Biological Evaluation for
VA Community-Based Outpatient Clinic
City of Bakersfield, Kern County, California

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(Revision-3)

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1.0 INTRODUCTION

1.1 Purpose and Background

The purpose of this report is to document biological resources identified during the literature review and reconnaissance-level survey conducted within the Project site, identify the potential for special-status resources to be present, identify potential impacts to those resources due to the proposed Project, and recommend avoidance and minimization measures for implementation prior to and during Project activities. The objective of avoidance and minimization measures is to reduce potential impacts to biological resources to a level of "less than significant", if any potentially significant impacts are identified. For the purposes of this report, potential impacts to the biological resources of the proposed Project were evaluated in accordance with the biological resources section in Appendix G of the *CEQA Guidelines* (2021).

1.2 Project Description and Surrounding Area

The SASD Development Group, LLC (SASD) is proposing the construction of a United States Department of Veterans Affairs (VA) Community-Based Outpatient Clinic. The proposed Project will include approximately 30,100 square feet maximum net usable space and 39,648 rentable gross square feet in the facility that will include parking (Figure 1-1). The Project site is located in north Bakersfield, approximately 0.15 miles (15.3 kilometers) west of State Highway 99, and 0.5 miles southeast of the corner of Olive Drive and Knudsen Drive, more specifically in Sections 15, Township 29 South, Range 27 East Mount Diablo Base & Meridian, Assessor Parcel Number 365-020-30. The entire Project site consists of approximately 10-acres at 14045 Knudsen Drive, Bakersfield, California (Figures 1-2 and 1-3). The general topography of the area is nearly flat and ranges from 426 feet to 430 feet above mean sea-level.

The Project is located near the middle of the southern portion of the San Joaquin Valley; a broad, treeless plain in the rain shadow of the Coast Ranges. The region's climate can be characterized as Mediterranean with hot, dry summers and cool, moist winters. Summer high temperatures frequently exceed 100 degrees Fahrenheit (°F; 38 °Celsius [°C]). Winter temperatures in the San Joaquin Valley are mild, with most areas experiencing very few frost days. Rainfall varies, increasing from west to east. Approximately 90% of the rainfall in the region occurs between November 1 and April 1. Drought cycles occur periodically, becoming severe enough that plant and animal populations can experience large fluctuations (Twisselman 1967).

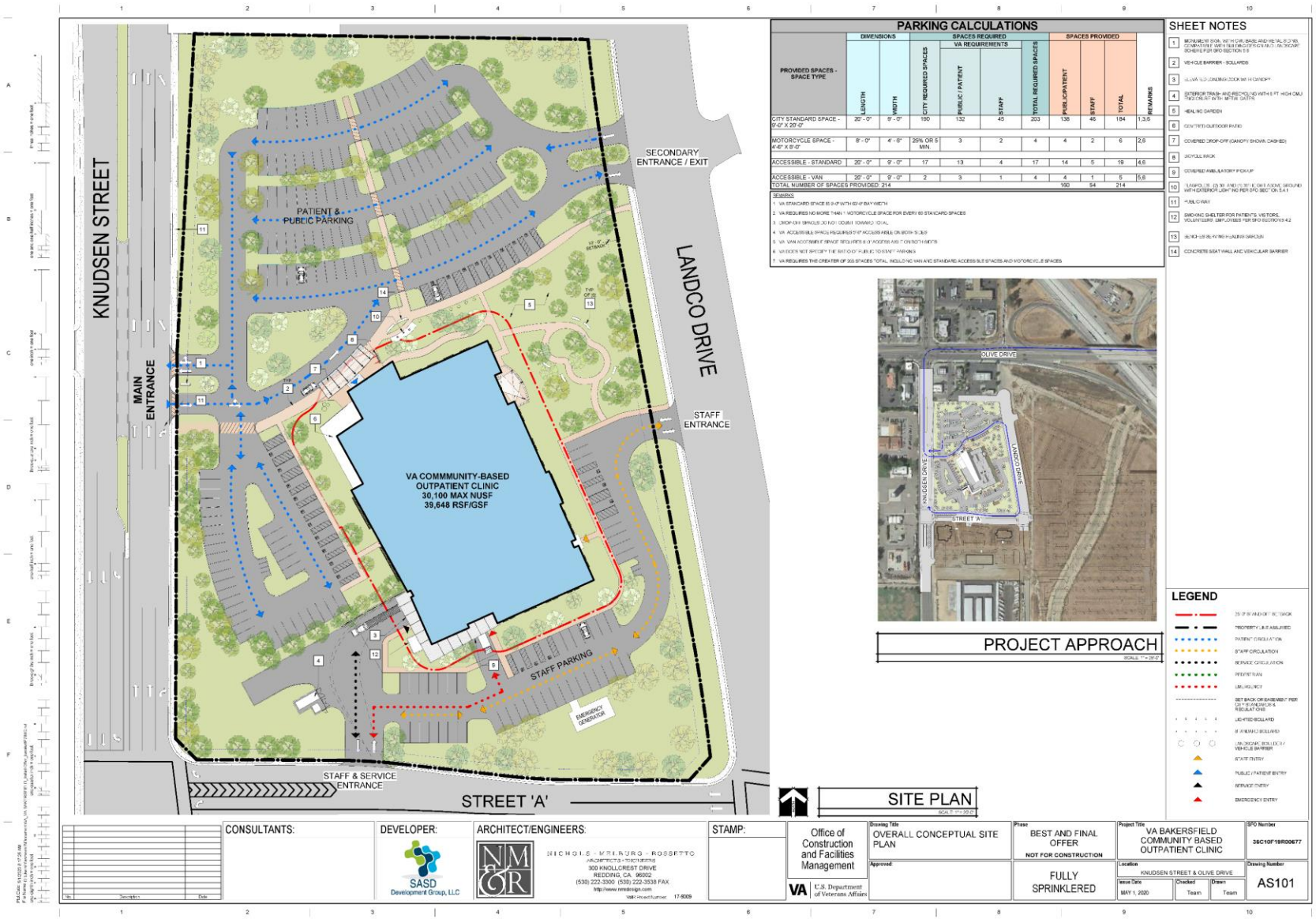

Figure 1-1: Project Conceptual Plan – Kern County, California (SASD 2021).

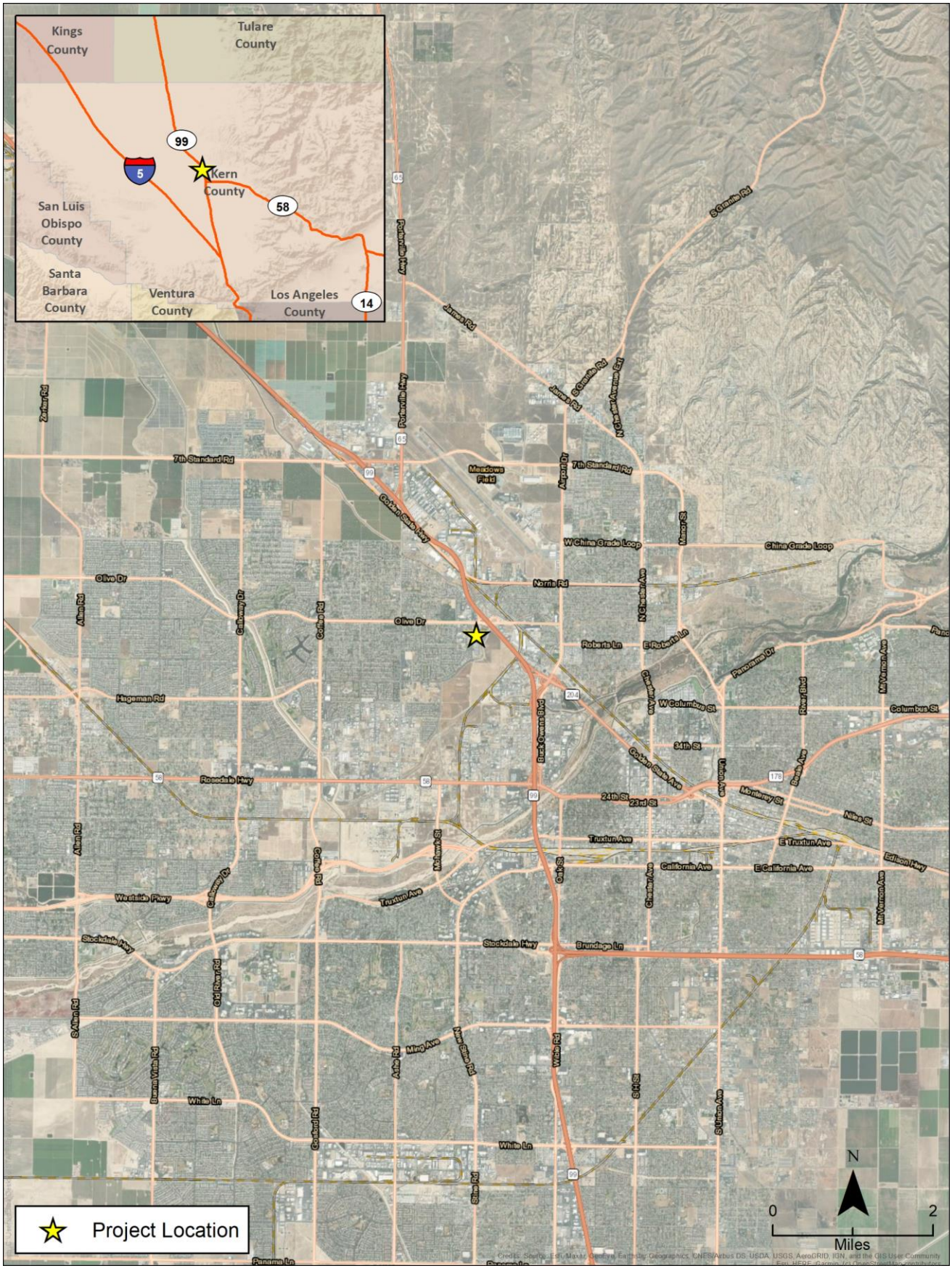

Figure 1-2: Project Vicinity Map – Kern County, California

Figure 1-3: Project Site Map- Kern County, California

2.0 REGULATORY BACKGROUND

The following section identifies the regulatory compliance framework that has been considered during both the field work and development of this biological evaluation. The regulatory framework establishes criteria in which significance is determined and whether a project will have a significant impact on species, biological resources, or the environment.

2.1 Federal and State Endangered Species Acts

The project site is within the range of several state- and federal-listed species which are protected through various statutes. Listed plant and animal species are protected primarily through the Federal Endangered Species Act (FESA) (16 U.S.C. §1531 et seq. (1973)) and/or the California Endangered Species Act (CESA) (Fish & G. Code § 2050 - 2115.5), depending on listing status. Each of these laws, among other provisions, prohibits *take* of listed threatened and endangered species. Although the definition of *take* under each law varies, in general, possessing, injuring or killing a listed species without a permit issued from the USFWS and/or the CDFW [Formerly the California Department of Fish and Game (CDFG)] is unlawful. Under FESA, harassment and harm could also be considered take, which requires a permit.

2.2 Migratory Bird Treaty Act

Among other provisions, the *Migratory Bird Treaty Act* (MBTA) *of 1918* (2018) prohibits the possession of migratory birds or their parts, and destruction of nests, eggs, and/or young of all designated migratory bird species. With very limited exceptions, all birds native to California are included in this prohibition.

2.3 California Fish and Game Code (C.F.G.C. § 1580 et seq.)

Several sections of the CFGC are applicable to analysis of biological resource impacts that may be associated with the Project. The following paragraphs summarize these sections.

2.4 Section 1580

This section declares the policy of the state is to protect threatened or endangered native plants; wildlife; aquatic organisms or specialized habitat types; both terrestrial and non-marine aquatic, or large, heterogeneous natural gene pools for the future use of mankind through the establishment of ecological reserves.

2.5 Sections 1600–1616

This portion of the CFGC requires notification of the CDFW if any of the following may occur within a river, stream, or lake in the state of California:

- Substantial diversion or obstruction of the natural flow,
- Substantially changing or using any material from the bed, channel, or bank,

- Depositing or disposing of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

This notification may result in a Streambed Alteration Agreement between the project applicant and the CDFW. Activities in intermittent streams and canals may require Streambed Alteration Agreements.

2.6 Section 1900, et seq.

This portion of the CFGC is known as the *California Native Plant Protection Act of 1977* (2015). The purpose of this chapter is to preserve, protect and enhance endangered or rare native plants of California. Many species and subspecies of native plants are endangered because their habitats are threatened with destruction, drastic modification, or severe curtailment. Commercial exploitation, disease, and other factors also represent threats to species and subspecies of native plants. This portion of the code designates rare, threatened, and endangered plant taxa of California.

2.7 Section 1930–1933

These sections established the Significant Natural Areas Program and declared it to be administered by the CDFW, because areas containing diverse ecological and geological characteristics are vital to the continual health and well-being of the state's citizens and natural resources. The CDFW is responsible for obtaining access to the most recent information with respect to natural resources by maintaining, expanding, and keeping a current data management system (California Natural Diversity Database [CNDDB]), designed to document information on these resources. This data is required to be made available to interested parties on request, and costs are to be shared by all who use the data management system (CDFW 2020).

The state's most significant natural areas are to be designated and, after consultation with federal, state, and local agencies, educational institutions, civic and public interest organizations, private organizations, landowners, and other private individuals, periodic reports regarding the most significant natural areas are to be prepared. The CDFW is required to maintain and perpetuate these significant natural areas for present and future generations in the most feasible manner. The code also requires that the CDFW coordinate services to federal, state, local and private interests wishing to aid in the maintenance and perpetuation of significant natural areas.

2.8 Section 3503

This section prohibits taking, possessing, or needlessly destroying the nest or eggs or any bird. Birds of prey are specifically included in Section 3503.5.

2.9 Section 3513

California's migratory birds are protected under this section by making it unlawful to take or possess any migratory, non-game bird (or any part of such bird) as designated in the MBTA.

2.10 Section 3511, 4700, 5050, and 5515

These sections prohibit take of animals that are classified as fully protected (FP) in California. Take of FP species is specifically prohibited, even if other sections of the CFGC provide for incidental take of the species, with very narrow exceptions.

2.11 Title 14 California Code of Regulations (CCR) Section 15000 et seq.

This portion of the CCR prescribes the regulations to be followed by all local and state agencies in implementing CEQA.

2.12 Porter-Cologne Water Quality Control Act (Clean Water Act Section 401 Certification or Waiver)

The state of California regulates water quality related to discharge of fill material into waters of the state pursuant to Section 401 of the *Clean Water Act of 1972* (2002). Section 401 compliance is a federal mandate implemented by the state. The local Regional Water Quality Control Board (RWQCB) has jurisdiction over all those areas defined as jurisdictional under Section 404 of the CWA and regulates water quality for all waters of the State. These waters may include isolated wetlands as defined under the *Porter-Cologne Water Quality Control Act* (2015). Regulated discharges include those that can affect water quality, even if there is no significant nexus to a traditional navigable water body required for the U.S. Army Corps of Engineers (ACOE) determination of jurisdiction over waters of the U.S. A Waste Discharge Permit may be required to comply with the Porter-Cologne Water Quality Control Act even if the CWA (including Section 401 water quality certifications or Section 404 permits) would not apply.

2.13 Clean Water Act

The ACOE, under Section 404 of the CWA, regulates discharges of dredged or fill material in waters of the U.S. Per the U.S. Environmental Protection Agency (2020), waters of the United States include:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or

natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    - Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    - (From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    - Which are used or could be used for industrial purposes by industries in interstate commerce;
- All impoundments of waters otherwise defined as waters of the United States under this definition;
- Tributaries of waters identified above;
- The territorial sea;
- Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in bullets above.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the U.S.

Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Both wetlands and non-wetland areas can be included within the regulated area. Within non-wetlands that are classified as waters of the U.S., the ACOE maintains jurisdiction up to the ordinary high-water mark. If wetlands are present that meet the criteria established by the ACOE, the limit of jurisdiction is the ordinary high-water mark or the limit of the adjacent or associated wetland, whichever is greater. If waters are determined to be under the jurisdiction of the ACOE, the RWQCB would be the state-permitting authority. At the discretion of the ACOE, impacts to these areas could require a permit, depending on the type and size of the activity within ACOE jurisdiction.

2.14 Metropolitan Bakersfield Habitat Conservation Plan

The Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) (City of Bakersfield 1994; CDFW 2014) was developed to obtain permits that meet both federal and state environmental regulations regarding incidental "take" of listed species set for in the ESA and CESA. In turn, urban development outlined in the Metropolitan Bakersfield 2010 General Plan can proceed while the goal of the MBHCP is to acquire, preserve, and enhance native habitats that support endangered and sensitive species. Since development on open lands in Metropolitan Bakersfield could potentially result in the incidental "take" of habitat and/or sensitive species, permits acquired under the MBHCP (Incidental Take Permit [ITP] No. 2081-2013-058-04) include Section 10(a)(1)(B) of the ESA and Section 2081 of the CESA. The MBHCP is funded through the collection

of mitigation fees associated with all urban development occurring within the HCP permit area. The fee is paid to the City or County at the time of grading permit approval, grading plan approval, or issuance of building permit, whichever occurs first. Upon payment and provided that all applicable measures required in the HCP have been implemented, the applicant will become a sub-permittee and would be allowed the incidental take of species in accordance with federal and state endangered species laws. However, in June 2023, the MBHCP and the Metropolitan Bakersfield Urban Development Incidental Take Permit (MBITP), in its current form, is set to expire and will no longer provide incidental "take" coverage for applicants. In the event of MBHCP and MBITP expiration, projects requiring and seeking incidental take coverage will be required to comply with CESA and FESA as individual projects unless subsequent regional authorizations are issued.

2.15 Metropolitan Bakersfield General Plan

The Metropolitan Bakersfield General Plan (2002) has developed Conservation/Biological Resources, Land Use, Open Space and Parks Elements goals, and policies that provide guidance for decision makers regarding the future affects to biological resources within the Metropolitan Bakersfield planning area. Goals and policies that are applicable to the proposed project, and the project's consistency with these goals, are outlined below.

CON/BR-G-1 "Conserve and enhance Bakersfield's biological resources in a manner which facilitates orderly development and reflects the sensitivities and constraints of these resources."

CON/BR-G-2 "To conserve and enhance habitat areas designated 'sensitive' animal and plant species."

CON/BR-P-1 "Direct development away from 'sensitive biological resource' areas, unless effective mitigation measures can be implemented."

CON/BR-P-5 "Determine the locations and extent of suitable habitat areas required for the effective conservation management of designated 'sensitive' plant and animal species."

3.0 METHODS

"Special-status" or "sensitive" species considered in this evaluation include those that may occur in the project vicinity that have statutory protections, such as federal- and state-listed (rare, threatened, or endangered; fully protected) species and candidates for listing under the respective endangered species acts. In addition, species that are of "concern" to either USFWS or CDFW have been included in the evaluation if the project site or vicinity (generally, 10-mile radius) includes habitat that may be occupied by such species. Bird species that are not listed as threatened or endangered have been included if the project site or observed vicinity includes potential nesting habitat or the species was observed during biological survey activities. In addition, potential impacts to special-status bird species have been considered if habitat that may be important to the species outside of breeding season was observed. Species may meet the criteria for inclusion on the lists consulted during the literature review if a special interest group, such as the California Native Plant Society (CNPS), has concluded through published data that the species is declining and warrants concern and, potential habitat is present on the project site or vicinity. Species evaluated in this biological resource assessment have been collectively referred to as "special-status species."

3.1 Literature Review

This section discusses methods of the literature review and surveys.

- Listed or proposed for listing as threatened or endangered under Federal Endangered Species Act (FESA) or candidates for possible future listing as threatened or endangered under FESA (50 CFR §17.12);

- Listed or candidates for listing by the State of California as threatened or endangered under California Endangered Species Act (CFGC §2050 et seq.);

- Records search of the California Natural Diversity Database (CNDDB; CDFW 2021) for sensitive wildlife species, plant species, and vegetation communities (Appendix A);

- List of potentially occurring listed species generated from a review of the U.S. Fish and Wildlife Service's (USFWS) IPaC Trust Resources Report (USFWS 2021a) list of federal and threatened species (Appendix B);

- Listed as rare under the California Native Plant Protection Act (CFGC §1900 et seq.);

- Meet the definition of rare or endangered under CEQA §15380(b) and (d). Species that may meet the definition of rare or endangered include the following:

- List of potentially occurring special-status plants generated by a query for the California Native Plant Society (CNPS) *Inventory or Rare and Endangered Plants* (CNPS 2021) (Appendix C);

- Species that may warrant consideration on the basis of local significance or recent biological information;

- Considered a locally significant species, that is, a species that is not rare from a statewide perspective, but is rare or uncommon in a local context such as within a county or region (CEQA §15125) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G).

- USFWS National Wetlands Inventory (NWI; USFWS 2021b)

The list of special-status species that was evaluated was additionally compiled by consulting pertinent literature, obtaining the USFWS *List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project*, and accessing the CNDDB (USFWS 2021a; CDFW 2021). The CNDDB contains records for special-status species, as well as special-status natural communities that have been reported to the CDFW. A report was generated for the project location (i.e., Oildale USGS 7.5-minute topographic quadrangle in which the project site is found (Appendix A). Species that are recorded by the CNDDB that have no official status (e.g., *Watch List*) were not further considered in the impact evaluation unless observed during the reconnaissance site visits.

MBI staff reviewed these lists and other pertinent information to complete the list of special-status species evaluated. The list was then reviewed based on site characteristics, the project description, and observations, to assess the potential for occurrence. Potential impacts were determined in relation to the special-status species that may occur on the proposed project site and the aspects of the Project that could result in impacts to those species. Species whose occurrence in the vicinity and life history makes them vulnerable to impacts even if they are not known to occur directly on the project site were also evaluated.

3.2 Field Survey

The site visit field survey was conducted by MBI Senior Biologist, Erika Noel on October 26, 2021. The site visit consisted of walking belt transects spaced at 50 to 75 feet in potential habitat within the proposed project footprint. A 100-foot buffer was walked if accessible and areas not accessible were visually scanned using binoculars. Field notes included all identified plant and wildlife species observed. Supporting documentation regarding species findings included indirect observations (aurally) or direct observations and/or significant species *sign* (e.g., scat, tracks, feather/fur, prey remains, nests/burrows or any other indication of wildlife presence) deemed necessary to document potential occupation and habitat suitability. Species identification was aided through the use of binoculars and field guides, and locations of significant findings were recorded using handheld, global positioning system (GPS) units.

If encountered, coordinates for important biological resource elements and direct observations of special-status species were recorded using a handheld geographic positioning system unit (accuracy ±20 feet, ±6 meters). If observed, SJKF dens were classified as potential, known, natal, or atypical as defined by the *USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (2011).

All plant taxa encountered during the site visits were identified to the extent possible. Identifications were made using keys contained in *The Jepson Manual: Vascular Plants of California* and online updates containing revisions to taxonomic treatments (Baldwin *et al*., 2012; Jepson Flora Project 2021). Plant identifications were made using a 10X or greater magnification field hand lens and/or were collected and identified using a dissecting microscope. Locations of special-status plant species or tentatively identified special-status plant species were recorded using a handheld GPS unit.

General habitat and site conditions were photographed to visually depict conditions during the site visits. In addition, special-status species or habitat features, such as vegetation communities or ephemeral channels, were also photographically documented if present.

4.0 RESULTS and DISCUSSION

The literature review resulted in identification of 9 special-status plant species and 11 special-status wildlife species that could occur in the vicinity of the proposed project (Tables 4-1 and 4-2). The general site conditions combined with the habitat requirements and known ranges of these species were evaluated to determine potential for occurrence of these species on the proposed project site. The remainder of this section discusses the October 26, 2021, reconnaissance field survey and evaluation of those results based on the literature review and professional judgment of MBI personnel. Special-status species that are discussed in the following sections are those that were identified as potentially being affected by the proposed project or are discussed due to sensitivity in the region.

4.1 General Conditions

The Project site had been through a fire a little over a year ago and was nearly devoid of any vegetation at the time of the survey (Appendix A). Historically, the site had been used for agriculture but more recently became fallow and was left vacant, with vegetation consisting of non-native ruderal species (*Salsola* sp.). Additionally, evidence of periodic disking was observed, presumably for fire prevention. Surrounding land uses include commercial development to the north and south, residential/commercial to the west, and open land in a similar condition to the east. Seven plant taxa and 4 wildlife species were observed during the survey (Appendix B). Site diversity is extremely limited due to the ongoing disturbance, historic land use, and urban nature of the site and its surroundings.

No areas identified by the USFWS National Wetlands Inventory are present within the Project site (USFWS 2021b). A stormwater sump was present approximately 160 feet north of the southwest corner of the Project site.

4.2 Common Plant Species

MBI Biologist Erika Noel, observed a total of 7 common plant species that were identifiable to either genus or species. Two native plant species were identified, comprising 29% of the total taxa. Five non-native plant species were identified, comprising 71% of the total. Plant identification was limited based on the season of the survey, site disturbance, and urban nature of the Project.

4.3 Common Wildlife Species

Amphibians and Reptiles

Amphibians require standing or flowing water for part or all of their life cycle. Ponds, seasonal pools, and drainages provide suitable habitat for common as well as some sensitive amphibian species. Due to recent rain, a small amount of water was in the stormwater sump at the time of the survey efforts. No amphibian species were observed within the Project site and none are suspected. Amphibians may temporarily occupy the stormwater sump during the wet season if ponded water were present for a sufficient time period. Species known from the vicinity of the Project include western toad (*Anaxyrus boreas*) and Baja California treefrog (*Pseudacris hypochondriaca hypochondriaca*).

Vegetation characteristics can contribute to the potential diversity of reptiles within an area. Reptiles occur within a diverse mixture of habitats used for foraging, shelter, and breeding. Small mammal burrows contribute to cover opportunities, which they use as a refuge from differing ambient temperatures and predator avoidance. The Project site provides marginally suitable habitat for several reptile species. Common side-blotched lizard (*Uta stansburiana*) was observed during survey efforts. Other common lizards known to occur in the vicinity include California whiptail (*Aspidoscelia tigris munda*) and San Joaquin fence lizard (*Sceloporus occidentalis biseriatus*).

Birds

The open habitat of the Project area is well suited for predatory bird species as well as several passerines. The power line poles within the vicinity of the project provide suitable nesting habitat for common raptors, and the Project site provides suitable foraging habitat.

The only bird species observed at the time of the survey were common raven (*Corvus corax*) and mourning dove (*Zenaida macroura*). Numerous common bird species typical of urban open space may forage on the Project site, such as northern mockingbird (*Mimus polyglottos*), and house finch (*Haemorhous mexicanus*). The site has extremely limited value as nesting habitat.

Mammals

The Project site provides suitable vegetative communities that common small mammalian species that are tolerant of disturbance can use as cover and food gathering. These species provide a prey base for larger mammals and birds of prey.

The Project site provides predatory mammals such as coyote (*Canis latrans*) and San Joaquin kit fox (*Vulpes macrotis mutica:* SJKF) a suitable prey base. Coyote and SJKF, both common mammalian predators in the region, may use the Project site to hunt for small mammals, although coyotes are typically seen less in this type of urban environment. No predatory mammals or evidence of their presence was observed during the survey effort. The only mammal species observed was California ground squirrel (*Otospermophilus beecheyi*).

The literature review and field survey results for all relevant special-status species are described in the following sections.

4.4 Special-status Biological Resources

As a result of the literature review, nine special-status plant species were identified that are known from the region. A summary of the special-status plant species occurrence evaluation is included in Section 4.4.1. Additionally, 11 special-status wildlife species were identified that occur in the region of the Project site. Of these 11 species, 4 species were determined to warrant further consideration and have the potential for significant impacts from the project. These species are further discussed in Section 4.4.2. The initial evaluations of each special-status species that was identified during the literature review with potential to occur in the region are included in Tables 4-1 and 4-2. Those that the initial evaluation found unlikely to be impacted by the proposed project and for which no significant impacts are anticipated are not discussed beyond the evaluation contained in Tables 4-1 and 4-2.

4.4.1 Special-Status Plant Species

Review of the CNDDB (CDFW 2021) and the Inventory of Rare and Endangered Plants of California (CNPS 2021) for the Oildale USGS 7.5-minute quadrangle resulted 9 special-status plant species that are reported to currently or historically occur in the Project vicinity. Based on MBI's survey conducted October 26, 2021, of the 9 special-status plant species that have been documented within the vicinity of the Project site, none have potential to occur based on habitat, soils, topography, previous documented occurrences of the species, and the extremely disturbed conditions found on the Project site.

All special-status plant species found in the CNPS (CNPS 2021) and CNDDB (CDFW 2021) occurrence records for the Oildale 7.5-minute USGS quadrangle (USGS 2021) were evaluated for their potential to occur on site based on the presence of suitable habitat, elevation, and soils, and are listed in Table 4-1. No special-status plants were observed on the Project site

during the survey in October 2021, although the survey was not conducted within the blooming or phenological period for several special-status plant species. Due to the high level of disturbance from past disturbance through historic agricultural practices, a recent fire, lack of suitable habitat both historically and currently, and lack of plant species, it was concluded that none of the special-status plant species are expected to occur. Therefore, special-status plants are not discussed further in this document as no impacts are anticipated. Additionally, there is no USFWS critical habitat for special-status plants mapped within or adjacent to the Project site (USFWS 2021a).

4.4.2 Special-status Wildlife Species

This section assesses the potential for special-status wildlife species identified as having the potential to be impacted by the proposed Project. Several special-status species were identified in the literature review for which the Project site is outside of the current known range and/or they have habitat requirements that are not present in the general vicinity of the Project. These include southwestern willow flycatcher (*Empidonax traillii extimus*), yellow-billed cuckoo (*Coccyzus americanus*), giant garter snake (*Thamnophis gigas*), California red-legged frog (*Rana draytonii*), Delta smelt (*Hypomesus transpacificus*), and vernal pool fairy shrimp (*Branchinecta lynchi*). No further discussion of these species is included in this report.

A total of 11 special-status wildlife species that are known to occur in the region of the Project site were further evaluated (Table 4-2). Of those, MBI then identified the special-status wildlife species with potential to occur on the Project site based on general habitat conditions, habitat elements important to each species, soils, vegetation, and elevation. Species that have no potential to occur due to various factors such as lack of suitable habitat and site being outside of the known elevation or geographic range, or the species having been extirpated from the region are not discussed any further in this report. In addition, many special-status avian species were identified during the database query that may occasionally fly over or forage on the Project site but are not expected to nest on site due to lack of nesting habitat or suitable substrates; therefore, the Project would not result in impacts to those species and they are not discussed further in this report.

Invertebrates

Crotch Bumble Bee

Crotch bumble bee (Bombus crotchii) is a state candidate for listing as endangered. This species was historically known from throughout much of California but has recently lost substantial habitat in the northern Central Valley due to agricultural development. The conversion of the San Joaquin Valley for agricultural uses has similarly reduced the available habitat for the species in that portion of the range. These threats along with several other human impacts have caused declines in this species that have recently warranted listing consideration. Crotch bumble bee occurs in grasslands and upland scrub habitats that contain suitable flowering resources to support small colonies. Colonies are annual and consist of a queen, workers, and reproductive

(males and new queens). The queen emerges from overwintering in early spring and locates a nest site, often in bird nests, abandoned rodent burrows, rock piles, tufts of grass, or tree cavities. Colonies are active until early to late summer when mated queens seek overwintering sites (Hatfield et al. 2015). Bumble bees forage for nectar and pollen from the plants that they pollinate, with food plants including Asclepias, Chaenactis, Lupinus, Medicago, Phacelia, and Salvia (Williams et al. 2014).

Birds

Burrowing owl

The burrowing owl is a California species of special concern, and documented population declines have occurred in the state since at least the 1970s. This species is a small, ground-dwelling owl with a round head that lacks ear tufts. Adults are sandy brown overall with bold spotting and barring, have white eyebrows above yellow eyes, and can be distinguished from all other small owls by their long legs. Adult burrowing owls have an average weight of 6 ounces (170 grams), a full body length of 8.5 to 11 inches (22–28 centimeters), and average wingspan of 20- to 24-inches (51- to 61-centimeters) wingspan (Brown 2006).

Table 4-1: Special-status Plants That May Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period	Potential to Occur
Astragalus hornii var. *hornii*	Horn's milk-vetch	None/None/1B.1	Annual herb in the Fabaceae family found in meadows and seeps and on playas and lake margins on alkaline soils between 197 and 2,789 feet (60–850 meters) in elevation. Known from occurrences in the Southern San Joaquin Valley, the Tehachapi Mountains and the Western Transverse Ranges in Kern, Los Angeles, and San Bernardino Counties.; lake margins, alkaline/annual herb/May–Oct	The site does not contain any suitable habitat, nor did it historically contain suitable habitat. **No potential**
Caulanthus californicus	California jewelflower	FE/SE/1B.1	Herbaceous annual in the Brassicaceae family that occurs between 200 and 3,281 feet (61–1,000 meters) elevation on sandy soils in chenopod scrub, pinyon and juniper woodland, and valley and foothill grasslands. Although many populations are thought to have been extirpated from the San Joaquin Valley, occurrences are known from Kern, Kings, Tulare, San Luis Obispo, Santa Barbara, and Fresno Counties.; sandy/annual herb/Feb–May	Although the Project site may have historically contained suitable habitat, ongoing disturbance and past historic use for agriculture have eliminated any potential for this species to persist. **No potential**
Chloropyron molle ssp. *hispidum*	Hispid salty bird's-beak	None/None/1B.1	Hemiparasitic annual herb in the Orobanchaceae found on alkaline soils in meadows and seeps, playas, and valley and foothill grasslands below 509 feet (155 meters) in elevation. Known from Alameda, Fresno, Kern, Merced, Placer, and Solano Counties /annual herb/ June-Sep	Not observed. The site was visited during the blooming period, and this species was not present. Although the grassland onsite could be considered suitable as a category of vegetation, the soils are not alkaline. Additionally, ongoing disturbance and past historic use for agriculture have eliminated any potential for this species. **No potential**
Eriastrum hooveri	Hoover's eriastrum	None/None/4.2	Annual herb in the Polemoniaceae family that occurs between 164 and 3,002 feet (50–915 meters) in elevation in pinyon-juniper woodland, and valley and foothill grasslands, occasionally on gravelly soils. Known to occur in the Southern San Joaquin Valley in Kern and Fresno Counties and on the Carrizo Plain in San Luis Obispo County; Sometimes gravelly/annual herb/(Feb)Mar–July	Although the Project site may have historically contained suitable habitat, ongoing disturbance and past historic use for agriculture have eliminated any potential for this species to persist. **No potential**

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period	Potential to Occur
Eriogonum gossypinum	Cottony buckwheat	None/None/4.2	Small, annual buckwheat with wooly, gray-green leaves and a conspicuously cottony inflorescence. The flower is white to rose and glandular and usually appears between March and September. The species grows on exposed clay hills, typically south-facing. Its general distribution includes the southwestern San Joaquin Valley and low foothills of the Greenhorn Range.	Although the Project site may have historically contained suitable habitat, ongoing disturbance and past historic use for agriculture have eliminated any potential for this species to persist. **No potential**
Imperata brevifolia	California satintail	None/None/2B.1	Perennial rhizomatous herb in the Poaceae found in chaparral, Coastal scrub, Mojavean desert scrub, meadows and seeps on alkaline soils, and riparian scrub usually found on mesic soils below 3,986 feet (1,215 meters) in elevation. Known from occurrences in the Eastern San Joaquin Valley from Kern County to Fresno County. It is more widespread in southwestern portion of the state and occurs outside California / Sep-May/perennial grass	Not observed. The site does not contain any suitable habitat, nor did it historically contain suitable habitat. No perennial grasses were observed during the survey. **No potential**
Monolopia congdonii	San Joaquin woollythreads	FE/None/1B.2	Annual herb in the Asteraceae family found between 197 and 2,625 feet (60–800 meters) in elevation in chenopod scrub, and valley and foothill grasslands, on sandy soils. Known to occur in the San Joaquin Valley from Kern County north to San Benito County, and the Carrizo Plain in San Luis Obispo and Santa Barbara Counties/annual herb/Feb–May	Although the Project site may have historically contained suitable habitat, ongoing disturbance and past historic use for agriculture have eliminated any potential for this species to persist. **No potential**
Opuntia basilaris var. *treleasei*	Bakersfield cactus	FE/SE/1B.1	Perennial stem succulent in the Cactaceae found in chenopod scrub, cismontane woodland, and valley and foothill grasslands between 394 and 1,804 feet (120–550 meters) in elevation. Known to occur in the Southeast San Joaquin Valley and Southern Sierra Nevada Foothills in Kern County/perennial stem succulent/Apr-May.	Not observed. This succulent is identifiable year-round and was not observed. Disturbance and past historic use for agriculture has eliminated any potential for this species. **No potential**
Trichostema ovatum	San Joaquin blue curls	None/None/4.2	Annual herb in the Lamiaceae family found in valley and foothill grasslands and chenopod scrub between 213 and 1,050 (65-320 meters) in elevation. Known to occur in the San Joaquin Valley from Fresno, Kings, Kern, San Luis Obispo, and Tulare Counties; annual herb/July-Oct	Not observed. The Project site may have historically contained suitable habitat for this species and it can occur on disturbed locations. Other populations in the vicinity responded well to late rains in 2020; however, this species was not observed on the Project and is not expected. **No potential**

[1]STATUS: Federal and State Listing Code

E	Federally or State-listed Endangered
T	Federally or State-listed Threatened

CNPS

1A	Plants presumed extirpated in California, and either rare or extinct elsewhere
1B.1	Plants considered rare, threatened, or endangered in California and elsewhere; seriously threatened in California
1B.2	Plants considered rare, threatened, or endangered in California and elsewhere; fairly threatened in California
2B.1	Plants considered rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California
4.2	Watch list plants that have a limited distribution; moderately threatened in California

Table 4-2: Special-status Wildlife That May Occur on the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Invertebrates				
Bombus crotchii	Crotch bumblebee	None/Candidate	Open grassland and scrub communities supporting suitable floral resources. Nests underground. Associated food plant species *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia*, and *Salvia* (Williams et al. 2014). CNDDB records reported from within the City of Bakersfield.	Annual grassland and potentially suitable small mammal burrows are present on the Project site. Suitable flowering resources are marginal. **Moderate potential**
Amphibians				
Spea hammondii	Western spadefoot	None/SSC	Central valley and adjacent foothills, Coast Ranges from Point Conception south to the Mexico border; valley-foothill grasslands and valley-foothill hardwood, shallow temporary pools used for breeding, below 4,472 feet (1,363 meters).	No suitable habitat for this species exists on the Project site. No impacts are expected. **No potential**
Reptiles				
Anniella grinnelli	Bakersfield legless lizard	None/SSC	Southern San Joaquin Valley. Known from two disjunct areas: the east side of the Carrizo Plain and portions of the city limits of Bakersfield. Often found underneath leaf litter, rocks, and logs (CDFW 2020).	The Project site lacks suitable cover and soils are very dry and have been manipulated multiple times over the years. The only cover that is present consists of trash. Historical agricultural practices, off-road vehicle travel, trash dumping, and frequent disking reduce the potential for this species. **Not expected / Low potential**
Arizona elegans occidentalis	California glossy snake	None/SSC	Commonly occurs in desert regions throughout southern California. Prefers open sandy areas with scattered brush. Also found in rocky areas.	No suitable habitat for this species exists on the Project site. In addition, the site has been historically used for agricultural purposes. **No potential**

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Gambelia sila	Blunt-nosed leopard lizard	FE/FP, SE	Found only in the San Joaquin Valley, adjacent Carrizo Plain, Elkhorn Plain, Cuyama Valley, and Panoche Valley; inhabits sparsely vegetated plains, lower canyon slopes, on valley floors, and washes; open grassland, saltbush scrub, and alkali sink are more common habitat types.	No suitable habitat for this species exists on the Project site. In addition, the site has been historically used for agricultural purposes in the past and is surrounded by intensively developed urban lands. The parcel and connected opens lands do not contain sufficient habitat to support this species. **No potential**
Birds				
Athene cunicularia (burrow sites & some wintering sites)	Burrowing owl	None/SSC	Inhabit dry, open grasslands, rolling hills, desert floors, prairies, savannas, agricultural land, and other areas of open, bare ground. These owls will also inhabit open areas near human habitation, such as airports, golf courses, shoulders of roads, railroad embankments, and the banks of irrigation ditches and reservoirs.	Not observed. Several suitable sized burrows were observed during the survey effort. However, none of these burrows showed any sign (whitewash, pellets, prey remains, feathers) of burrowing owl use (see Section 4.4.2). **Low potential**
Buteo swainsoni (nesting)	Swainson's hawk	None/ST	Riparian and sometimes large isolated trees used for nesting; grasslands and agricultural lands used for foraging; in California, breeds primarily in the Sacramento Valley, with occasional nesting to the south through Kern County; migrate through the Central and San Joaquin Valleys to their wintering grounds in South America.	Marginal foraging habitat on the project site. No suitable nest trees are located within the Project site. Several eucalyptus trees are located east of the project along SR-99 and numerous large trees associated with residence and business building areas are west of the Project. However, given the urban setting and lack of sufficient accessible foraging habitat, these trees are very unlikely to support nesting. The nearest historical observation is at an unspecific location approximately 2 miles south in central Bakersfield from 1935 (CDFW 2020). **No potential (nesting)**

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Mammals				
Dipodomys nitratoides nitratoides	Tipton kangaroo rat	FE/SE	Found in arid communities on the valley floor portions of Kern, Tulare, and Kings counties in scrub and grassland communities in level to near-level terrain with alluvial fan-floodplain soil (fine sands and sandy loams) with sparse grasses and woody vegetation such as iodine bush, saltbush, seep weed, and mesquite.	Although the Project site may have historically contained suitable habitat, ongoing disturbance and past historic use for agriculture have eliminated any potential for this species to persist. **No potential**
Eumops perotis californicus	Western mastiff bat	S/CSC	Open, semi-arid to arid habitats, including conifer and deciduous woodlands, annual and perennial grasslands, chaparral, desert scrub, and urban areas; roosts in cliff faces, as well as high buildings, trees, and tunnels; uncommon resident in southwestern San Joaquin Valley.	No suitable roosting habitat is present on the Project site. Low potential for foraging on the Project site and in the vicinity. **No potential**
Taxidea taxus	American badger	None/SSC	Uncommon resident found through California; in less disturbed grassland and shrubland habitats in San Joaquin Valley.	Not observed. Although badgers will utilize a variety of habitats (including agriculture) the majority of the Project site is regularly disked which makes the site unsuitable (see Section 4.4.2). **Low potential**
Vulpes macrotis mutica	San Joaquin kit fox	FE/ST	Found in valley saltbush scrub, valley sink scrub, Interior Coast Range saltbush scrub, upper Sonoran sub-shrub scrub, non-native grassland, and valley sacaton grassland in the Central Valley and adjacent foothills and valleys, infrequently to the outer Coast Ranges; generally not found in densely wooded areas, wetland areas, or areas subject to frequent periodic flooding.	The Project site provides suitable habitat for denning and foraging. California ground squirrel activity observed and 27 dens that met the size criteria for potential SJKF dens. No SJKF sign was observed (see Section 4.4.2). **Moderate potential**

[1]STATUS: Federal and State Listing Code

FE	Federally Endangered
FP	Fully Protected
SE	State-listed Endangered
ST	State-listed Threatened
SSC	Species of Special concern

Within California, this species is found throughout the Central Valley, in the San Francisco Bay Area, Carrizo Plain, and Imperial Valley. Typical habitat includes open grasslands, agricultural or range lands, and desert lands with short, sparse vegetation at elevations from 200 feet (61 meters) below sea level to 9,000 feet (2,743 meters) above sea level (Brown 2006). The Central Valley population resides in the area year-round in the annual and perennial grasslands or other vegetation communities that support little to no tree or shrub cover. The state of California is also considered an important wintering ground for migrants; thus, California's burrowing owl population increases during the winter season (CDFG 2012; Dunn & Alderfer 2008; Shuford & Gardali 2008). Nesting season begins late March and breeding pairs exhibit biparental care in which the female incubates the eggs and the male cares for the young.

Burrowing owls are active daytime and nighttime but are mostly active during dawn and dusk. In California, the species is typically found in close association with California ground squirrels that create burrows that are used by burrowing owls as year-round shelter and seasonal nesting habitat; however, burrowing owls may also use human-made structures such as culverts, corrugated metal pipes, debris piles, or openings beneath pavement as shelter and nesting habitat. During active periods of the year they may be observed above ground in the vicinity of their burrows, or roosting on the ground or nearby high spots such as berms, fence posts, or shrubs. They have a varied diet that includes insects, small rodents, birds, amphibians, reptiles, and carrion, and there is some evidence that population sizes of California vole (*Microtus californicus*) influence their survival and reproductive success (Poulin *et al*., 1998). Pellets including animal bones and exoskeletons may be found near burrow entrances, along with white wash and foot tracks.

Protocol-level surveys per guidelines for breeding-season surveys in Appendix D of the Staff Report on *Burrowing Owl Mitigation* (CDFG 2012) for the burrowing owl were not conducted on the Project site. However, several suitable size burrows at least 3-inches in diameter were observed on the Project site. Surveys resulted in no burrowing owl or its sign (i.e., whitewash, pellets, prey remains, feather, etc.). Although no burrowing owls, or their sign, were observed during the site visits, the Project site does contain potential for this species to occur.

Mammals

American badger

The American badger is a California species of special concern (CDFW 2020). This species is a low, squat animal with conspicuous silver-tipped, dorsal fur and a short, black-tipped tail. The most striking visual feature of this species is its striped face, consisting of a median white stripe proceeding from the tip of its nose to the back of its head. This stripe is flanked by alternating white and dark stripes giving way to bright, white-outlined ears. The American badger has short but powerful legs, and the front feet are fitted with long claws that are well suited for digging out the burrows of the rodents on which it feeds (Reid 2006). In addition to rodents, their diet includes other small mammals, invertebrates, birds, snakes and carrion. Mating occurs in late

summer or early autumn, and litters of two to five offspring are born in early spring (Zeiner et al. 2020b).

The historic range of American badgers in California was throughout the state with the exception of the humid coastal forests in Del Norte and Humboldt Counties (Zeiner et al. 1990b). Their modern distribution in the lower San Joaquin Valley is restricted to the limited, often isolated tracts of grassland and shrubland habitats. Cultivated lands have been reported to provide little usable habitat for this species. In the 1980s, badgers were believed to be declining throughout California, and their status has not changed (Williams 1986).

Badgers are primarily nocturnal animals and infrequently observed directly during daytime surveys; however, they have a fairly distinctive digging style and burrow shape, which is easily detected in the field. Combined with tracks, it is typically the method used to determine presence on a site (Reid 2006; Zeiner et al., 1990b). In addition, it is notable that badger burrow size overlaps with that of SJKF.

Numerous California ground squirrel burrows were observed, but none of these burrows had sign of badger presence or evidence of foraging. Although badgers can be tolerant of human disturbance, the intensity and frequency of disturbance on this site reduces the potential for occurrence of this species.

San Joaquin kit fox

The SJKF currently federal-listed as endangered and state-listed as threatened, resembles a small, lanky dog in appearance, with disproportionately large ears containing an abundance of large white, inner guard hairs. This species is the largest subspecies of kit fox, with adults weighing 4.5 to 5 pounds (2–2.3 kilograms). Total length is about 32 inches (81 centimeters), including a bushy black-tipped tail up to 12 inches (30 centimeters) long, and total height is about 12 inches (30 centimeters) tall. Coloration ranges from light buff to grayish along the back and tail; gray, rust, or yellowish along the sides; and white on the belly.

SJKF occur in a variety of open grassland, oak savannah, and shrub vegetation types/habitats as well as oil-producing and urban areas in Kern County. Predation is an appreciable cause of SJKF mortality, with urban kit foxes yielding higher survival rates due to lack of competition with large carnivores such as coyotes (USFWS 2010). In the southern San Joaquin Valley portion of the range, SJKF are generally found in sparse, annual grassland and scrub communities (e.g., valley sink scrub, saltbush scrub) with low annual precipitation. Home ranges for the taxon have been reported by several authors to range from 1 to 12 square miles (1.6–19 square kilometers) with large overlap in home ranges among individuals, though dens are restricted to a single family. They change dens on a regular basis, likely due to prey depletion; in one study, a single kit fox was tracked to 70 dens during a 2-year period (Native fish and wildlife endangered species 1967; USFWS 1998). Dens are used for temperature regulation, shelter, reproduction, and safety from potential predators, but characteristics such as number of entrances varies across the taxon's range. In the southern portion of its range the taxon often

creates dens with two entrances, and natal dens generally have multiple entrances. Entrances are usually 8 to 10 inches (20–25 centimeters) in diameter and are normally greater in height than width, but kit foxes can utilize dens with entrances as small as 4 inches (10 centimeters) in diameter. Kit foxes do not typically excavate their own dens, but rather enlarge the burrows of other species, such as California ground squirrels and American Badgers, or utilize human-made structures such as culverts and pipelines.

The diet of this taxon consists largely of nocturnal kangaroo rats and other small mammals, though they may also eat ground-nesting birds or insects (USFWS 2010a). Similar to many desert species, kit fox do not need drinking water and obtain hydration from their diet. Breeding season is December-March with pups typically born between February and March. Adult breeding pairs remain monogamous within the same year, but pairs may change between years (Morrell 1972; USFWS 1998).

SJKF are primarily nocturnal but can be seen during the day when activities on the surface get their attention or when pups are present and play outside of the den in late afternoon. Potential site occupation is determined based on observation of canid scat and/or tracks within a size range appropriate for this species, and presence of dens that meet the criteria for classification as known or natal/pupping per the USFWS guidelines (USFWS 2011).

The reconnaissance survey conducted on October 26, 2021 included a search for San Joaquin kit fox evidence and evaluation of the potential for site occupation. During the survey, 27 burrows meeting the minimum size criteria for SJKF were identified and examined. Of these, none had sign (i.e., scat, prey remains, prints, fresh digging, claw marks, etc.) indicating San Joaquin kit fox past or present occupation. SJKF frequently use California ground squirrel burrows and because they are known in the general area, the burrows that met the size criteria as potential SJKF dens could be used by this species at any time.

4.4.3 Riparian Habitat, Wetlands, and Other Waters

A search of the USFWS National Wetlands Inventory resulted in no wetlands mapped on the project site (USFWS, 2021b). No features were identified within the Project site that would be classified as riparian habitat, wetlands, or other waters.

4.4.4 Critical Habitat

No critical habitat for any federal listed species has been designated within the Project site.

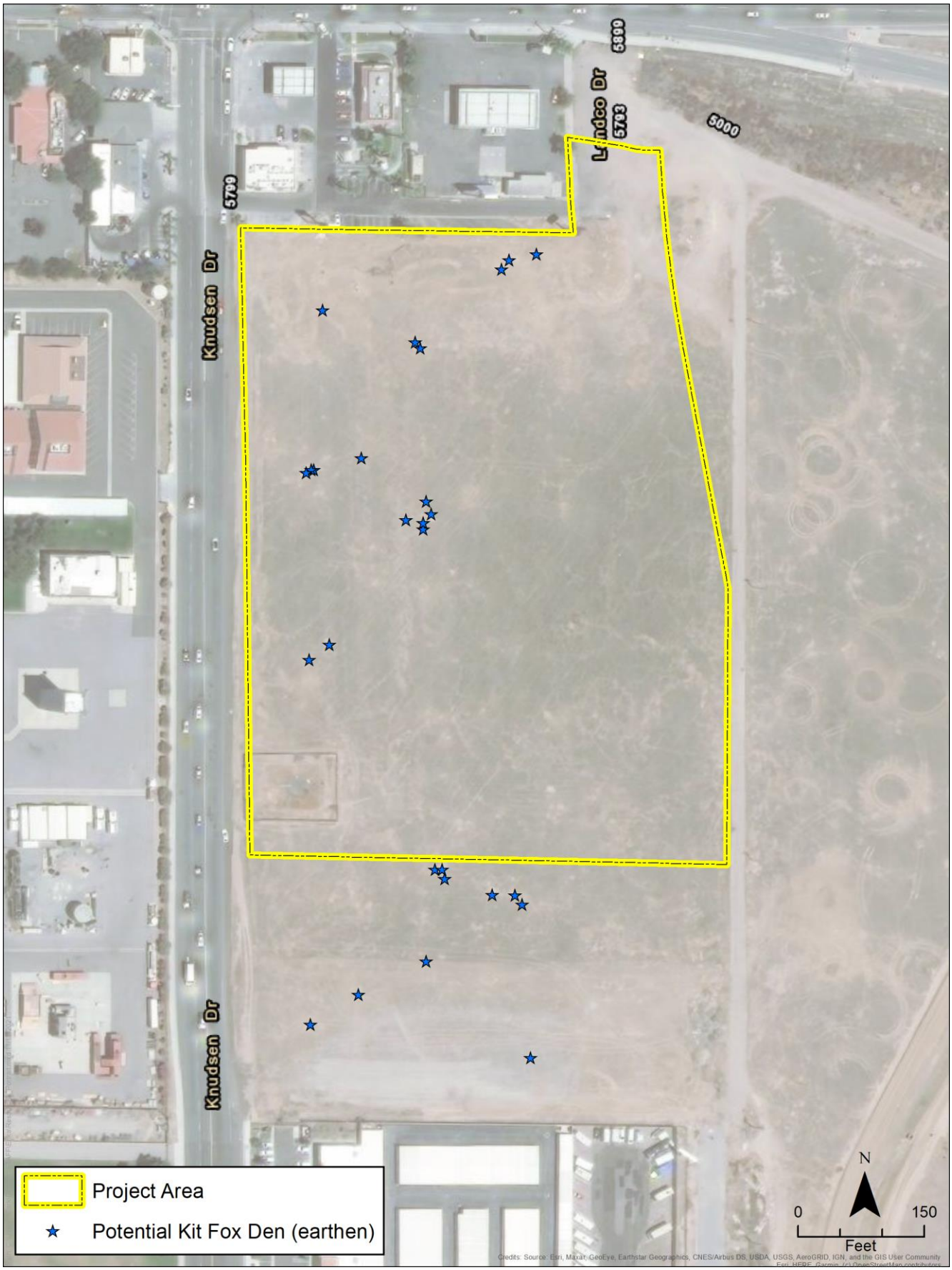

Figure 4-1: Potential dens suitable for use by San Joaquin kit fox observed during the Project site survey conducted on October 26, 2021 (blue dots- potential SJKF dens

5.0 IMPACT ANALYSIS AND RECOMMENDATIONS

5.1 Effects of the Proposed Project

This section provides an analysis of the potential impacts of the Project following the standards of CEQA and CEQA Guidelines. CEQA Appendix G thresholds have been used to evaluate potential impacts to the biological resources from the proposed Project. The Project would create a significant impact to biological resources, based on the specifications in the biological resources section in Appendix G of the CEQA Guidelines, if the following were to occur:

1. 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 Wildlife or U.S. Fish and Wildlife Service;

2. 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 Wildlife or U.S. Fish and Wildlife Service;

3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

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

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

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

The following analysis discusses potential impacts associated with the development of the Project and provides recommendations where appropriate to further reduce potential impacts.

1. Would the project 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 CDFW, or the USFWS?

Effects to Special-status Plants:

The CNDDB, USFWS, and CNPS Rare and Endangered Plant Inventory queries returned a total of nine special-status plant species that have been documented within the Oildale 7.5-minute quadrangle. Based on MBI's habitat suitability analysis, none of the special-status plant species had potential to occur within the proposed project site (Table 4-1). During the survey a total of 8 plant species were observed, including 7 non-native species and 1 native species. No listed or California Rare Plant Rank (CRPR) species were identified on the proposed project site during the field survey. Therefore, there is no potential for direct and indirect impacts to special-status plant species within the Project site. As described above, the Project site is typically fallow and undergoes routine disking for fire control. As described in Section 4.4.1, no special-status plant species have potential to occur on site; therefore, no significant impacts to special-status plants would occur. No additional measures or recommendations are needed.

Effects to Special-status Wildlife:

Crotch Bumble Bee

Although no bumble bees were observed during the site visit, the survey was conducted during the inactive period for Crotch bumble bee. Small mammal burrows and annual grassland are present, and these features represent potential habitat for Crotch bumble bee. Potential foraging and nesting habitat could be impacted by the proposed project. Absent surveys to detect the species, bumble bee nests could be crushed or destroyed by vehicles during initial ground disturbance. Provided that the measures recommended below are implemented, impacts can be reduced to "less than significant."

Burrowing Owl

Although no burrowing owls or sign of species presence was observed during the site visit, California ground squirrel burrows, which are frequently used by burrowing owls for nesting and shelter, were observed. The site is likely to support small mammals that are typical prey items in the diet of burrowing owl. Therefore, a foraging and potential nesting habitat will be removed as a result of the Project. Absent additional measures, burrowing owl burrows could be crushed or destroyed by vehicles during construction activities. Provided that the measures recommended below are implemented, impacts can be reduced to "less than significant".

San Joaquin Kit Fox and American Badger

The Project provides suitable denning habitat for San Joaquin kit fox and American badger. Several suitable sized holes were observed during the survey effort. Impacts to suitable dens are expected to occur; however, no known SJKF or American badger dens were observed on the Project. The nearest historic record of American Badger occurs approximately 0.5 miles southeast of the Project site and suitable foraging habitat is present.

Although no sign of kit fox was observed during the survey, it is not possible to conclude that a kit fox would never visit or occupy the site. However, given the amount of human foot traffic and trash dumping, the Project site is lower quality than adjacent parcels that experience less disturbance. Individual kit fox could move onto the site, converting California ground squirrel burrows into denning sites. If the site becomes occupied, Project activities could result in harm or injury to kit fox or American badger that would constitute a significant impact.

Measures described in Section 5.2, below, are intended to avoid, minimize, and reduce the potential for these effects to occur, reducing the potential to less than significant. Implementation of measures required per the MBHCP, if the project is eligible for permit coverage, will result in minimizing effects to American badgers due to the overlap in badger burrow and SJKF den size. The USFWS protocols (*Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (2011)) to protect SJKF will protect both SJKF and American badger.

Nesting and Migratory Birds

The Project site is void of all trees and shrubs, which can be used for nesting birds. However, birds nesting on or in the immediate vicinity of the Project site could be disturbed if the project is conducted during nesting season when active nests are present. If these nests are disturbed to the extent that eggs are destroyed, young are injured or killed, or adults abandon the nests, a violation of the MBTA and California Fish and Game Code could result.

Wildlife are known to commonly enter open pipes, materials stockpiles and storage containers as well as get on, under, or in vehicles and equipment. In addition, terrestrial wildlife may fall into open excavations. Closing or moving pipes with wildlife inside could lead to direct mortality of individuals. If present under pallets, wildlife could be killed or injured by equipment when moving materials. If present in, on, or under equipment or vehicles when started or moving, wildlife could be crushed by tires, injured or killed by moving parts, or threatened through harassment by workers needing to access the vehicles. If deep enough in comparison to the animal size, wildlife falling into open excavations could be injured by the fall or otherwise become entrapped thereby increasing risks to the individual.

Measures described in Section 5.2, below, are intended to avoid, minimize, and reduce the potential for these effects to occur as a result of work activities. The following measures are also intended to result in compliance with applicable state and federal statutes and regulations protecting biological resources. In some cases, if effects cannot be definitively determined based on the reconnaissance-level survey, additional surveys are recommended. In addition, if it is determined that the effects to these species cannot be avoided, state and/or federal permits may be warranted to obtain the appropriate authorization for such project effects.

2. Would the project 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 CDFW or the USFWS?

No riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations; or by the CDFW or the USFWS will be disturbed by the proposed Project; therefore, no further measures are recommended.

3. **Would the project 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?**

The proposed Project does not propose any disturbance to wetland vegetation. No wetland features or vegetation indicative of wetland conditions were observed during the field survey. Consequently, no impacts will occur as a result of the development of the Project.

4. **Would the project 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?**

Wildlife corridors can be defined as connections between wildlife blocks that meet specific habitat needs for species movement generally during migratory periods, but seasonally as well. Wildlife corridors generally contain habitat dissimilar to the surrounding vicinity and include examples such as riparian areas along rivers and streams, washes, canyons, or otherwise undisturbed areas within urbanization. Corridor width requirements can vary based on the needs of the species utilizing them. No impacts are expected; consequently, no additional measures are included.

5. **Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

There are no biological resources on the site which are specifically protected by local policies. Therefore, conflicts with local policies will not occur.

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

The Project is not known to conflict with any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.2 Recommendations

The following measures are intended to reduce identified potential effects to special-status species as a result of the Project; and are intended to result in compliance with applicable state and/or federal statutes and regulations protecting biological resources.

BIO-1: The following additional general measures should be implemented that represent *best management practices* for reducing the potential for impacts on biological resources:

A) Traffic restraints and signs should be established to minimize temporary disturbances during construction. All construction traffic should be restricted to designated access roads and routes, Project site, storage areas, and staging and parking areas. Off-road traffic outside designated Project boundaries should be prohibited. A 15 mile-per-hour (24 kilometer-per-hour) speed limit should be observed in all Project construction areas, except as otherwise posted on county roads and state and federal highways.

B) All equipment storage and parking during construction activities should be confined to the designated construction area or to previously disturbed offsite areas that are not habitat for listed species.

C) All Project construction activities involving excavation or surface disturbance should be limited to daylight hours.

D) Trenches should be inspected for entrapped wildlife each morning prior to the onset of construction. Before such holes or trenches are filled, they should be thoroughly inspected for entrapped animals. Any wildlife so discovered should be allowed to escape voluntarily, without harassment, before construction activities resume. A qualified biologist may remove wildlife from a trench, hole or other entrapment out of harm's way if the immediate welfare of the individual is in jeopardy. State or federal listed species may not be handled. Should any state or federal listed species become entrapped, CDFW and USFWS should be contacted as appropriate.

E) All food-related trash items such as wrappers, cans, bottles and food scraps generated by Project activities should be disposed of in closed containers and removed at least once each week from the site. Deliberate feeding of wildlife should be prohibited.

F) To prevent harassment of special-status species, construction personnel should not be allowed to have firearms or pets on the Project.

G) All equipment and work-related materials should be contained in closed containers either in the work area or on vehicles. Loose items (e.g. rags, hose, etc.) should be stored within closed containers or enclosed in vehicles when on the work site.

H) All liquids should be in closed, covered containers. Any spills of hazardous liquids should not be left unattended until clean-up has been completed.

I) Use of rodenticides and herbicides on the Project should be prohibited unless approved by the USFWS and the CDFW. This is necessary to prevent primary or secondary poisoning of special-status species using adjacent habitats, and to avoid the depletion of prey upon which they depend. Label restrictions and other restrictions imposed by the United States

Environmental Protection Agency, the California Department of Food and Agricultural, and other state and federal legislation should be implemented. If rodent control must be conducted, zinc phosphide should be used because of its proven lower risk to SJKF.

J) Any employee who inadvertently kills or injures a listed species, or who finds any such wildlife dead, injured, or entrapped, should be required to report the incident immediately to a designated site representative (e.g., foreman, project manager, environmental inspector, etc.), except animals killed on state and county roads when such mortality is not associated with Project traffic.

K) In the case of entrapped wildlife that are listed species, escape ramps or structures should be installed immediately, if possible, to allow the subject wildlife to escape unimpeded.

L) In the case of injured special-status wildlife, the CDFW should be notified immediately. During business hours Monday through Friday, the phone number is (559) 243-4017. For non-business hours, report to (800) 952-5400. Notification should include the date, time, location, and circumstances of the incident. Instructions provided by the CDFW for the care of the injured animal should be followed by the contractor onsite.

M) In the case of dead wildlife that are listed as threatened or endangered, the USFWS and the CDFW should be immediately (within 24 hours) notified by phone or in person, and should document the initial notification in writing within 2 working days of the findings of any such wildlife. Notification should include the date, time, location, and circumstances of the incident.

N) Prior to commencement of construction on any phase of work, work areas should be clearly marked with fencing, stakes with rope or cord, or other means of delineating the work area boundaries.

O) All personnel entering the Project location should attend a worker orientation program. The worker orientation program should present measures required to avoid, minimize, and mitigate impacts to biological resources and should include, at a minimum, the following subjects: A summary of FESA, CESA, and the MBTA; biological survey results for the current construction area; life history information for the species of concern; biological resource avoidance, minimization, and mitigation requirements; consequences for failure to successfully implement requirements; and procedures to be followed if dead or injured wildlife area located during Project activities. Upon completion of the orientation, employees should sign a form stating that they attended the program and understand all biological resource mitigation measures and receive a hardhat sticker or other means of identifying that they have attended the worker orientation. Forms verifying worker attendance should be filed at the applicant's office and be accessible to County, USFWS and CDFW staff. No untrained personnel should be allowed to work onsite with the exception of delivery trucks that are only onsite for 1 day or less and are under the supervision of a trained employee.

BIO-2: Surveys to detect burrowing owls should be conducted no more than 30 days prior to any ground disturbance activities on the Project site and can be conducted concurrently with the pre-activity survey required per BIO-4, below. Occupied burrows should not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies through non-invasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If burrowing owls are observed using burrows during the surveys, owls shall be excluded from all active burrows through the use of exclusion devices placed in occupied burrows in accordance with CDFG protocols (CDFG 2012), *Staff report on burrowing owl mitigation*, shall be implemented. In such case, exclusion devices shall not be placed until the young have fledged and are no longer dependent upon the burrow, as determined by a qualified biologist. Specifically, exclusion devices, utilizing one-way doors, shall be installed in the entrance of all active burrows. The devices shall be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows shall then be excavated by hand and refilled to prevent reoccupation. Exclusion shall continue until the owls have been successfully excluded from the site, as determined by a qualified biologist.

BIO-3: If project activities occur during nesting season (March 1 to August 31) a qualified biologist shall conduct a nesting bird survey to identify any active nests present within the proposed work area and a 250-foot buffer no more than 14 days prior to the onset of project activities. If active nests are found, clearing and construction shall be postponed or halted within a buffer area, established by the qualified biologist, that is suitable to the particular bird species and location of the nest, until the nest is vacated and juveniles have fledged, as determined by the biologist. The construction avoidance area shall be clearly demarcated in the field with highly visible construction fencing or flagging, and construction personnel shall be instructed on the sensitivity of nest areas. The nest will not be disturbed until the young have fledged or the nest has been abandoned as determined by the qualified biologist.

BIO-4: If any previously unidentified protected species that is not addressed in this document, or any previously unreported protected species is found to be present, avoid the species and have it evaluated by a qualified biologist. Notify the USFWS and CDFW of any previously unreported protected species. Any take of protected wildlife shall be reported immediately to USFWS and CDFW.

BIO-5: A qualified biologist shall conduct a survey to determine the presence of suitable foraging, nesting, or over-wintering habitat for the CBB within or immediately adjacent to the work limits. If suitable habitat is present, at least 2 visual surveys shall be conducted between April 1 and May 30 to detect CBB on or within 100 feet of the work limits prior to vegetation removal/initial ground disturbance. The surveys will target the peak flowering period of CBB preferred nectar plants and will be conducted by a CDFW-approved biologist who is familiar with CBB behavior and life history to determine presence/absence of CBB within one year of vegetation removal/initial ground disturbance. CBB individuals shall only be handled for identification if appropriate authorizations are issued. Surveys will be conducted under suitable conditions for

observation of bumble bees. Methods will be in accordance agency protocols if issued. If no agency protocols have been issued at the time of the surveys, the following survey parameters will be applied: the qualified biologist will walk slow (≤2 mph) meandering transects covering all portions suitable habitat within and immediately adjacent to the work limits containing suitable habitat; surveys will be conducted no earlier than 2 hours after sunrise and 3 hours before sunset, on mostly sunny days with temperature between 65° and 90°F; surveys will not be conducted on cloudy days (≥90% cloud cover) or under wet or windy conditions (≥8 mph). Surveyors will search for bumble bees in flight and potential nest sites.

All potential CBB nests found in small mammal burrows, under thatched grasses, brush piles or other suitable ground locations will be further examined based on observations of entering or exiting CBB. Observations of potential CBB nest sites will be conducted for no less than 15 minutes per location where CBB are possibly entering/exiting, or a longer period as determined by the CDFW-approved biologist. If no CBB or their nests are detected, no further measures would be necessary provided that vegetation removal/initial ground disturbance occurs prior to March 1 of the year following the negative survey.

BIO-6: Pre-construction surveys should be conducted no more than 30 days prior to the onset of Project activities. The purpose of the preconstruction survey will be to provide current biological information in order to implement all avoidance and minimization measures that are required based on any previous observations of special-status species and to update observations should any new site occupation by special-status species occur. If any known San Joaquin kit fox dens are detected, implementation of the most recent USFWS protocols (*Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (2011)) is required unless protocols are issued by either CDFW or USFWS that supersede these protocols.

BIO-7: If California or Federal listed threatened or endangered species are found occupying burrows or dens on the Project site or any such species could be injured or killed due to project activities, the CDFW and/or USFWS (as appropriate) shall be contacted for further guidance. Should either agency determine that incidental take authorization is required prior to construction, the appropriate CESA/FESA authorization shall be obtained by the applicant.

CESA and FESA authorizations shall include measures addressing the respective state and/or federal listed species and shall include the following at a minimum:

- Implementation of standardized biological resource protective measures included in BIO MM-6;
- Biological preconstruction surveys conducted by qualified biologists approved by each applicable agency no more than 30 days prior to conducting work on the Project site;
- If any known San Joaquin kit fox dens are detected, implementation of the most recent USFWS protocols (*Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (2011)) unless protocols are issued by either CDFW or USFWS that supersede these protocols.

- Destruction of San Joaquin kit fox dens shall follow the monitoring and excavation procedures in USFWS (2011).
- If CBB individuals or nests are detected during any surveys conducted per CBB-1, and the CBB remains a state candidate species or is listed under CESA, the applicant will obtain take authorization from CDFW prior to vegetation removal/initial ground disturbance. A CBB Mortality Reduction Plan will be submitted for CDFW approval no less than 30 days prior to project initiation. The plan will contain the following information at a minimum:
    - Active CBB nests shall be avoided by 50 feet. If CBB nests cannot be avoided, the plan shall include seasonal restrictions for disturbance within 50 feet of any nest and procedures for determining when nest impacts will be minimized.
    - Vegetation removal/initial ground disturbance shall be limited to the period when impacts to individual CBB that may be underground will be minimized (e.g., after nests have become inactive).
    - Prior to vegetation removal/initial ground disturbance, small mammal burrows that may harbor overwintering CBB queens shall be excavated by hand. The plan shall include timing and excavation methods. In addition, the plan shall include procedures for handling and disposition of CBB if encountered during burrow excavations.
    - The plan shall include procedures for handling and disposition of individual CBB if they are encountered in the work limits or on construction equipment during construction activities.
- Biological monitoring of initial ground disturbance during each phase of grading;
- Provision for compliance reporting to be provided to each agency as required in respective take authorizations;
- Compensation for habitat disturbance acceptable to CDFW (state listed species) and/or USFWS (federal listed species) at a ratio of no less than 3:1 for permanent impacts and 1.1:1 for temporary impacts to listed species habitat. The only existing approved conservation bank for impacts to San Joaquin kit fox habitat in Kern County is the Kern Water Bank Authority Conservation Bank. Lands used to mitigate for San Joaquin kit fox must be contiguous with other potentially occupied lands, provide suitable foraging and denning habitat for San Joaquin kit fox, and be located in the southern San Joaquin Valley portion of Kern County below 1,500’ in elevation;
- Compensation land shall be funded for maintenance, protection, and management through establishment of a long-term funding mechanism such as an endowment. The endowment must be a non-wasting account that is acceptable to both CDFW and USFWS.

6.0 SUMMARY OF FINDINGS

Development of the approximately 10-acre Project site would have a less than significant impact on the diversity and abundance of native flora and fauna in the region. The Project site supports only marginal habitat suitable for special-status wildlife species. Although habitat quality is low, two listed species have the potential to be present. Should either species be detected occupying the Project site, measures

to fully mitigate potential impacts have been included. The Project site does not support a high diversity of plants, and most wildlife species that could be expected to regularly use the Project area are species that are adapted to human disturbances. Because of the present condition of the proposed Project site and the surrounding vicinity is highly disturbed by commercial and residential development and of a similar nature, it is not likely that development of the site would contribute significantly to cumulative adverse impacts to regional flora and fauna.

7.0 CONCLUSION

With the implementation of recommendations, impacts to biological resources can be reduced to a level of “less than significant.”

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Appendix A

California Natural Diversity Database Query Results: Oildale Quadrangle

SciName	ComName	TaxonGrou	FedList	CalList	GRank	SRank	Rplant Rank
Agelaius tricolor	tricolored blackbird	Birds	None	Threatened	G1G2	S1S2	
Ammospermophilus nelsoni	Nelson's antelope squirrel	Mammals	None	Threatened	G2G3	S2S3	
Anniella grinnelli	Bakersfield legless lizard	Reptiles	None	None	G2G3	S2S3	
Anniella spp.	California legless lizard	Reptiles	None	None	G3G4	S3S4	
Arizona elegans occidentalis	California glossy snake	Reptiles	None	None	G5T2	S2	
Astragalus hornii var. hornii	Horn's milk-vetch	Dicots	None	None	GUT1	S1	1B.1
Athene cunicularia	burrowing owl	Birds	None	None	G4	S3	
Atriplex tularensis	Bakersfield smallscale	Dicots	None	Endangered	GX	SX	1A
Bombus crotchii	Crotch bumble bee	Insects	None	None	G3G4	S1S2	
Buteo swainsoni	Swainson's hawk	Birds	None	Threatened	G5	S3	
Calochortus striatus	alkali mariposa-lily	Monocots	None	None	G3?	S2S3	1B.2
Caulanthus californicus	California jewelflower	Dicots	Endangered	Endangered	G1	S1	1B.1
Chloropyron molle ssp. hispidum	hispid salty bird's-beak	Dicots	None	None	G2T1	S1	1B.1
Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	Marsh	None	None	G3	S2.1	
Danaus plexippus pop. 1	monarch - California overwintering population	Insects	Candidate	None	G4T2T3	S2S3	
Delphinium recurvatum	recurved larkspur	Dicots	None	None	G2?	S2?	1B.2
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Insects	Threatened	None	G3T2	S3	
Diplacus pictus	calico monkeyflower	Dicots	None	None	G2	S2	1B.2
Dipodomys nitratoides nitratoides	Tipton kangaroo rat	Mammals	Endangered	Endangered	G3T1T2	S1S2	
Elanus leucurus	white-tailed kite	Birds	None	None	G5	S3S4	
Emys marmorata	western pond turtle	Reptiles	None	None	G3G4	S3	
Eremalche parryi ssp. kernensis	Kern mallow	Dicots	Endangered	None	G3G4T3	S3	1B.2
Eremophila alpestris actia	California horned lark	Birds	None	None	G5T4Q	S4	
Eriastrum hooveri	Hoover's eriastrum	Dicots	Delisted	None	G3	S3	4.2
Eschscholzia lemmonii ssp. kernensis	Tejon poppy	Dicots	None	None	G5T2	S2	1B.1
Eumops perotis californicus	western mastiff bat	Mammals	None	None	G4G5T4	S3S4	
Gambelia sila	blunt-nosed leopard lizard	Reptiles	Endangered	Endangered	G1	S1	
Gonidea angulata	western ridged mussel	Mollusks	None	None	G3	S1S2	

Great Valley Cottonwood Riparian Forest	Great Valley Cottonwood Riparian Forest	Riparian	None	None	G2	S2.1	
Great Valley Mesquite Scrub	Great Valley Mesquite Scrub	Riparian	None	None	G1	S1.1	
Helminthoglypta callistoderma	Kern shoulderband	Mollusks	None	None	G1	S1	
Imperata brevifolia	California satintail	Monocots	None	None	G4	S3	2B.1
Lasiurus cinereus	hoary bat	Mammals	None	None	G3G4	S4	
Layia leucopappa	Comanche Point layia	Dicots	None	None	G1	S1	1B.1
Lytta moesta	moestan blister beetle	Insects	None	None	G2	S2	
Lytta morrisoni	Morrison's blister beetle	Insects	None	None	G1G2	S1S2	
Masticophis flagellum ruddocki	San Joaquin coachwhip	Reptiles	None	None	G5T2T3	S2?	
Monolopia congdonii	San Joaquin woollythreads	Dicots	Endangered	None	G2	S2	1B.2
Navarretia setiloba	Piute Mountains navarretia	Dicots	None	None	G2	S2	1B.1
Onychomys torridus tularensis	Tulare grasshopper mouse	Mammals	None	None	G5T1T2	S1S2	
Opuntia basilaris var. treleasei	Bakersfield cactus	Dicots	Endangered	Endangered	G5T1	S1	1B.1
Perognathus inornatus	San Joaquin pocket mouse	Mammals	None	None	G2G3	S2S3	
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None	G3G4	S3S4	
Sorex ornatus relictus	Buena Vista Lake ornate shrew	Mammals	Endangered	None	G5T1	S1	
Spea hammondii	western spadefoot	Amphibian	None	None	G2G3	S3	
Stylocline citroleum	oil neststraw	Dicots	None	None	G3	S3	1B.1
Stylocline masonii	Mason's neststraw	Dicots	None	None	G1	S1	1B.1
Taxidea taxus	American badger	Mammals	None	None	G5	S3	
Tortula californica	California screw moss	Bryophytes	None	None	G2G3	S2?	1B.2
Valley Saltbush Scrub	Valley Saltbush Scrub	Scrub	None	None	G2	S2.1	
Vulpes macrotis mutica	San Joaquin kit fox	Mammals	Endangered	Threatened	G4T2	S2	

Appendix B

United States Fish and Wildlife Service IPac Resource List

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Kern County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

San Joaquin Kit Fox Vulpes macrotis mutica — **Endangered**
Wherever found
No critical habitat has been designated for this species.
http://ecos.fws.gov/ecp/species/2873

Tipton Kangaroo Rat Dipodomys nitratoides nitratoides — **Endangered**
Wherever found
No critical habitat has been designated for this species.
http://ecos.fws.gov/ecp/species/7247

Birds

NAME	STATUS

Southwestern Willow Flycatcher Empidonax traillii extimus — **Endangered**
Wherever found
There is **final** critical habitat for this species. The location of the critical habitat is not available.
http://ecos.fws.gov/ecp/species/6749

Yellow-billed Cuckoo Coccyzus americanus — **Threatened**
There is **final** critical habitat for this species. The location of the critical habitat is not available.
http://ecos.fws.gov/ecp/species/3911

Reptiles

NAME	STATUS

Blunt-nosed Leopard Lizard Gambelia silus — **Endangered**
Wherever found
No critical habitat has been designated for this species.
http://ecos.fws.gov/ecp/species/625

Giant Garter Snake Thamnophis gigas — **Threatened**
Wherever found
No critical habitat has been designated for this species.
http://ecos.fws.gov/ecp/species/4482

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii — **Threatened**
Wherever found
There is **final** critical habitat for this species. The location of the critical habitat is not available.
http://ecos.fws.gov/ecp/species/2891

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. http://ecos.fws.gov/ecp/species/321	**Threatened**

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. http://ecos.fws.gov/ecp/species/9743	**Candidate**

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. http://ecos.fws.gov/ecp/species/498	**Threatened**

Flowering Plants

NAME	STATUS
Bakersfield Cactus Opuntia treleasei Wherever found No critical habitat has been designated for this species. http://ecos.fws.gov/ecp/species/7799	**Endangered**
San Joaquin Wooly-threads Monolopia (=Lembertia) congdonii Wherever found No critical habitat has been designated for this species. http://ecos.fws.gov/ecp/species/3746	**Endangered**

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE.

	"BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA http://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Lawrence's Goldfinch Carduelis lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. http://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA http://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any

week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

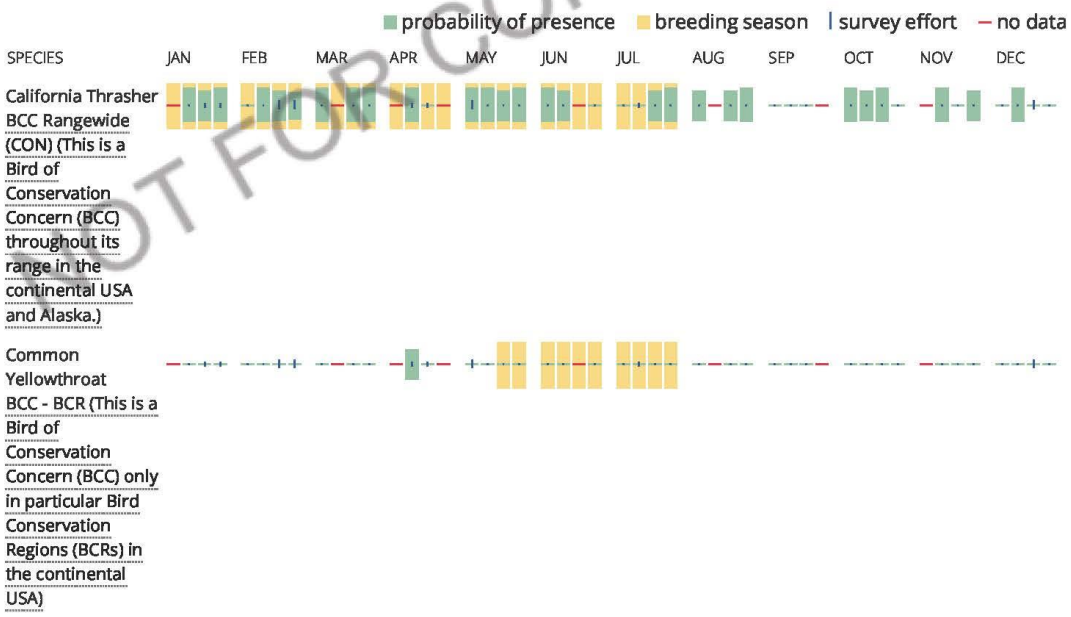
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10

km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged

aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix C

California Native Plant Society Inventory of Rare and Endangered Plants: Oildale Quadrangle

ScientificName	CommonName	Family	Lifeform	CRPR	GRank	SRank	CESA	FESA	BloomingPeriod
Monolopia congdonii	San Joaquin woollythreads	Asteraceae	annual herb	1B.2	G2	S2	None	FE	Feb-May
Opuntia basilaris var. treleasei	Bakersfield cactus	Cactaceae	perennial stem	1B.1	G5T1	S1	CE	FE	Apr-May
Astragalus hornii var. hornii	Horn's milk-vetch	Fabaceae	annual herb	1B.1	GUT1	S1	None	None	May-Oct
Trichostema ovatum	San Joaquin bluecurls	Lamiaceae	annual herb	4.2	G3	S3	None	None	(Apr-Jun)Jul-Oct
Chloropyron molle ssp. hispidum	hispid salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	1B.1	G2T1	S1	None	None	Jun-Sep
Imperata brevifolia	California satintail	Poaceae	perennial rhizomatous herb	2B.1	G4	S3	None	None	Sep-May
Eriastrum hooveri	Hoover's eriastrum	Polemoniaceae	annual herb	4.2	G3	S3	None	FD	Mar-Jul
Eriogonum gossypinum	cottony buckwheat	Polygonaceae	annual herb	4.2	G3G4	S3S4	None	None	Mar-Sep

Appendix D

Photo Plates

Site Photos October 26, 2021

Photo 1. Northwest corner, facing south.

Photo 2. Northwest corner, facing east.

Photo 3. Northeast corner, facing west.

Photo 4. Northeast corner, facing south.

	
Photo 5. Southeast corner, facing north.	Photo 6. Southeast corner, facing northwest.
	
Photo 7. Southwest corner, facing north.	Photo 8. Stormwater sump on west side of Project site.

	
Photo 9. California ground squirrel complexes.	Photo 10. Suitable size den for use by SJKF.
	
Photo 11 Suitable size den for use by SJKF in California ground squirrel complex.	Photo 12. California ground squirrel complexes.

Appendix E

Plants and Wildlife Observed During the Biological Survey

Plants Observed During the Biological Survey

VASCULAR SPECIES

ASTERACEAE- Sunflower Family
Laennecia coulteri- Coulter's horseweed

BRASSICACEAE—Mustard Family
Hirschfeldia incana—shortpod mustard*
Sisymbrium irio- London rocket*

CHENOPODIACEAE—Goosefoot Family
Salsola sp.—Russian thistle*

POACEAE—Grass Family
Bromus diandrus—ripgut brome*

SOLANACEAE—Nightshade Family
Datura wrightii—Jimsonweed

ZYGOPHYLLACEAE- Caltrop Family
Tribulus terrestris- Puncture vine*

**Indicates non-native species*

Wildlife Observed During the Biological Survey

BIRDS

Corvus corax **-** common raven
Zenaida macroura- Mourning dove

MAMMALS

Spermophilus (Otospermophilus) beecheyi -
California ground squirrel

REPTILES

Uta stansburiana - common side-blotched lizard