadrangles. The CNPS quadrangle search revealed one additional plant species. The USFWS list contained no additional plant species and five additional wildlife species. Of these fifty-three species, three have potential to occur within the project site and are listed in Table 2. Two additional special-status wildlife species were identified onsite during the biological survey and are also listed in Table 2. Specific information regarding the species and their potential for occurrence in the study area is provided in the following sections. The remaining fifty are not expected to occur on the project site due to specific habitat requirements not identified in the study area. All twenty plant species and thirty-five wildlife species are provided in Appendices C and D, respectively.



 Table 2 of Sensitive Plant and Wildlife Species

List of Sensitive Plant and Wildlife Species					
Scientific Name	Common Name	Legal Status* Federal/State/CNPS			
Plants					
None					
Wildlife		Federal/State/CDFG			
Mammals					
Vulpes macrotis mutica	San Joaquin kit fox	FE/ST/			
Birds					
Accipiter striatus	sharp-shinned hawk	/CSC/			
Athene cunicularis	burrowing owl	/CSC/			
Buteo swainsoni	Swainson's hawk	/ST/			
Circus cyaneus	northern harrier	/CSC/			
*Legal Status					

Wildlife and Plant Codes:

FE: Federally endangered ST: California threatened

CSC: California species of special concern

1. Special-status Plants

No special-status plant species were observed within the project site during the field survey. The botanical surveys were conducted on October 31, November 1, and December 5, 2006. The botanical survey only coincided with the blooming period of ten percent of the plant species listed by regulatory agencies as potentially occurring in the vicinity of the project site. However, due to the ongoing intensive agricultural production and associated activities of the project site, the botanical survey did not identify individual occurrences of, or suitable habitat for, any of the thirteen special-status plant species provided in Appendix C. Botanical surveys conducted during the appropriate blooming season are unlikely to identify any special-status plant species within the subject property.

2. Special-status Wildlife

Three special-status wildlife species (sharp-shinned hawk, burrowing owl, and northern harrier) were observed within the project site during the biological surveys associated with this project on October 31, November 1, and December 5, 2006. The site surveys identified suitable habitat for one more special-status species (San Joaquin kit fox) listed by the CNDDB and USFWS as potentially occurring within the vicinity of the



project. These four species are described below. The discussion includes the preferred habitat of each species and the potential for occurrence within the project site.

a. San Joaquin kit fox (Vulpes macrotis mutica)

The San Joaquin kit fox is a small, nocturnal canid approximately 30 inches in length and four to five pounds. This fox has large ears, slim body and legs, and a narrow nose. The inside of the ears are dark, as is the tapered tip of its long, bushy tail. The coat appearance of the kit fox varies with season and locality, with buff, tan, and yellowish gray being most common. San Joaquin kit foxes historically inhabited such native San Joaquin Valley plant communities as valley saltbush scrub, annual grassland, and valley sink scrub. As these communities have diminished, the species have been found to occupy grasslands and scrublands of varying degrees of modification or disturbance. Kit foxes have been observed within areas modified by oil extraction equipment, agricultural crop production, and cattle grazing. Kit foxes utilize one to several underground dens throughout the year, which they require for temperature regulation and protection from predators and weather. They excavate their own dens, modify and occupy dens of other animals, and have been known to den in human-made structures, such as pipes and culverts. Most kit fox dens have at least two entrances. They are able to breed at one year of age and litters of two to six pups are born between February and late March. The pups begin emerging from the den after one month and begin dispersing at four to five months, in August or September. San Joaquin kit fox diet varies seasonally, geographically, and annually. California ground squirrels (Spermophilus beecheyi), black-tailed jackrabbits, and white-footed mice are common prey species. Other prey consumed includes kangaroo rats (Dipodomys califonicus), pocket mice, cottontails, San Joaquin antelope squirrels (Ammospermophilus nelsoni), ground-nesting birds, insects, and grasses. Although nocturnal, the San Joaquin kit fox is commonly observed during daylight hours in late spring and early summer.

The San Joaquin kit fox is federally endangered and state threatened. Formerly, the species occupied much of the San Joaquin Valley, from Contra Costa County to southern Kern County. Numerous anthropogenic factors, such as habitat loss, fragmentation and degradation, predation, road kills, suffocation, trapping, and electrocution, have contributed to the decline of the species within its historical range.

Although San Joaquin kit fox were not observed during the biological surveys, the species has the potential to occur within the proposed project site due to the proximity of known kit fox occurrences and suitable onsite habitat. In addition, kit fox tracks were identified in several locations throughout subject property and scat was observed in the southern portion of the project site (refer to Figure 4). No active dens or live kit fox were identified during the biological surveys. Several partially collapsed culverts within the project site provide suitable habitat denning habitat for the species. None of these showed signs of past or present occupation. The subject property provides suitable kit fox foraging habitat. A culvert near the north boundary of the property passes under Highway 99 and connects the subject property with more suitable habitat west of the highway. The project site lies within the current mapped distribution of the species. There are several known documented occurrences of the species approximately three



miles north of the project site. Recent sign of coyote (i.e., scat, tracks) was identified throughout the property as well. The coyote is a known predator of the kit fox.

b. Sharp-shinned hawk (Accipiter striatus)

The sharp-shinned hawk is the smallest North American accipiter. The jay-sized raptors have blue-gray upperparts and white underparts with rufous bars as adults. The tail is squared and alternately dark and light gray banded. The eyes of this hawk change from yellow to red at maturity. During the breeding season they spend much of their time within dense forest canopy and are most often observed during the winter migration periods when they are out in the open. The sharp-shinned hawk prefers to nest on a horizontal branch against the main trunk of the tree in dense forest or riparian areas, typically on north facing slopes. They normally return to the same nesting area every year, but do not use the same nest. Three to four eggs are laid in late spring or early summer and incubate within thirty-two days with the young fledging at approximately twenty-six days. Sharp-shinned hawks hunt from perches or by rapid flapping flight. Approximately 90% of their diet consists of birds, specifically song birds. They are also known to occasionally take large insects, frogs, lizards, and small mammals.

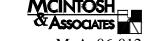
The sharp-shinned hawk is a California species of special concern. The breeding population in California has experienced a decline, while the migrating populations appear to have rebounded from declines of the 1950's and early 60's. Threats to the species include the falconry trade and logging.

An adult male sharp-shinned hawk was observed foraging after small passerine flocks throughout the property each day of biological surveys (October 31, November 1, and December 5, 2006). It was also observed perching in the trees lining South Union Avenue at the eastern boundary of the site.

c. Burrowing owl (Athene cunicularia)

The burrowing owl is a small, ground-dwelling owl of open areas. Although considered diurnal because they are often observed perching near their den by day, they are truly nocturnal or crepuscular. The adult burrowing owl is brown above with white bars or spots. They are approximately 9-11 inches in length, have round heads without ear tufts, white eyebrows and chin stripe, and yellow eyes. They occur primarily in open grasslands and desert habitats throughout California. Burrowing owl prey varies with availability, season, and location. Primary prey includes insects, small mammals and birds, reptiles and amphibians, and carrion. They utilize burrows abandoned by mammals such as ground squirrels or badgers. In soft soil they have been known to excavate their own burrows. Breeding occurs from March to August, producing two to ten eggs per clutch. The eggs are incubated for 28-30 days with young emerging from the burrow at 14 days and flying by the fourth week.

The burrowing owl is a federal species of concern and a state species of special concern. Burrowing owl populations have been declining over the past 60 years, with a rapid declination the last five years. The initial reduction in numbers has been attributed



to the conversion of grasslands to agriculture. However, the recent accelerated loss is believed to be due to increased habitat loss from residential and commercial development.

One active burrow and three adult owls were identified in the central and eastern portion of the property during the biological surveys of the site (refer to Figure 4). The burrow was located on the bank of an unlined irrigation ditch in association with a ground squirrel colony. The owls occurred in a recently tilled area used for row crops and the adjacent unlined irrigation ditch.

d. Swainson's hawk (Buteo swainsoni)

The Swainson's hawk is similar in size to the more common red-tailed hawk (Buteo jamaicensis). They have a distinct light and dark morph. The light morph has a whitish forehead and a white patch on the throat below the bill. The remainder of the head, neck sides, bib-like patch on the chest, and upper body parts are brown. Swainson's hawks prefer open areas including grasslands with scattered trees or shrubs for perching, irrigated meadows, and ecotones. Agricultural areas, particularly alfalfa fields, riparian areas, juniper-sage flats, and oak savannas are desired by the Swainson's hawk in California. During winter months and migration, the hawks primarily eat insects, but are known to consume include birds, small mammals, reptiles, and amphibians during summer. They are found to take advantage of certain agricultural practices, such as tilling, by following behind the tractor and capturing prey as it is disturbed by the equipment. These hawks begin nesting in late March with young fledging by July. They are known to nest in trees, shrubs, and utility poles from 4 to 100 feet in height. In the Central Valley of California they nest in riparian habitats. Swainson's hawks breed in western North America, including California's Central Valley, and migrate south to Argentina for the winter.

The Swainson's hawk is California threatened and a federal species of concern. Swainson's hawk population has declined by 90% since the 1940's due to the loss of nesting habitat. They were not observed during the biological surveys of the project site. Large trees on the adjacent properties and utility poles provide suitable perching locations. The project site contains suitable foraging habitat for the species, however no nesting habitat occurs onsite.

e. Northern harrier (Circus cyaneus)

The northern harrier is a long-winged, long-tailed raptor inhabiting open grassland and marshes. The female and male are easily distinguishable. The male is whitish below with a gray head and back and a white rump, whereas the female is mottled browns with a white rump. The species occurs from annual grassland to lodgepole pine forests and alpine meadows. The northern harrier frequents meadows, open rangelands, grasslands, desert sinks, prairies, fresh and saltwater emergent wetlands, and some types of croplands. They occur throughout the year within the Central Valley in suitable habitat, but are more abundant during the winter months. Northern harriers fly low over open habitats in search of prey consisting primarily of voles, but including mice, birds,



frogs, small reptiles, and invertebrates. In California, they breed in coastal and freshwater marshlands, typically adjacent to upland grasslands including saltgrass, pasturelands, native prairies, and montane meadows. Nests are built on the ground in shrubby vegetation with breeding occurring between April and September. Young fledge in approximately 53 days.

The northern harrier is a California species of special concern. Habitat degradation appears to be a major reason for decline of the species in California. Destruction or disturbance of wetlands and marshes, as well as the burning, disking and plowing of grasslands during the breeding season has had a negative affect on the species. A male northern harrier was observed every survey day foraging throughout the subject property. No nesting habitat occurs within the project site.

III. REGULATORY SETTING

A. Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (50 CFR 17) provides legislation to protect plant and animal taxa considered at risk of extinction, and classified as either threatened or endangered. Section 9 of the Act prohibits any person or entity from the "taking" of any endangered fish or wildlife species. Impacts to listed species resulting from project implementation would require the responsible agency or individual to consult the USWFS. Formal consultations must take place with the USFWS pursuant to Sections 7 and 10 of the FESA, with the USFWS then making a determination as to the extent of impact to a particular species. If the USFWS determines that impacts to a species would likely occur, alternatives and measures to avoid or reduce impacts must be identified. The proposed project site is located within the area included in the MBHCP and is therefore covered by and subject to conditions of the corresponding USFWS Section 10 Incidental Take Permit for the Metropolitan Bakersfield area.

B. California Endangered Species Act

California has a parallel mandate to the FESA, which is embodied in the California Endangered Species Act (CESA) of 1984 and the California Native Plant Protection Act of 1977. These laws regulate the listing and take of plant and animal species designated as endangered, threatened, or rare. The State of California also lists Species of Special Concern based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Under State law, the CDFG is empowered to review projects for their potential to impact listed species and their habitats. The MBHCP, which covers the project site, also addresses state listed special-status species through the issuance of a 2081 permit (Memorandum of Understanding).

C. Fish and Game Code

The CDFG is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. Protected species may not be taken or possessed without a permit from the Fish and Game Commission and/or the CDFG. Information



on these species can be found within Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish) of the Fish and Game Code. It is unlawful to take the nest or eggs of any bird, to take any bird of prey per Section 3503 of the Fish and Game Code.

D. Migratory Bird Treaty Act of 1918

The Migratory Bird Treaty Act (MBTA) protects all migratory birds, including their eggs, nests, and feathers. The MBTA was originally drafted to put an end to the commercial trade in bird feathers popular in the latter part of the 1800's and is enforced by the USFWS.

IV. IMPACT ASSESSMENT

This section focuses on identifying potential impacts associated with implementation of the proposed project. The emphasis of the assessment is on determining the effect of the proposed project on sensitive species and/or habitats present at and adjacent to the project site. Adverse impacts are expected to occur where proposed activities would result in temporary or permanent modification to sensitive habitats or habitats occupied by sensitive species. Where potential project-related impacts (direct and/or indirect) to sensitive resources have been identified, measures for avoiding, minimizing, or mitigating adverse impacts to these resources have been recommended.

As the proposed project site lies within the Metropolitan Bakersfield area, adverse impacts to special-status species are addressed by the MBHCP, which provides mitigation sufficient to reduce potential impacts to a level of insignificance. Consultation with USFWS and CDFG regarding special-status species is not required due to the implementation of the MBHCP.

A. Sensitive Communities and Habitat Types

No impacts to sensitive communities or habitat types are anticipated as none were identified within the proposed project site.

B. Sensitive Species

1. Impacts to Special-Status Plants

a. Impact Discussion

No impacts to special-status plants are expected as none were identified onsite during site surveys. The proposed project site is degraded from historic and ongoing agricultural activities.

2. Impacts to San Joaquin Kit Fox

a. Impact Discussion

No live San Joaquin kit fox or dens were identified during the biological surveys of the subject property. However, kit fox tracks and scat was observed at several locations. The project site provides suitable foraging habitat for the species and is within the



current mapped distribution for San Joaquin kit fox. Additionally, the CNDDB documents the presence of the species in the vicinity of the proposed project site. The proposed project has the potential to result in adverse impacts to San Joaquin kit fox and/or its habitat and will result in adverse impacts to foraging habitat for the species. Potential direct adverse impacts include direct mortality from vehicle collision, entrapment in open pipes, trenches, or pits, and contamination. degradation, and fragmentation are also potential direct adverse impacts to the species resulting from project implementation. Potential indirect impacts to the species resulting from the proposed project include those associated with human habitation of property, such as increased traffic, refuse, domestic pets, and pedestrian use of adjacent open lands. Such potential impacts to the species resulting from the implementation of the proposed project would be a "take" of the San Joaquin kit fox and be considered a significant effect. However, because the proposed project lies within the MBHCP area, mitigation and compensation requirements of the implemented MBHCP will reduce these potential impacts to a level of insignificance.

b. Recommended Mitigation Measures

To minimize the potential for direct and indirect impacts to San Joaquin kit fox, implementation of the following measures are recommended:

- Retain a qualified biologist to conduct a pre-construction survey of the project site at least 30 days prior to ground disturbance. Particular attention should be given to debris piles and mapped potential dens.
- Any identified kit fox dens shall be monitored, excavated, and backfilled following MBHCP, CDFG, and USFWS guidelines and authorization.
- Prior to any construction activities, a qualified biologist shall conduct a preconstruction briefing for construction personnel on kit fox biology, regulatory responsibilities regarding the kit fox and the project, and protection measures to be implemented.
- MBHCP mitigation and compensation requirements shall be met.

3. Disturbance of Sensitive and Nesting Birds

a. Impact Discussion

As noted previously, several special-status birds have potential, or have been observed, to occur within the project site. However, it is unlikely any of these species, with the exception of the burrowing owl, will use the project site for nesting purposes due to the lack of suitable nesting habitat. Although northern harrier and sharp-shinned hawk were observed during biological surveys, nesting habitat for these species does not occur onsite. As previously discussed, three burrowing owls and one active burrow were observed in the eastern and central portions of the property (refer to Figure 4). Implementation of the proposed project will result in adverse impacts to burrowing owl foraging and nesting habitat. Disturbance of the sensitive bird species listed in Table 2 would be prohibited under several acts, codes, or policies, including the California Environmental Quality Act (CEQA), CDFG Code, CESA, or the MBTA. The project will result in adverse impacts to foraging habitat for sensitive birds species and raptors.



American kestrels were observed foraging onsite and owl and red-tailed hawk roosts were identified on the subject property during the survey. Mitigation provided by the MBHCP for other sensitive species will mitigate for the loss of foraging habitat resulting from project implementation. Disturbance of all nesting birds, sensitive and non-sensitive, is prohibited by Section 3503 of the CDFG Code. An owl nest and a rock pigeon nest were identified in the eastern portion of the site during the biological surveys. These species are not considered sensitive species, however the CDFG Code prohibits disturbance of the nest site until the young have fledged.

b. Recommended Mitigation Measures

To minimize the potential for direct impacts to nesting and sensitive birds, implementation of the following measures is recommended:

- Retain a qualified biologist to conduct a pre-construction burrowing owl and nesting bird survey of the project site at least 30 days prior to ground disturbance.
- If active nests of any bird species are observed, either 1) wait for such nesting birds to fledge and leave the project site, or 2) consult with the appropriate resource agency and secure impact authorization, prior to site disturbance.
- Project-related activity in the vicinity of burrowing owl active nesting territories shall be avoided during the critical phases of the nesting cycle (February 1-August 31).
- After a qualified biologist has identified that burrowing owl young have fledged, CDFG guidelines for dispersal of burrowing owls from active burrows shall be followed prior to project implementation.
- MBHCP mitigation and compensation requirements shall be met.



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Management

APPENDIX F

Wildlife Observed at the 99 Houghton, LLC property, Bakersfield, Kern County, California

Wildlife Observed at the 99 Houghton, LLC Project Area Bakersfield, Kern County, California

Scientific Name	Common Name	Comments			
MAMMALS					
Bos taurus	cow	skull			
Canis familiaris	domestic dog	observed			
Canis latrans	coyote	scat/tracks			
Capra aegagrus hircus	domestic goat	carcass			
Dipodomys sp.	kangaroo rat	tracks/burrows			
Equus caballus	domestic horse	tracks/scat			
Felis silvestris catus	domestic cat	tracks			
Mephitis mephitis	striped skunk	tracks			
Microtus californicus	meadow vole	skull			
Mus musculus	house mouse	carcass			
Mustela frenata	long-tailed weasel	observed/burrow			
Ovis aries	domestic sheep	observed			
Perognathus sp.	pocket mouse	skull			
Peromyscus sp.	white-footed mouse	scat/burrows			
Peromyscus maniculatus	deer mouse	carcass			
Rattus sp.	rat	tracks			
Reithrodontomys megalotis	western harvest mouse	observed			
Spermophilus beecheyii	California ground squirrel	observed/burrows			
Sylvilagus audubonii	desert cottontail rabbit	observed			
Thomomys bottae	Botta's pocket gopher	observed/burrows/carcass			
Vulpes macrotis mutica	San Joaquin kit fox	scat/tracks			
BIRDS					
Accipiter striatus	sharp-shinned hawk	observed			
Agelaius phoeniceus	red-winged blackbird	observed			
Amphispiza belli	sage sparrow	observed			
Anas cyanoptera	cinnamon teal	observed			
Anas platyrhynchos	mallard	carcass			
Aphelocoma californica	western scrub jay	observed			
Ardea herodias	great blue heron	observed			
Athene cunicularia	burrowing owl	observed			
Bubulcus ibis	cattle egret	observed			
Buteo jamaicensis	red-tailed hawk	observed			
Buteo lineatus	red-shouldered hawk	observed			
Buteo swainsoni	Swainson's hawk	observed			
Calypte anna	Anna's hummingbird	observed (nesting)			
Campylorhynchus	cactus wren	nest			
brunneicapillus					
Carduelis lawrencei	Lawrence's goldfinch	observed			
Carpodacus mexicanus	house finch	observed			
Cathartes aura	turkey vulture	observed			
Charadrius vociferus	killdeer	observed			
Circus cyaneus	northern harrier	observed			
Columba livia	rock pigeon	observed/nest			

Scientific Name	Common Name	Comments
Corvus brachyrhynchos	American crow	observed
Corvus corax	common raven	observed
Dendroica coronata	yellow-rumped warbler	observed
Euphagus cyanocephalus	Brewer's blackbird	observed
Eremophila alpestris actia	California horned lark	observed
Falco mexicanus	prairie falcon	observed
Falco sparverius	American kestrel	observed
Gallus gallus domesticus	chicken	observed
Himantopus mexicanus	black-necked stilt	observed
Lanius ludovicianus	loggerhead shrike	observed (presumed nesting)
Melospiza melodia	song sparrow	observed
Mimus polyglottos	northern mockingbird	observed
Myiarchus cinerascens	ash-throated flycatcher	observed
Passer domesticus	house sparrow	observed
Passerculus sandwichensis	savannah sparrow	observed
Petrochelidon pyrrhonota	cliff swallow	observed
Sayornis nigricans	black phoebe	observed
Sayornis saya	Say's phoebe	observed
Sturnella neglecta	western meadowlark	observed
Sturnus vulgaris	European starling	observed
Troglodytes aedon	house wren	observed
Tyrannus verticalis	western kingbird	observed (nesting)
Tyto alba	barn owl	nest/pellets
Zenaida macroura	mourning dove	observed
Zonotrichia leucophrys	white-crowned sparrow	observed
REPTILES		
Aspidoscelis tigris munda	California whiptail	observed
Family: Colubridae	colubrid snake	carcass
Sceloporus graciosus	western sagebrush lizard	observed/carcass
gracilis	-	
Uta stansburiana	side-blotched lizard	observed
AMPHIBIANS		
Bufo boreas halophilus	California toad	scat
Rana catesbeiana	bullfrog	observed
FISH		
None observed		
INVERTEBRATES *		
Family: Acrididae	grasshopper	observed
Suborder: Anisoptera	dragonfly	observed
Apis sp.	honey bee	observed
Asphondylia sp.	creosote gall midge	gall observed
Bombus sp.	bumblebee	observed
Brephidium exile	western pygmy-blue	observed
Family: Calliphoridae	blow fly	observed
Family: Coccinellidae	lady beetle larvae	observed
Colias sp.	sulphur	observed
*	•	

Scientific Name	Common Name	Comments
Cotinis mutabilis	green fruit beetle	observed
Family: Culicidae	mosquito	observed
Dasymutilla sp.	velvet ant	observed
Order: Dermaptera	earwigs	
Dytiscus sp.	large diving beetle	observed
Eliodes sp.	stink beetle	observed
Euschistus sp.	green stink bug	observed
Family: Gryllidae	field cricket	observed
Helisoma sp. (Planorbella)	ramshorn snail	observed
Helix aspera*	brown garden snail	shell
Helminthoglypta sp.	shoulderband snail	shell fragments
Holocnemus pluchei	cellar spider	observed
Latrodectus hesperus	black widow	observed
Family: Libellulidae	skimmer dragonfly	observed
Family: Lycosidae	wolf spider	burrow
Family: Mantidae	mantis	observed
Family: Muscidae	house fly	observed
Myrmeleon sp.	ant lion	observed
Pieris rapae	cabbage white	observed
Physa gyrina	tadpole snail	observed
Pogonomyrmex rugosus	rough harvester ant	observed
Polistes sp.	paper wasp	observed
Family: Pompilidae	spider wasp	observed
Rumina decollata	decollate snail	shell
Solenopsis sp.	fire ant	observed
Family: Sphecidae	thread-waisted wasp	observed
Family: Tabanidae	horse fly	observed
Tibicinoides sp.	cicada	heard
Trimerotropis pallidipennis	pallidwinged grasshopper	observed
Suborder: Zygoptera	damselfly	observed

^{*} Incidentally observed invertebrates only – surveys of insects not attempted beyond those for sensitive species or habitat.

Wildlife observed on site

APPENDIX E

Vascular Plants Observed at the 99 Houghton, LLC property Bakersfield, Kern County, California

Vascular Plants Observed at the 99 Houghton Project Area, Bakersfield, Kern County, California

Scientific name	Common name	Family
Achillea millefolium	common yarrow	Asteraceae
Achnatherum speciosum	desert needlegrass	Poaceae
Agrostis avenacea	pacific bentgrass	Poaceae
Ailanthus altissima*	tree of heaven	Simaroubaceae
Allium cepa*	cultivated onion	Liliaceae
Allium sativum*	cultivated garlic	Liliaceae
Amaranthus retroflexus*	pigweed	Amaranthaceae
Ambrosia artemisifolia*	common ragweed	Asteraceae
Ambrosia dumosa	white bursage	Asteraceae
Amsinkia menziezii var. intermedia	fiddleneck	Boraginaceae
Asclepias speciosa	showy milkweed	Asclepiadaceae
Atriplex argentea	silverscale	Chenopodiaceae
Atriplex polycarpa	allscale	Chenopodiaceae
Atriplex semibaccata*	Australian saltbush	Chenopodiaceae
Avena sp.*	cultivated oats	Poaceae
Avena fatua*	wild oat	Poaceae
Baccharis douglasii	marsh baccharis	Asteraceae
Baccharis salicifolia	mule fat	Asteraceae
Brassica nigra*	black mustard	Brassicaceae
Bromus catharticus*	rescue grass	Poaceae
Bromus diandrus*	ripgut brome	Poaceae
Bromus hordeaceus*	soft chess brome	Poaceae
Bromus madritensis ssp. rubens*	red brome	Poaceae
Calystegia macrostegia	morning-glory	Convolvulaceae
Calystegia sp.	morning-glory	Convolvulaceae
Capsella bursa-pastoris*	shepherd's purse	Brassicaceae
Carya illinoinensis*	pecan	Juglandaceae
Castilleja exserta	owl clover	Scrophulariaceae
Centaurea melitensi*s	tocalote	Asteraceae
Chamomilla suaveolens*	pineapple weed	Asteraceae
Chamaesyce ocellata	valley spurge	Euphorbiaceae
Chenopodium album*	lamb's quarters	Chenopodiaceae
Chrysothamnus nauseosus	rubber rabbitbush	Asteraceae
Chrysothamnus teretifolius	green rabbitbush	Asteraceae
Citrullus lanatus*	watermelon	Cucurbitaceae
Ciclospermum leptophyllum*	marsh parsley	Apiaceae
Conyza canadensis	horseweed	Asteraceae
Cupressus sp.	Cypress	Cupressaceae
Cynodon dactylon*	Bermuda grass	Poaceae
Cyperus acuminatus	tapertip flatsedge	Cyperaceae
Cyperus esculentus	nutsedge	Cyperaceae
Cyperus sp.	flatsedge	Cyperaceae
Dactyloctenium aegyptium*	crowfoot grass	Poaceae
Datura wrightii	jimson weed	Solanaceae
Digitaria sanguinalis*	crabgrass	Poaceae
Distichlis spicata	saltgrass	Poeaceae
Echinocloa crus-galli*	barnyard grass	Poaceae
Eleocharis sp.	spikerush	Cyperaceae
Енеосии и вр.	spikerusii	Cyperaceae

Scientific name	Common name	Family
Eriogonum sp.	buckwheat	Polygonaceae
Eriogonum fasciculatum	California buckwheat	Polygonaceae
Eriogonum inflatum	desert trumpet	Polygonaceae
Erodium cicutarium*	filaree	Geraniaceae
Erodium moschatum*	white stemmed filaree	Geraniaceae
Eschscholzia californica	California poppy	Papaveraceae
Filago gallica*	narrowleaf cottonrose	Asteraceae
Frankenia salina	alkali heath	Frankeniaceae
Fraxinus cuspidata	fragrant ash	Oleaceae
Gilia tricolor	bird's eyes	Polemoniaceae
Gossypium sp.	cultivated cotton	Malvaceae
Helianthus sp.	sunflower	Asteraceae
Hemizonia pungens	common spikeweed	Asteraceae
Heterotheca grandiflora	telegraph weed	Asteraceae
Hirschfeldia incana*	Mediterranean mustard	Brassicaceae
Hordeum murinum ssp. glaucum*	foxtail barley	Poaceae
Hymenoclea salsola	burrobush	Asteraceae
Isocoma acradenia var. bracteosa	goldenbush	Asteraceae
Ipomoea triloba*	littlebell	Convolvulacea
Isomeris arborea	bladderpod	Capparaceae
Juglans californica	California black walnut	Juglandaceae
Juncus bufonius var. bufonius	toad rush	Juncaceae
Krascheninnikovia lanata	winter fat	Chenopodiacea
Lactuca serriola*		
	prickly lettuce	Asteraceae
Lagerstroemia indica*	crape myrtle	Lythraceae
Lamium amplexicaule*	common henbit	Lamiaceae
Larrea tridentata	creosote bush	Zygophyllaceae
Lasthenia glabrata	goldfields	Asteraceae
Lemna minor	duckweed	Lemnaceae
Lepidium nitidum	common peppergrass	Brassicaceae
Lolium multiflorum*	Italian ryegrass	Poaceae
Lotus corniculatus*	birdsfoot trefoil	Fabaceae
Lycium sp.	desert thorn	Solanaceae
Malva parviflora*	cheeseweed	Malvaceae
Malvella leprosa	alkali-mallow	Malvaceae
Marrubium vulgare*	horehound	Lamiaceae
Medicago polymorpha*	California burclover	Fabaceae
Medicago sativa*	alfalfa	Fabaceae
Melia azedarach*	chinaberry tree	Meliaceae
Melilotus officinalis*	yellow sweetclover	Fabaceae
Mentha spicata var. spicata*	spearmint	Lamiaceae
Morus alba*	mulberry	Moraceae
Navarretia sp.	Navarretia	Polemoniaceae
Nicotiana glauca*	tree tobacco	Solanaceae
Opuntia basilaris var. treleasei	Bakersfield cactus	Cactaceae
Opuntia bigelovii	teddy bear cholla	Cactaceae
Parkinsonia aculeate*	Mexican palo verde	Fabaceae
Peucephyllum schottii	pygmy-cedar	Asteraceae
Picris echioides*	bristly ox-tongue	Asteraceae
Pinus sp*.	pine	Pinaceae
Pleuraphis rigida	big galleta grass	Poaceae
Poa annua*	annual bluegrass	Poaceae

Scientific name	Common name	Family
Polygonum sp.	smartweed	Polygonaceae
Polypogon monspeliensis*	annual beard grass	Poaceae
Populus fremontii	Fremont cottonwood	Salicaceae
Portulaca oleracea*	green purslane	Portulacaceae
Raphanus sativus*	cultivated radish	Brassicaceae
Robinia sp.	locust	Fabaceae
Rorippa palustris	bog yellowcress	Brassicaceae
Rumex sp.*	dock	Polygonaceae
Salix gooddingii	Goodding's black willow	Salicaceae
Salix laevigata	red willow	Salicaceae
Salix lasiolepis	arroyo willow	Salicaceae
Salsola tragus*	Russian thistle	Chenopodiaceae
Sambucus mexicana	blue elderberry	Caprifoliaceae
Schismus arabicus*	Arabian grass	Poaceae
Scirpus acutus var. occidentalis	tule	Cyperaceae
Senecio vulgaris*	butterweed	Asteraceae
Setaria gracilis*	bristlegrass	Poaceae
Sisymbrium irio*	London rocket mustard	Brassicaceae
Solanum elaeagnifolium*	white horse-nettle	Solanaceae
Solanum lycopersicum*	cultivated tomato	Solanaceae
Solanum nigrum*	black nightshade	Solanaceae
Solanum sarrachoides*	nightshade	Solanaceae
Solanum tuberosum*	potato	Solanaceae
Sonchus oleraceus*	annual sowthistle	Asteraceae
Sorghum bicolor*	sudangrass	Poaceae
Sorghum halepense*	johnsongrass	Poaceae
Spirogyra sp.*	filamentous algae	Zygnemataceae
Stellaria crispa	curled starwort	Caryophyllaceae
Stellaria media*	common chickweed	Caryophyllaceae
Tamarix ramosissima*	tamarisk	Tamaricaceae
Tetradymia spinosa	shortspine horsebrush	Asteraceae
Tribulus terrestris*	puncture vine	Zygophyllaceae
Trichostema lanceolatum	vinegar weed	Lamiaceae
Trifolium sp.	clover	Fabaceae
Triticum sp.*	cultivated wheat	Poaceae
Triticum aestivum*	common wheat	Poaceae
Tropaeolum majus	garden nasturtium	Tropaeolaceae
Typha latifolia	broad-leafed cattail	Typhaceae
Ulmus minor*	smooth-leaved elm	Ulmaceae
Urtica dioica	stinging nettle	Urticaceae
Urtica urens*	dwarf nettle	Urticaceae
Vitis vinifera*	cultivated grape	Vitaceae
Vulpia myuros*	foxtail fescue	Poaceae
Washingtonia sp.*	fan palm	Arecaceae
Wisteria sp.*	wisteria	Fabaceae
Xanthium strumarium	cocklebur	Asteraceae
Yucca brevifolia	Joshua tree	Liliaceae
Zea mays*	cultivated maize	Poaceae
Plants observed at site		

APPENDIX D

Listed Wildlife Species Potentially Occurring in the Project Area

Listed Wildlife Species Potentially Occurring in the Project Area

Scientific Name Common Name	<u>Status*</u> Federal/State/CDFG	General Habitat Description	Area Locations	Onsite Potential
Mammals				
Ammospermophilus nelsoni Nelson's antelope squirrel	/ST/	Arid annual grassland and shrubland communities; sparse to moderate cover; saltbushes and ephedra; friable soils	Known from the Millux, Oil Center, Conner SW, northeast, west, and southwest of the site	None; Suitable habitat absent due to regular cultivation activities
Dipodomys ingens giant kangaroo rat	FE/SE/	Annual grassland, some shrubland; gently sloping topography; friable sandy-loam soils	2 occurrences in Millux quad; known from Lokern area	None; Suitable habitat absent due to regular cultivation activities
Dipodomys nitratoides brevinasus short-nosed kangaroo rat	FSC/CSC/	Relatively flat scrub, saltbush scrub, and grassland communities; friable soils	3 occurrences in the Millux quad	None; Suitable habitat not identified onsite
Dipodomys nitratoides nitratoides Tipton kangaroo rat	FE/SE/	Flat arid grassland and saltbush scrubland; sandy to clayey friable, alluvial soils	Known from seven of the twelve quads; closest documented occurrences are ~ 5.5 miles SW and SE	None; Suitable habitat not identified onsite
Onychomys torridus tularensis Tulare grasshopper mouse	FSC/CSC/	Hot, arid shrubland, desert, and grassland habitats	Known from Stevens and Conner quads	None. Suitable habitat absent due to regular cultivation activities
Perognathus inornatus inornatus San Joaquin pocket mouse	FSC//	Grasslands and blue oak savannas with loose-textured soils for burrowing	Known from Oildale, Stevens, Conner SW, Coal Oil Canyon, and Mettler quads	None; Suitable habitat absent due to regular cultivation activities
Sorex ornatus relictus Buena Vista lake shrew	FE/CSC/	Valley freshwater marsh habitat	Known from Stevens, Millux, and Coal Oil Canyon quads	None; Suitable habitat does not occur onsite
Taxidea taxus American badger	/CSC/	Dry, treeless, open areas; prairies, desert areas; annual grassland and saltbush scrub	Closest occurrence is ~ 3.0 miles north of site	None; Suitable habitat absent due to regular cultivation activities

Vulpes macrotis mutica San Joaquin kit fox	FE/ST/	Loose-textured, shallow soils; Valley sink scrub, valley saltbush scrub, annual grassland; inhabit grazed grassland, petroleum fields, urban areas, and known to exist adjacent to tilled or fallow fields	Closest known occurrence is approx. 3 miles north of site; site is within mapped range	High; Suitable foraging habitat occurs onsite; tracks and scat observed onsite
Birds				
Accipiter striatus sharp-shinned hawk	/CSC/	Nests in ponderosa pine, black oak, riparian deciduous, mixed conifer, and jeffrey pine habitats; prefers riparian areas; north facing slopes with plucking perches, usually within 275 feet of water	Not documented as nesting in the vicinity; known to occur throughout Kern County	High; observed foraging onsite during biological surveys; nesting habitat does not occur onsite
Agelaius tricolor tricolored blackbird	/CSC/	Nest colonially in cattails or riparian brambles; requires open water and large grassland areas for foraging	Known from the Coal Oil Canyon and Mettler quads	None; Suitable habitat does not occur within the project site
Ardea alba great egret	rookery ¹	Colonial nester in large trees; rookery sites located near marshes, tide flats, irrigated pastures, and margins of rivers and lakes	1 rookery occurrence in Weed Patch quad, ~ 1.6 miles southeast of site	None; Suitable habitat does not occur within the project site
Athene cunicularis burrowing owl	/CSC/	Annual and perennial grasslands, deserts, and scrublands with low- growing vegetation; burrows of fossorial mammals	Closest known occurrence is ~ 3 miles west of site	High; One active burrow and three individuals observed onsite
Buteo swainsoni Swainson's hawk	/ST/	Breed in Juniper-sage flats, riparian corridors, and oak savannas; require grassland, alfalfa, or grain fields with rodent population for foraging	Closest known occurrence is approx. 12.5 miles west of site at Kern River	Moderate; Marginal foraging habitat. No nesting habitat occurs onsite.
Charadrius alexandrinus nivosus western snowy plover	FT//	Sandy beaches, salt pond levees, and shores of large alkali lakes; needs sandy, gravelly, or friable soils for nesting	Known from Mouth of Kern quad, but habitat gone due to lake drainage	None; Suitable habitat does not occur within the project site

Circus cyaneus northern harrier	/CSC/	Open country, tidal marshes, meadows, wetlands, fallow fields, grasslands, agricultural fields; nest on ground or over water in dense vegetation	Known throughout Kern County	High; Species observed foraging during site survey. No nesting habitat occurs onsite
Coccyzus americanus occidentalis western yellow-billed cuckoo	FC/SE/	Nest in riparian forests, along broad lower flood bottoms of larger river systems; willows and mixed cottonwood canopy with understory of blackberry, nettles or wild grape	Known from Kern River near Weldon, extirpated from Mouth of Kern quad	None; Suitable habitat does not occur within the project site
Dendrocygna bicolor fulvous whistling-duck	/CSC/	Nest in tule/cattail marsh freshwater marsh; flooded grassland and pasture, rice fields	Known from the Mouth of Kern quad at Buena Vista Lake	None; Suitable habitat does not occur within the project site
Egretta thula snowy egret	rookery ²	Nests colonially in protected beds of dense tules; rookeries located close to foraging areas: marshes, tidal flats, wet meadows, streams, and borders of lakes	1 rookery occurrence in Weed Patch quad, ~ 1.6 miles southeast of site	None; Suitable habitat does not occur within the project site
Haliaeetus leucocephalus bald eagle	FT/SE/FP	Lakes, reservoirs, forests and some rangeland	Known to occur in eastern and southern Kern County	None; Suitable habitat does not occur within the project site
Plegadis chihi white-faced ibis	FSC/CSC/	Fresh emergent wetlands, shallow lacustrine waters, wet meadows, and flooded or irrigated croplands and pastures	Known to winter northwest of the project site in the Rosedale quad	None; Suitable habitat does not occur within the project site
Xanthocephalus xanthocephalus yellow-headed blackbird	/	Nest with freshwater emergent wetland with dense vegetation and deep water; in areas with high abundance of large insects	1 occurrence in Mouth of Kern quad, near Buena Vista Lake	None; Suitable habitat does not occur within the project site

Reptiles

Anniella pulchra pulchra silvery legless lizard	FSC/CSC/	Sandy or loose loamy soils under sparse vegetation of beaches, chaparral, pine-oak woodlands, sycamores, cottonwoods on riparian terraces	Closest known occurrence is in the Oildale quad	None; Suitable habitat absent due to regular cultivation activities
Clemmys marmorata pallida southwestern pond turtle	FSC/CSC/	Permanent or nearly permanent water bodies with basking areas, such as downed woody debris or bank haul- out areas	Known from Kern County. Location information suppressed by CDFG	None; No suitable aquatic habitat exists onsite
Gambelia sila blunt-nosed leopard lizard	FE/SE/FP	Sparsely vegetated alkali scrub and desert scrub habitats with low topographic relief	Known throughout Kern County. Closest known occurrence is approx. 9.7 miles west of site	None; Suitable habitat absent due to regular cultivation and surface disturbance activities
Thamnophis gigas giant garter snake	FT/ST/	Freshwater, low-gradient streams; highly aquatic	1 occurrence in the Tupman quad	None; No suitable aquatic habitat exists onsite
Amphibians				
Rana aurora draytonii California red-legged frog	FT/CSC/	Woodlands, grasslands, forests, and streamsides with plant cover; breeding needs include permanent water, ponds, slow streams, marshes	Possible occurrences in Sierra foothills of Kern County	None; Suitable habitat does not occur within the project site
Spea hammondii western spadefoot	/CSC/	Grassland habitats and valley-foothill hardwood woodlands; vernal pools required for breeding	Known form the Stevens quad	None; Suitable habitat does not occur within the project site
Fish				
Hypomesus transpacificus delta smelt	FT/ST/	Sacramento-San Joaquin Estuary, in streams with other fish	Only occurs in the Sacramento-San Joaquin Estuary	None; Suitable habitat does not occur within the project site
Invertebrates				
Brachinecta lynchi vernal pool fairy shrimp	FT//	Vernal pools ecosystems	Known to occur throughout the Central Valley	None; Suitable habitat does not occur within the project site

Desmocerus californicus dimorphus valley elderberry longhorn beetle	FT//	Riparian forests in association with elderberry (Sambucus sp.)	Known patchy distribution in riparian forests in Central Valley from Redding to Bakersfield	None; Suitable habitat does not occur within the project site
Helminthoglypta callistoderma Kern shoulderband	/	Little known about habitat. Known to occur in vegetation at waters edge	1 occurrence in the Gosford quad	None; Suitable habitat does not occur within the project site
Lytta moesta moestan blister beetle	FSC//	Adults found on flowers and in grasslands; central California	Listed as occurring in the Lamont quad	None; Suitable habitat does not occur within the project site
Lytta morrisoni Morrison's blister beetle	FSC//	Found on <i>Gilia</i> and <i>Linanthus</i> flowers; Southern central valley of California	Listed as occurring in the Lamont quad	None; Suitable habitat does not occur within the project site

*Status

Federal:

FE: Federally endangered FT: Federally threatened

FSC: Federal species of concern FC: Candidate species

State:

SE: California endangered ST: California threatened

CSC: California species of special concern

¹: California Department of Forestry-Sensitive

²: U.S. Birds Conservation Watch List

CDFG:

FP: Fully protected

APPENDIX C

Listed Plant Species Potentially Occurring in the Project Area

Listed Plant Species Potentially Occurring in the Project Area

Scientific Name Common Name	<u>Status*</u> Federal/State/CNPS	Flowering Period	General Habitat Description	Area Locations	Onsite Potential
Atriplex cordulata heartscale	//1B.2	Apr-Oct	Meadows/seeps, chenopod scrub, valley and foothill grassland, sandy, saline/alkaline soils; 1-375 m.	Closest known occurrence is ~4.0 miles NE of site	None; Suitable habitat does not occur onsite
Atriplex tularensis Bakersfield smallscale	/SE/1B.1	Jun-Oct	Chenopod scrub, alkali meadow, valley sink scrub, saltgrass; 90-110 m.	Extirpated from known locations in Gosford and Weed Patch quads	None; Suitable habitat does not occur onsite
Calochortus striatus alkali mariposa lily	//1B.2	Apr-Jun	Chaparral, chenopod scrub, Mojavean desert scrub, meadows; alkali meadows and ephemeral washes; 90-1595 m.	1 occurrence in Millux quad	None; Suitable habitat does not occur onsite
Caulanthus californicus California jewelflower	FE/SE/1B.1	Feb-May	Chenopod scrub, valley and foothill grassland, pinyon and juniper woodland; sandy soil; 70-1000 m.	1 occurrence in Rosedale quad and 1 in Oil Center quad	None; Suitable habitat does not occur onsite
Caulanthus coulteri var. lemmonii Lemmon's jewelflower	//1B.2	Mar-May	Pinyon-juniper woodland, valley and foothill grassland; 80-1220m.	1 occurrence in Mettler quad at Wheeler Ridge	None; Suitable habitat does not occur onsite
Cordylanthus mollis ssp. hispidus hispid bird's beak	//1B.1	Jun-Sep	Meadows, playas, valley and foothill grassland; damp alkaline soils, esp. in alkali meadows and alkali sinks with <i>Distichlis</i> ; 10-155 m.	1 occurrence in Coal Oil Canyon quad	None; Suitable habitat does not occur onsite
Delphinium recurvatum recurved larkspur	//1B.2	Mar-May	Chenopod scrub, cismontane woodland, valley and foothill grassland; alkaline soil; 3-750 m.	Known occurrences in Millux, Gosford, and Stevens quads	None; Suitable habitat does not occur onsite

Erodium macrophyllum round-leaved filaree	//2.1	Mar-May	Cismontane woodland, valley and foothill grassland; clay soils; 15-1200 m.	Closest known occurrence in the Eagle Rest Peak quad at Wind Wolves Preserve	None; Suitable habitat does not occur onsite due to ongoing agricultural practices
Eschscholzia lemmonii ssp. kernensis Tejon poppy	//1B.1	Mar-May	Chenopod scrub, valley and foothill grassland, sparse vegetation; adobe clay soils; 160-1000 m.	1occurrences in Coal Oil Canyon quad	None; Suitable habitat does not occur onsite
Lasthenia glabrata ssp. coulteri Coulter's goldfields	//1B.1	Feb-Jun	Coastal salt marshes, playas, valley and foothill grasslands, vernal pools; usually found on alkaline soils in playas, sinks, and grasslands; 1-1400 m.	1 occurrence in Millux quad	None; Suitable habitat does not occur onsite
Layia leucopappa Comanche Point layia	//1B.1	Mar-Apr	Chenopod scrub, valley and foothill grassland; dry hills in white, grey clay soils, often with weedy grasses; 100-350 m.	1 occurrence in Coal Oil Canyon quad area	None; Suitable habitat does not occur onsite
Mimulus pictus calico monkeyflower	//1B.2	Mar-May	Broadleaf upland forests, cismontane woodland; in bare ground around gooseberry bushes or granite rock outcrops; 100-1300 m.	1 occurrence in Oil Center quad area	None; Suitable habitat does not occur onsite
Monardella linoides ssp. oblonga flax-like monardella	FSC//1B.3	Jun-Aug	Lower and upper montane coniferous forest, pinyon-juniper woodland; on dry slopes of yellow pine forest; decomposed granitic soils; also on roadside disturbed areas; 1695-2470 m.	Known from Mt. Pinos	None; Suitable habitat does not occur onsite
Monolopia congdonii San Joaquin woolly threads	FE//1B.2	Feb-May	Chenopod scrub, valley and foothill grassland, non-native grassland; sandy neutral – subalkaline soil with less than 10% cover; 60-800 m.	Known from Oil Center, Oildale, Rosedale, and Stevens quads	None; Suitable habitat does not occur onsite due to ongoing agricultural practices

Navarretia setiloba Piute Mountain navarretia	//1B.1	Apr-Jul	Cismontane woodland, pinyon- juniper woodland, valley and foothill grassland; red clay and possibly other clay soils or gravelly loam; 300-1110 m.	1 occurrence in Lamont quad	None; Suitable habitat does not occur onsite
Opuntia basilaris var. treleasei Bakersfield cactus	FE/SE/1B.1	Apr-May	Chenopod scrub, valley and foothill grassland, cismontane woodland; coarse or cobbly well-drained granitic sand on bluffs, low hills, and flats within grassland; 90-550 m.	Known from Coal Oil Canyon, Mettler, Weed Patch, Lamont, Oil Center, and Oildale quads	None; Suitable habitat does not occur onsite
Pterygoneurum californicum California chalk-moss	//1B.1	N/A	Chenopod scrub, akali playas, valley and foothill grasslands; alkali soils; 10-100 m.	1 occurrence in Gosford quad, possibly extirpated	None; Suitable habitat does not occur onsite
Stylocline citroleum oil nestraw	//1B.1	Mar-Apr	Chenopod scrub, coastal scrub, valley and foothill grassland, valley saltbush scrub; sandy and clay soils; 50-400 m.	1 occurrence in Oil Center quad	None; Suitable habitat does not occur onsite
Stylocline masonii Mason's neststraw	//1B.1	Mar-May	Chenopod scrub, pinyon and juniper woodland, washes; sandy soil; 100-1200 m.	1 occurrence in Rosedale quad, 1 in Gosford quad; Closest known occurrence is ~6.7 miles NW of site	None; Suitable habitat does not occur onsite
Tortula californica California screw-moss	//1B.2	N/A	Chenopod scrub, valley and foothill grassland; sandy soil; 10-1460 m.	1 occurrence in Oil Center quad	None; Suitable habitat does not occur onsite
*Status Federal: FE: Federally endangered FSC: Federal species of concern	State: SE: California endangered	CNPS: List 1B: Rare, threatened, or endangered in California and elsewhere List 2: Rare, threatened, or endangered in California, but		CNPS Threat Code Extensions: .1 = Seriously endangered in California .2 = Fairly endangered in California .3 = Not very endangered in California	

more common elsewhere

APPENDIX B

Photo Documentation





Site Photo Index





Photo 1

View north from southwest corner of the property. State Highway 99 is located adjacent to the west.



Photo 2

View looking northeast from the southwest corner of the property



Photo 3

View looking east from the southwest corner of the site



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Photo 4 View from midline of west boundary looking east along



Photo 5 View from northwest corner of property looking east along northern boundary line



Photo 6 View from northwest corner of property looking southeast





Photo 7

View from northwest corner looking south along western boundary of the property. State Highway 99 is located adjacent to the west.



Photo 8

View from northeast corner of property looking south



Photo 9

View from northeast corner of property looking southwesterly.





Photo 10 View looking south from point in the northeast 1/4

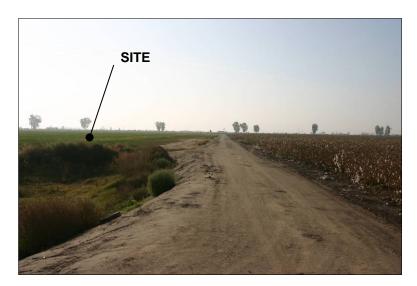


Photo 11 View looking west from point in the northeast 1/4 section 7.



Photo 12
East-facing view along the concrete-lined ditch.
Burrowing Owl observed along irrigation ditch at edge of recently tilled field.





Photo 13
West-facing view from the south side of the steel shop building



Photo 14
South-facing view along Union
Avenue from the east midsection line of Section 7



Photo 15
View looking north from the southeast corner of the site





Photo 16
View west from southeast corner of site



Photo 17
North-facing view of from
Houghton Road at the south 1/4
corner

APPENDIX A

Definitions of Special-Status Species

Definitions of Special-Status Species

Special-Status Plant Species

- Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species).
- Plants that are Category 1 candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (55 CFR 6184, February 21, 1990).
- Plants that meet the definitions of rare or endangered species under the CEQA (State CEQA Guidelines, Section 15380).
- Plants considered by the CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2 in Skinner and Pavlik, 1994).
- Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Lists 3 and 4 in Skinner and Pavlik, 1994).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
- Plants considered sensitive by other federal agencies (i.e., U.S. Forest Service, Bureau of Land Management), state and local agencies or jurisdictions.
- Plants considered sensitive or unique by the scientific community or occurring at the limits of its natural range (*State CEQA Guidelines*, Appendix G).

Special-Status Wildlife Species

- Animals listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species).
- Animals that are Category 1 candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (54 CFR 554).
- Animals that meet the definitions of rare or endangered species under the CEOA (State CEOA Guidelines, Section 15380).
- Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5).
- Animal species of special concern to the CDFG (Remsen, 1978 for birds; Williams, 1986 for mammals).
- Animal species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).