BIOLOGICAL RESOURCES ASSESSMENT AND JURISDICTIONAL DELINEATION FOR THE PROPOSED BEYOND FOOD MART AND CARWASH DEVELOPMENT IN PALMDALE, CALIFORNIA

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SECTION 1.0 - INTRODUCTION

Jennings Environmental, LLC (Jennings) was retained by Beyond Food Mart (Client) to conduct a literature review and reconnaissance-level survey for the proposed Beyond Food Mart and Carwash (Project) within the City of Palmdale, Los Angeles County, California. The survey identified vegetation communities, the potential for the occurrence of special status species, or habitats that could support special status wildlife species, and recorded all plants and animals observed or detected within the Project boundary. This biological resources assessment is designed to address potential effects of the proposed project to designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) or species designated as sensitive by the California Department of Fish and Wildlife (CDFW) or the California Native Plant Society (CNPS). Information contained in this document is in accordance with accepted scientific and technical standards that are consistent with the requirements of the United States Fish and Wildlife Service (USFWS) and CDFW. Additionally, the site was surveyed for any drainage features that would meet the definition of the Waters of the US (WOUS), Waters of the State (WOS), or CDFW jurisdiction.

1.1 PROJECT LOCATION

The project is generally located in the southern portion of Section 30, Township 6 North, Range 11 West and is depicted on the *Palmdale* U.S. Geological Survey's (USGS) 7.5-minute topographic map. More specifically the project is located within Assessor Parcel Number (APNs) 3018-028-023 and 3018-052-054 within the City of Palmdale, Los Angeles County, California. The Project site is located northwest corner of the intersection of E Ave R. and 25th Street E. The site is mostly surrounded by developed residential parcels with a vacant parcel to the southwest and Palmdale High School to the east. (Figures 1 and 2 in Appendix A).

1.2 PROJECT DESCRIPTION

The proposed Project includes the development of an approximately 7,460 sq. ft. store and an approximately 1,790 sq. ft. carwash. Additional improvements include a gas station, EV charging station, paving and parking.

2.0 – METHODOLOGY

2.1 LITERATURE REVIEW

Prior to performing the field survey, existing documentation relevant to the Project site was reviewed. The most recent records of the California Natural Diversity Database (CNDDB) managed by CDFW (CDFW 2022), the USFWS Critical Habitat Mapper (USFWS 2022) and the California Native Plant Society's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2021) were reviewed for the following quadrangles containing and surrounding the Project site: *Palmdale*, USGS 7.5-minute quadrangle. These databases contain records of reported occurrences of federal- or state-listed endangered or threatened species, California Species of Concern (SSC), or otherwise special status species or habitats that may occur within or in the immediate vicinity of the Project site.

2.2 SOILS

Before conducting the surveys, soil maps for Los Angeles County were referenced online to determine the types of soil found within the Project site. Soils were determined in accordance with categories set forth by the United States Department of Agriculture (USDA) Soil Conservation Service and by referencing the USDA Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2022).

2.3 BIOLOGICAL RECONNAISSANCE-LEVEL SURVEY

Jennings biologist, Gene Jennings, conducted the general reconnaissance survey within the Project site to identify the potential for the occurrence of special status species, vegetation communities, or habitats that could support special status wildlife species. The surveys were conducted on foot, throughout the Project site between 0742 and 0830 hours on March 24, 2022. Weather conditions during the survey included temperatures ranging from 67.6 to 71.2 degrees Fahrenheit, with clear skies, no precipitation, 0 to 2 mile per hour winds. Photographs of the Project site were taken to document existing conditions (Appendix B).

2.4 JURISDICTIONAL FEATURES

A general assessment of jurisdictional waters regulated by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW was conducted for the proposed Project area. Pursuant to Section 404 of the Clean Water Act, USACE regulates the discharge of dredged and/or fill material into waters of the United States. The State of California (State) regulates the discharge of material into waters of the State pursuant to Section 401 of the Clean Water Act and the California Porter- Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. The assessment was conducted by a desktop survey through the USGS National Hydrography Dataset for hydrological connectivity. Additional discussion of the regulatory framework is provided in Appendix C.

2.4.1 VEGETATION

All plant species observed within the Project site were recorded. Vegetation communities within the Project site were identified and qualitatively described. Plant communities were determined in accordance with the *Manual of California Vegetation*, *Second Edition* (Sawyer et al. 2009). Plant nomenclature follows that of *The Jepson Manual, Second Edition* (Baldwin et al. 2012). A comprehensive list of the plant species observed during the survey is provided in Appendix D.

2.4.2 WILDLIFE

All wildlife and wildlife signs observed and detected, including tracks, scat, carcasses, burrows, excavations, and vocalizations, were recorded. Additional survey time was spent in those habitats most likely to be utilized by wildlife (native vegetation, wildlife trails, etc.) or in habitats with the potential to support state- and/or federally listed or otherwise special status species. Notes were made on the general habitat types, species observed, and the conditions of the Project site. A comprehensive list of the wildlife species observed during the survey is provided in Appendix D.

SECTION 3.0 – RESULTS

3.1 LITERATURE REVIEW RESULTS

According to the CNDDB, CNPSEI, and other relevant literature and databases, 18 sensitive species, 4 of which are listed as threatened or endangered, have been documented in the *Palmdale* quad. This list of sensitive species and habitats includes any State and/or federally listed threatened or endangered species, CDFW designated Species of Special Concern (SSC) and otherwise Special Animals. "Special Animals" is a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special status species." The CDFW considers the taxa on this list to be those of greatest conservation need.

An analysis of the likelihood for the occurrence of all CNDDB sensitive species documented in the *Palmdale* quad is provided in Table 2, in Appendix D. This analysis takes into account species range as well as documentation within the vicinity of the project area and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions. According to the databases, no sensitive habitat, including USFWS designated critical habitat, occurs within or adjacent to the project site.

3.1.1 SOILS

After review of USDA Soil Conservation Service and by referencing the USDA NRCS Web Soil Survey (USDA 2022), it was determined that the Project site is located within the Antelope Valley Area, California area CA675. Based on the results of the database search, two (2) soils types were observed in the area (Figure 3 in Appendix A):

Ramona coarse sandy loam. 0 to 2 percent slopes (RcA). This soil is well drained with a moderately high capacity to transmit water. This soil consists of alluvium derived from granite, typically ranges in elevation from 2,700 to 3,900 feet amsl and is considered prime farmland if irrigated.

Sorrento loam. 0 to 2 percent slopes (SsA). This soil is well drained with a moderately high to high capacity to transmit water. This soil consists of mixed alluvium, typically ranges in elevation from 80 to 1,800 feet amsl and is considered prime farmland if irrigated.

3.1.2 SPECIAL STATUS SPECIES BACKGROUND

Desert Tortoise – Threatened (Federal/State)

The desert tortoise is a State and federally listed threatened species. Throughout its range, it is threatened by habitat loss, domestic grazing, predation, collections, and increased mortality rates. The desert tortoise is typically found in creosote bush scrub. They are most often found on level or sloped ground where the substrate is firm but not too rocky. Tortoise burrows are typically found at the base of shrubs, in the sides of washes and hillsides. Because a single tortoise may have many burrows distributed throughout its home range, it is not possible to predict the exact numbers of individuals on a site based upon burrow numbers.

In 1992 the US Bureau of Land Management issued the *California Statewide Desert Tortoise Management Policy* which included categorizing habitat into three levels of classification. The management goal for

Category I areas is to maintain stable, viable populations and to increase the population where possible. The management goal for Category II areas is to maintain stable, viable populations. The management goal for Category III areas is to limit population declines to the extent feasible. In April 1993, the BLM amended the CDCA plan to delineate these three categories of desert tortoise habitat on public lands. Although habitat categories apply only to public lands administered by the BLM, regulatory agencies typically determine habitat compensation ratios based on the nearest BLM habitat categories (Desert Tortoise Compensation Team 1991). With the adoption of the West Mojave Plan (U.S. Bureau of Land Management 2005), all lands that are outside Desert Wildlife Management Areas, including the subject parcel, are characterized as Category 3 Habitat, which is the lowest priority management area for viable populations of the desert tortoise.

Mohave Ground Squirrel – Threatened (State)

The Mohave ground squirrel (MGS) is a State listed threatened species. Mohave ground squirrel is endemic to 2 million hectares in the western Mojave Desert. It typically inhabits sandy soils of alkali sink and creosote bush scrub habitat. In much of this region, the geographic range of the species is considered to lie west of the Mojave River. However, in the Victorville and Barstow areas, there are records of Mohave ground squirrel occurrence on the east side of the Mojave River. Mohave ground squirrel is listed as threatened by CDFW due to habitat loss, fragmentation, and deterioration (Brooks and Matchett 2002). CDFW does not designate critical habitat for this species.

MGS is small, grayish, diurnal squirrel measuring about 9 inches from nose to tip of tail. They forage on leaves and seeds and aestivate/hibernate for long periods of the year. Plants documented as forage for MGS include: fiddleneck (*Amsinckia tessellata*), wolfberry (*Lycium andersonii*), Joshua tree (*Yucca brevifolia*), winterfat (*Krascheninnikovia lanata*), spiny hopsage (*Grayia spinosa*), allscale (*Atriplex canescens* and *A. polycarpa*), desert holly (*A. hymenelytra*), coreopsis (*Coreopsis* sp.), and the seeds of Joshua tree. It is suspected that Mohave ground squirrel forage on the plant species with the highest water content available at the time. The project site falls within the historic range of the MGS but is located outside, to the south, of the Mohave ground squirrel Conservation Area set forth in the West Mojave Plan (U.S. Bureau of Land Management 2005).

Burrowing Owl – SSC

The burrowing owl (BUOW) is a state and federal Species of Special Concern (SSC). This owl is a mottled, brownish and sand-colored, dove-sized raptor, with large, yellow eyes, a rounded head lacking ear tufts, white eyebrows, and long legs compared to other owl species. It is a ground-dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW is heavily dependent upon the presence of mammal burrows, with ground squirrel burrows being a common choice, in its habitat to provide shelter from predators, inclement weather, and to provide a nesting place (Coulombe 1971). They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows.

BUOW spends a great deal of time standing on dirt mounds at the entrance to a burrow or perched on a fence post or other low to the ground perch from which they hunt for prey. BUOW frequently hunt by hovering in place above the ground and dropping on their prey from above. They feed primarily on insects such as grasshoppers, June beetles, and moths, but will also take small rodents, birds, and reptiles. They are active during the day and night but are considered a crepuscular owl; generally observed in the early

morning hours or at twilight. The breeding season for BUOW is February 1 through August 31. Up to 11, but typically 7 to 9, eggs are laid in a burrow, abandoned pipe, or other subterranean hollows where incubation is complete in 28-30 days. Young BUOW fledges in 44 days. The BUOW is considered a migratory species in portions of its range, which includes western North America from Canada to Mexico, and east to Texas and Louisiana. BUOW populations in California are considered to be sedentary or locally migratory.

Throughout its range, the BUOW is vulnerable to habitat loss, predation, vehicular collisions, and destruction of burrow sites and the poisoning of ground squirrels (Grinnell and Miller 1944, Zarn 1974, Remsen 1978). BUOW has disappeared from significant portions of their range in the last 15 years and, overall, nearly 60% of the breeding groups of owls known to have existed in California during the 1980s had disappeared by the early 1990s (Burrowing Owl Consortium 1993). The BUOW is not listed under the state or federal Endangered Species Act but is considered both a federal and state Species of Special Concern. The BUOW is a migratory bird protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California Fish and Game Code (CDFG Code #3513 & #3503.5).

Western Joshua Tree – *Candidate for Listing (State)*

Western Joshua trees occur throughout the Mojave Desert in Southern California and are typically found at an elevation of 400 to 1,800 meters (~1,200 to ~5,400 feet). Western Joshua trees within the western portion of the Mojave Desert typically receive more annual precipitation during "normal" years; consequently, cloning occurs more often resulting in numerous trunks sprouting from the same root system. Western Joshua tree habitats provide habitat for a variety of wildlife species including desert woodrats *(Neotoma* sp.) and night lizards *(Xantusia* sp.) both of which utilize the base of the trees. A variety of birds also utilize Western Joshua trees for nesting such as hawks, common ravens, and cactus wrens. CDFW consider Western Joshua tree woodlands as areas that support relatively high species diversity and as such are considered to be a sensitive desert community. Western Joshua trees are also considered a significant resource under the California Environmental Quality Act (CEQA) and are included in the Desert Plant Protection Act, Food and Agricultural Code (80001 - 80006).

Additionally, pursuant to the provisions of Section 2074.2 of the Fish and Game Code, the California Fish and Game Commission (Commission), at its September 22, 2020, meeting, accepted for consideration the petition submitted to list the western Joshua tree (Yucca brevifolia) as threatened or endangered under the California Endangered Species Act. Based on that finding and the acceptance of the petition, the Commission also provided notice that the western Joshua tree is a candidate species as defined by Section 2068 of the Fish and Game Code.

Additional Species

There were also 3 additional threatened or endangered species that are found within the *Palmdale* Quad. However, the site is either outside the known range for these species or suitable habitat does not occur within the Project area. Therefore, no further discussion or recommendations are required for the following species:

- Tricolored blackbird
- Swainson's hawk

- Least bell's vireo

3.1.3 JURISDICTIONAL WATERS

Aerial imagery of the site was examined and compared with the surrounding USGS 7.5-minute topographic quadrangle maps to identify drainage features within the survey area as indicated from topographic changes, blue-line features, or visible drainage patterns. The U.S. Fish and Wildlife Service National Wetland Inventory and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site. Similarly, the Soil maps from the U.S. Department of Agriculture (USDA) - Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2022) were reviewed to identify the soil series on-site and to check if they have been identified regionally as hydric soils. Upstream and downstream connectivity of waterways (if present) was reviewed in the field, on aerial imagery, and topographic maps to determine jurisdictional status. No obvious signs of jurisdictional features were observed during the literature review.

3.1.4 HYDROLOGY AND HYDROLOGIC CONNECTIVITY

Hydrologically, the project site is located within an undefined Hydrologic Sub-Area (HSA 626.50) which comprises a 557,620-acre drainage area within the larger Lake Palmdale-Piute Ponds Hydrologic Area (Hydrologic Unit Code [HUC10] 1809020615) (CalTrans, 2022). The Lake Palmdale-Piute Ponds watershed in Palmdale is bordered to the north by the Rosamond Lake watershed, to the east by the Little Rock Wash watershed, to the south by the Headwaters Santa Clara River watershed, and to the west by the Upper Amargosa Creek watershed. (Figure 4 in Appendix A).

3.1.4 JOSHUA TREE AND NATIVE DESERT VEGETATION PRESERVATION

It is determined by the City Council that appropriate action must be taken in order to protect and preserve desert vegetation, and particularly Joshua trees, so as to retain the unique natural desert aesthetics in some areas of this city, and to promote the general welfare of the community. Although it may not be feasible, practicable, or in the public interest to preserve all healthy desert vegetation regulated under this chapter due to reasonable planning, developmental or property rights considerations, the design of development projects should strive to protect and maintain the most desirable and significant of the healthy desert vegetation in a manner consistent with the city general plan and the California Environmental Quality Act. (Ord. 952 §2 (part), 1992).

Section 14.04.030 Definitions. For purposes of this chapter, certain words and phrases shall be defined as follows unless the context clearly requires otherwise:

A. "Damage" means any action which may cause injury death or disfigurement to desert vegetation. This includes, but is not limited to, cutting, mutilating, harvesting, overwatering and excavating.

B. "Desert native plant specialist" means any professional person whose combination of education and background in native desert vegetation is sufficient for he or she to be considered an expert in the field of native desert vegetation. The city's landscape architect will maintain a listing of qualified desert native plant specialists who shall be deemed authorized to carry out the duties set forth in this chapter.

C. "Desert vegetation" means Joshua trees and California juniper as defined by this chapter, and other living plants identified pursuant to the California Desert Native Plants Act (Food and Agricultural Code section 80001, et seq.) as protected or designated on any state or federal rare and endangered species list.

D. "Development proposal" means an application for approval of a specific plan, a subdivision, conditional use permit, tentative tract map, parcel map or any other development permit or entitlement application which has been filed with and is pending for consideration by the City.

E. "Growing season" means the period of time each year from March 1 through August 31.

F. "Joshua tree" means a living tree of botanical name of Yucca brevifolia, including Y. revifolia var. Herbertii, and all other varieties and forms thereof.

G. "California juniper" means a living tree of the botanical name of Juniperus Californica.

H. "Maintenance" means all actions needed for the continued good health of Joshua trees and other desert vegetation, including but not limited to, insect control, spraying, and removal of dead wood.

Section 14.04.040 Prohibition of removal.

A. Desert vegetation shall not be removed, nor caused to be removed, on or from any parcel of land, except as provided by the provisions of this chapter.

B. A native desert vegetation removal permit shall be obtained from the city's landscape architect, or in lieu thereof, the director of public works' designee, prior to the removal of any native desert vegetation as defined in this chapter. (Ord. 952 §2(part), 1992).

3.2 FIELD STUDY RESULTS

3.2.1 HABITAT

The habitat on-site consists of *Ericameria nauseosa Shrubland Alliance* (rubber rabbitbrush scrub), ruderal vegetation, and bare ground. Portions of the site have been subject to human disturbances and are completely void of vegetation. Additionally, there is signs of disturbance in the form of dumping, foot traffic, off-road vehicle traffic, and previous development. Historical aerials show the parcel was developed in 1994. A complete list of all plants observed is provided in Table 1 of Appendix D.

3.2.2 WILDLIFE

Several birds were seen or heard during the survey. Species observed or otherwise detected on or in the vicinity of the project site during the surveys included; mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), and house finch (*Haemorhous mexicanus*). A complete list of all species observed is provided in Table 1 of Appendix D.

The project site is located within a relatively developed area of Palmdale. There are vacant parcels near the project site, but development is adjacent to those vacant properties. Portions of the project site have been disturbed by humans in the form of foot traffic and vehicle traffic. There is no habitat suitable for any listed or sensitive species documented to occur within the Project area.

3.2.3 SPECIAL STATUS SPECIES

Desert Tortoise – Threatened (Federal/State)

No suitable habitat for desert tortoise exists within the Project site or surrounding area. There are no documented desert tortoise occurrences within the Project site or the surrounding area and this species are not expected to occur within the project area. The project site is situated west and north of the agricultural fields, and south and east of residential developments, both of which provide a barrier to desert tortoise. Due to the high level of human disturbance as well as the isolation of the site by surrounding development, the project site and immediate vicinity is no longer considered suitable habitat for the desert tortoise. Therefore, no potential direct or indirect impacts to desert tortoise can be identified, and presence/absence surveys for this species are not warranted or recommended.

Mohave Ground Squirrel – Threatened (State)

Although a focused MGS trapping survey was not performed, Jennings conducted an MGS habitat assessment of the proposed Project site. The habitat assessment for MGS included a pedestrian field assessment, a review of reported occurrences of the MGS in the region (CNDDB, 2022), and adherence to CDFW's criteria for assessing potential impacts to the Mohave ground squirrel. The criteria questions are as follows:

1. *Is the site within the range of the MGS?;*
2. *Is there native habitat with a relatively diverse shrub component?; and*
3. *Is the site surrounded by development and therefore isolated from potentially occupied habitat?*

The Project site falls within the historic range of the MGS but is located outside, to the west, of the MGS Conservation Area set forth in the West Mojave Plan (U.S. Bureau of Land Management 2005). According to the CNDDB, MGS was historically documented (1984) directly adjacent to the project site. However, two protocol MGS trapping sessions have been conducted in the same area since 1984, one in 1991 and one in 2005. MGS was not detected and were considered absent during those protocol trapping sessions (Leitner 2008). No ground squirrels of any species were observed on-site or within the project buffer and no burrows of suitable size or shape were observed during the survey. Additional surveys have been conducted within the Lancaster and Palmdale areas between 2008 and 2012 with no occurrences recorded (Figure 5 in Appendix A)[Western Wildlife Journal, 2015].

Adequate cover and forage for MGS appeared to be limited within and around the study site. No winterfat (*Eurotia lanata*), nor spiny hopsage (*Grayia spinosa*) were found on the study site, which are considered important forage for MGS. In the "Current Status of the Mohave ground squirrel (*Xerospermophilus mohavensis*): A five-year update (2008–2012)", Dr. Leitner hypothesized, based on trapping surveys in the southern portion of the MGS range, that densities of < 24/ha for spiny hopsage and < 100/ha of winterfat on a site was considered poor forage and may be related to the absence of MGS (Leitner, 2015). No streams or washes were noted on the study site. Absence of this habitat feature further lessens the likelihood of MGS presence on the study site or their ability to persist during long term drought conditions (Logan 2016). No wildlife corridors are expected to exist between the closest core MGS population and the project site. The maximum documented movement of MGS is 3.9 miles (Harris and Leitner, 2005).

The site is also surrounded by development within Palmdale. The development includes commercial and residential uses. Although some development is not directly adjacent to the project site, the development is scattered within the vicinity, which would further isolate this site from MGS, as these land uses prevent movement from the known populations to the north.

Because the site has low quality habitat for MGS, is within the historical range but not within or near any current or recent occurrences, is surrounded by development, and the Project site is subject to ongoing human disturbances such as foot traffic and vehicle traffic, this species is considered absent from the Project area and presence/absence surveys for this species are not warranted or recommended.

Burrowing Owl – SSC

The conditions present onsite appeared to be suitable for BUOW. As such a BUOW owl survey was completed. The assessment survey was structured, in part, to detect BUOW. The survey consisted of walking transects spaced to provide 100% visual coverage of the project site. The result of the survey was that no evidence of BUOW was found in the survey area. No burrows of appropriate size, aspect, or shape were located and no BUOW pellets, feathers, or whitewash were found. No burrowing owl individuals were observed. Additionally, the site was found to contain no suitable habitat for this species as the soils were not friable and no suitable burrow surrogate species was observed. Therefore, no further studies or surveys are recommended.

Western Joshua Tree – *Candidate for Listing (State)*

There are currently no western Joshua trees present on-site. Therefore, there are no proposed impacts to this species.

Designated Critical Habitat

The site is not located within or adjacent to any USFWS designated Critical Habitat. No further action is required.

Nesting Birds

The Project site and immediate surrounding area does contain habitat suitable for nesting birds. Nesting bird surveys should be conducted prior to any construction activities taking place during the nesting season to avoid potentially taking any birds or active nests. In general, impacts to all bird species (common and special status) can be avoided by conducting work outside of the nesting season (generally March 15th to September 15th), and conducting a worker awareness training. However, if all work cannot be conducted outside of the nesting season, a project-specific Nesting Bird Management Plan can be prepared to determine suitable buffers.

3.2.4 JURISDICTIONAL WATERS

Waters of the United States and Waters of the State

The USACE has the authority to permit the discharge of dredged or fill material in Waters of the U.S. under Section 404 CWA. While the Regional Water Quality Board has authority over the discharge of dredged or fill material in Waters of the State under Section 401 CWA as well as the Porter-Cologne Water Quality Control Act. The Project area was surveyed with 100 percent visual coverage and no drainage features

were present on site. As such, the subject parcel does not contain any wetlands, waters of the U.S., or Waters of the State.

Fish and Game Code Section 1602 - State Lake and/or Streambed

The CDFW asserts jurisdiction over any drainage feature that contains a definable bed and bank or associated riparian vegetation. The Project area was surveyed with 100 percent visual coverage and no definable bed or bank features exist on the project site. As such, the subject parcel does not contain any areas under CDFW jurisdiction.

Section 4.0 - CONCLUSIONS AND RECOMMENDATIONS

Based on the literature review and personal observations made on-site and in the immediate vicinity, no State and/or federally listed threatened or endangered species are documented/or expected to occur within the Project site. Additionally, no plant species with the California Rare Plant Rank (CRPR) of 1 or 2 were observed on-site or documented to occur on-site in the relevant databases. No other sensitive species were observed within the project area or buffer area.

There are no streams, channels, washes, or swales that meet the definitions of Section 1600 of the State of California Fish and Game Code (FGC) under the jurisdiction of the CDFW, Section 401 ("Waters of the State") of the Clean Water Act (CWA) under the jurisdiction of the Regional Water Quality Control Board (RWQCB), or "Waters of the United States" (WoUS) as defined by Section 404 of the CWA under the jurisdiction of the U.S. Army Corps of Engineers (Corps) within the subject parcel. Therefore, no permit from any regulatory agency will be required.

Joshua Tree And Native Desert Vegetation Preservation

The Project site does not contain any of the plant species that are covered under Title 14, Environmental Management, of the Building Code for the City of Palmdale.

Nesting Birds

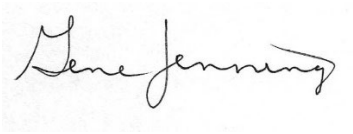
Since there is some habitat within the project site and adjacent area that is suitable for nesting birds in general, a pre-construction nesting bird survey is recommended before the commencement of any Project-related work activities within nesting season (March 15 through September 15) to avoid any potential Project-related impacts to nesting birds.

Certification

I hereby certify that the statements furnished herein, and in the attached exhibits present data and information required for this analysis to the best of my ability, and the facts, statements, and information presented are true and correct to the best of my knowledge and belief. This report was prepared in accordance with professional requirements and standards. Fieldwork conducted for this assessment was performed by me. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project proponent and that I have no financial interest in the project.

Please do not hesitate to contact me at 909-534-4547 should you have any questions or require further information.

Sincerely,



Gene Jennings
Principal/Regulatory Specialist

Appendices:

- Appendix A – Figures
- Appendix B – Site Photos
- Appendix C – Regulatory Framework
- Appendix D – Tables

Section 5 – REFERENCES

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, and T.J. Rosatti, and D.H. Wilken (editors) 2012 *The Jepson Manual: Vascular Plants of California, Second Edition.* University of California Press, Berkeley, CA.

Barbour, M.G., J.H. Burk, W.D. Pitts, F.S. Gilliam, and M.W. Schwartz. 1999 *Terrestrial Plant Ecology, Third Edition.* Addison Wesley Longman, Inc. Menlo Park, CA.

Bolster, B.C., editor. 1998. Terrestrial Mammal Species of Special Concern in California. Draft Final Report prepared by P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Report submitted to California Department of Fish and Game Wildlife Management Division, Nongame Bird and Mammal Conservation Program for Contract No. FG3146WM.

Butler, R., C. Schiffer, and A. Mann, 1991. Final report - San Bernardino flying squirrel. Unpublished report, U.S.D.A. Forest Service, San Bernardino Ranger District. 1-29 pp.

California Department of Fish and Wildlife (CDFW)

A. 2020 California Natural Diversity Database (CNDDB). RareFind Version 3.1.0. Database Query. Wildlife and Habitat Data Analysis Branch. [Accessed March 2022]

B. California Wildlife Habitats Relationships Life History Accounts and Range Maps. (Accessed online at https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range). Accessed September 2021.

California Department of Fish and Game. 1995. Staff report on burrowing owl mitigation. Memo from C.F. Raysbrook, Interim Director to Biologist, Environmental Services Division, Department of Fish and Game. Sacramento, CA.

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resources Agency. March 7, 2012

California Department of Transportation. Water Quality Planning Tool. http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx (Accessed March 2022)

California Native Plant Society (CNPS)2020 Inventory of Rare and Endangered Plants (online edition, v8-03 0.39). Rare Plant Scientific Advisory Committee, California Native Plant Society, Sacramento, California. Website http://www.rareplants.cnps.org; [Accessed March 2022].

Leitner, P. 2008. Current status of the Mohave ground squirrel. Transactions of the Western Section of the Wildlife Society 44: 11−29.

Leitner, P. 2015. Current status of the Mohave ground squirrel (*Xerospermophilus mohavensis*): A five-year update (2008–2012). Endangered Species Recovery Program, California State University, Stanislaus, One University Circle, Turlock, California 95382. Published in Western Wildlife 2: 9–22.

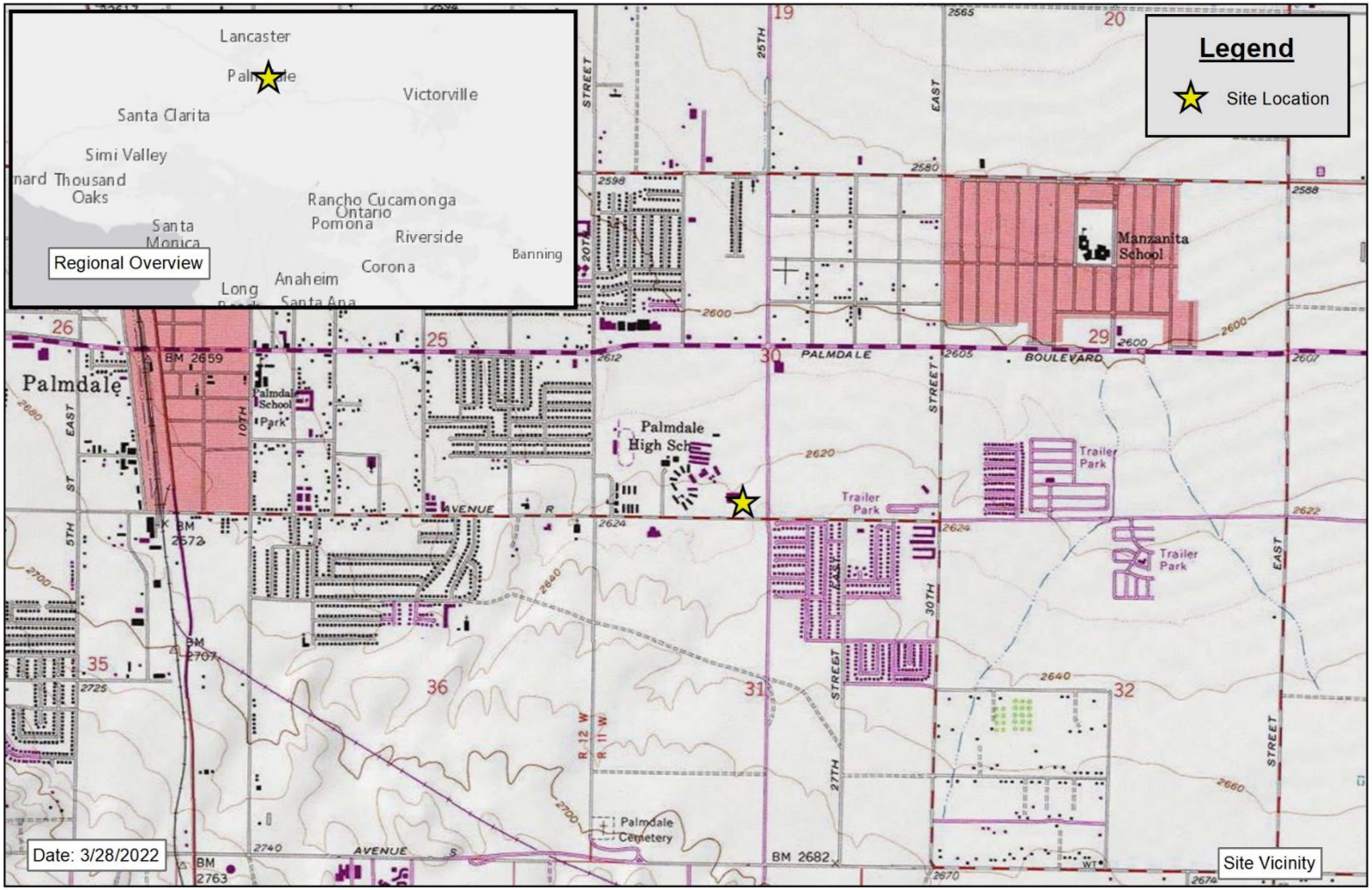
Sawyer, J.O., Jr., T. Keeler-Wolf, J. Evens2009 *A Manual of* California *Vegetation, Second Edition*. California Native Plant Society, Sacramento, CA.

U.S. Department of Agriculture (USDA)2020 Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions [Online Edition]. Website https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx [Accessed March 2022].

U.S. Fish and Wildlife Service (USFWS). National Wetlands Inventory. Website: http://wetlands.fws.gov. (Accessed: March 2022).

Western Wildlife, The Journal of the Western Section of the Wildlife Society, Volume 2, 2015; https://wwjournal.org/wp-content/uploads/sites/9/2021/05/WW_Volume02.pdf

Appendix A - Figures



Beyond Food Mart
Palmdale, CA

Figure 1 - Regional Overview and Site Vicinity

JENNINGS ENVIRONMENTAL

0 0.1 0.2 0.4 0.6 0.8 Miles

1:24,000

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
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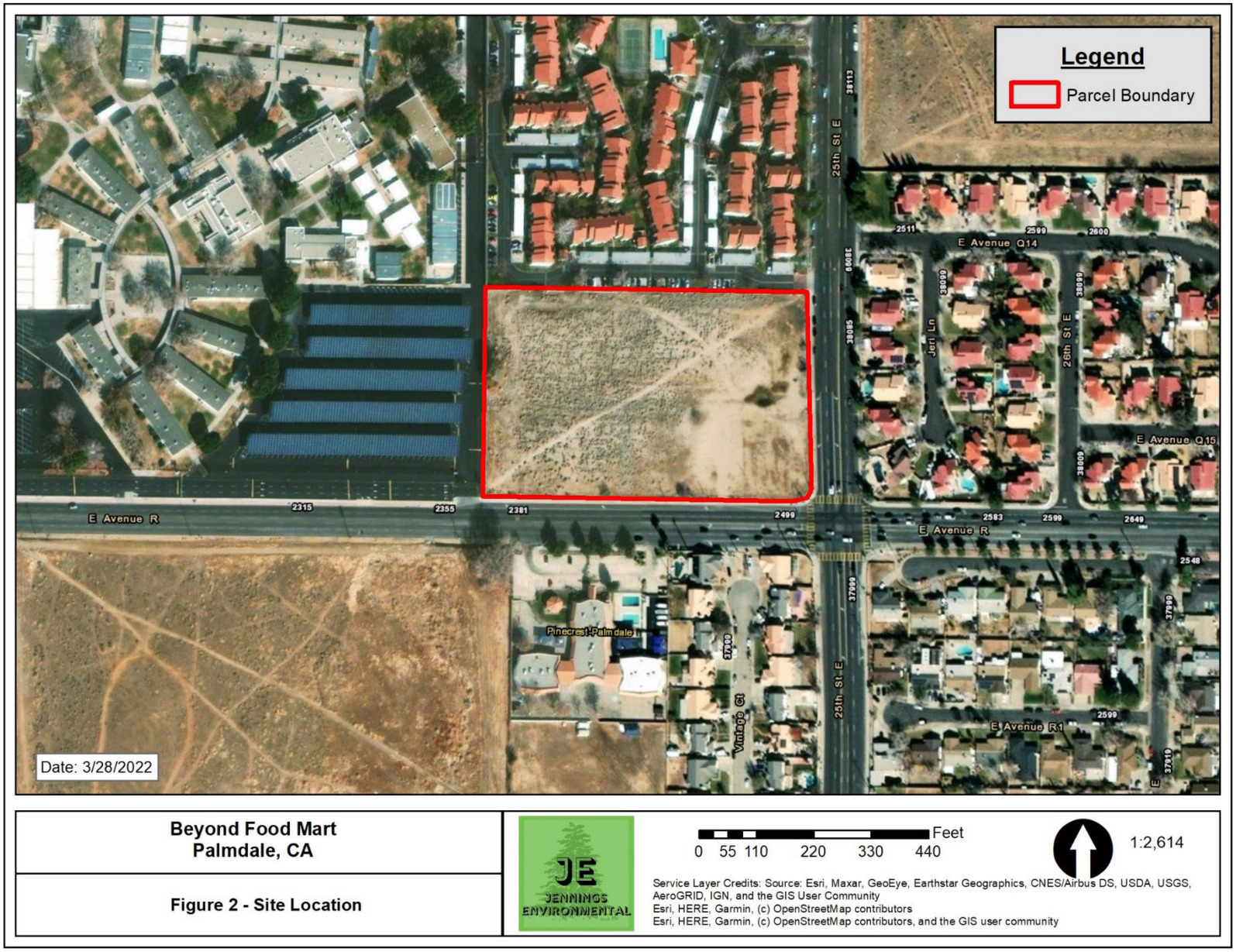
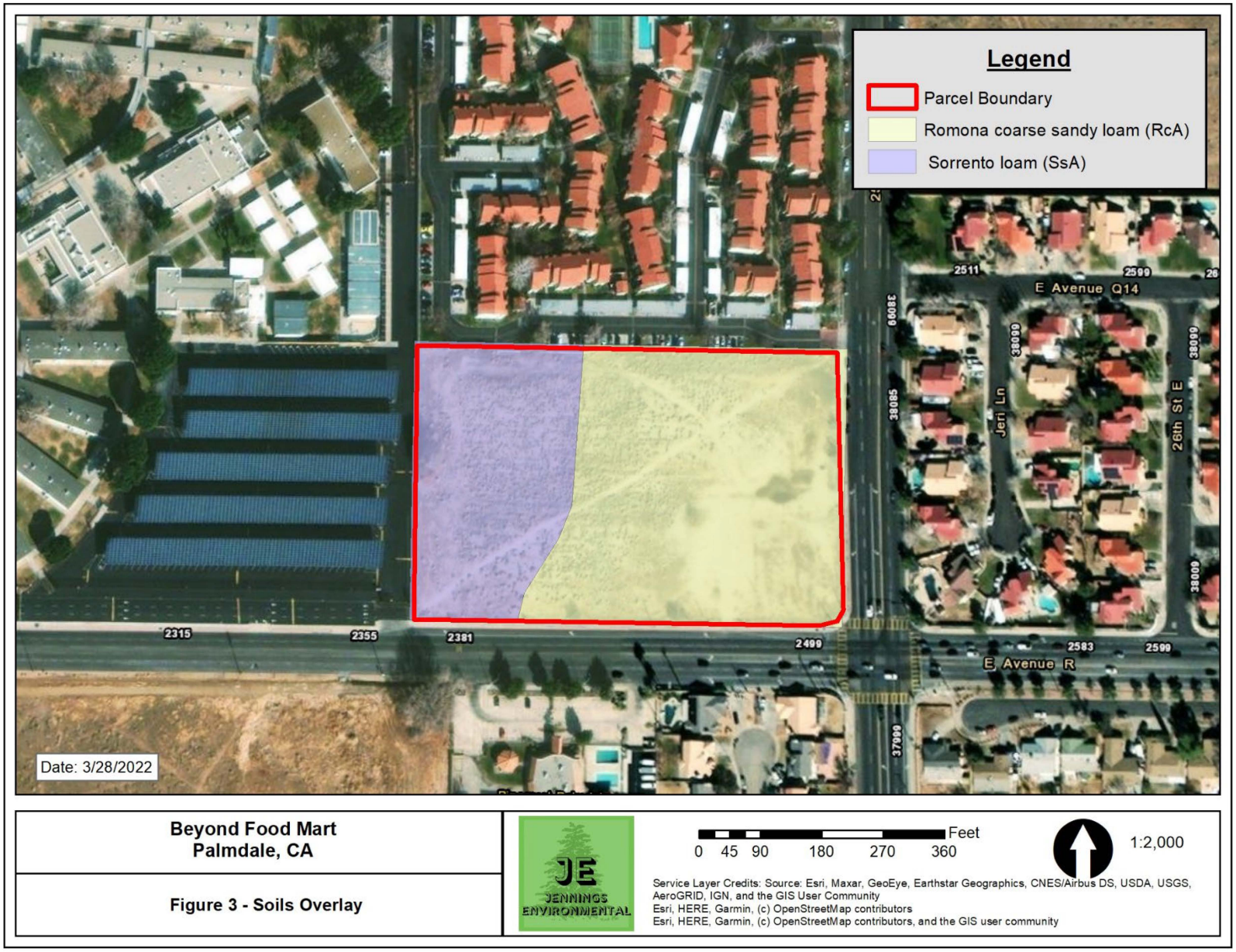
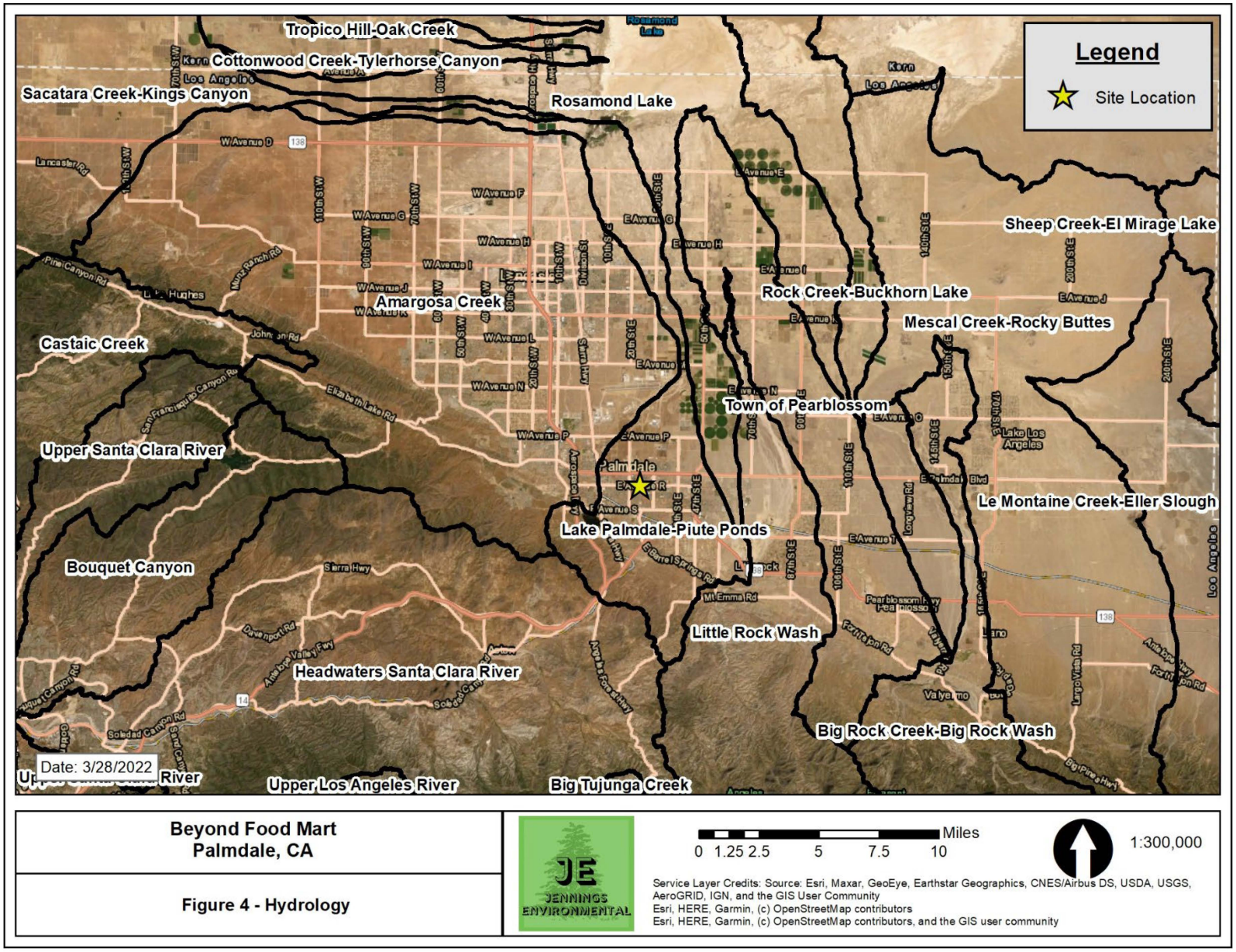

Legend
Parcel Boundary
E Avenue Q14
E Avenue Q15
E Avenue R
E Avenue R1
25th St E
26th St E
Jeri Ln
Vintage Ct
Pinecrest-Palmdale I
Date: 3/28/2022
Beyond Food Mart
Palmdale, CA
Figure 2 - Site Location
JE
JENNINGS ENVIRONMENTAL
Feet
0 55 110 220 330 440
1:2,614
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community


Legend
Parcel Boundary
Romona coarse sandy loam (RcA)
Sorrento loam (SsA)
E Avenue Q14
E Avenue R
Jeri Ln
26th St E
2511
2599
2315
2355
2381
2499
2583
Date: 3/28/2022
Beyond Food Mart
Palmdale, CA
Figure 3 - Soils Overlay
JE
JENNINGS ENVIRONMENTAL
0 45 90 180 270 360
Feet
1:2,000
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community


Legend
Site Location
Tropico Hill-Oak Creek
Cottonwood Creek-Tylerhorse Canyon
Sacatara Creek-Kings Canyon
Rosamond Lake
Sheep Creek-El Mirage Lake
Rock Creek-Buckhorn Lake
Amargosa Creek
Mescal Creek-Rocky Buttes
Castaic Creek
Town of Pearblossom
Upper Santa Clara River
Palmdale
Le Montaine Creek-Eller Slough
Lake Palmdale-Piute Ponds
Bouquet Canyon
Little Rock Wash
Headwaters Santa Clara River
Big Rock Creek-Big Rock Wash
Upper Los Angeles River
Big Tujunga Creek
Date: 3/28/2022
Beyond Food Mart
Palmdale, CA
Figure 4 - Hydrology
JE
JENNINGS ENVIRONMENTAL
Miles
0 1.25 2.5 5 7.5 10
1:300,000
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors
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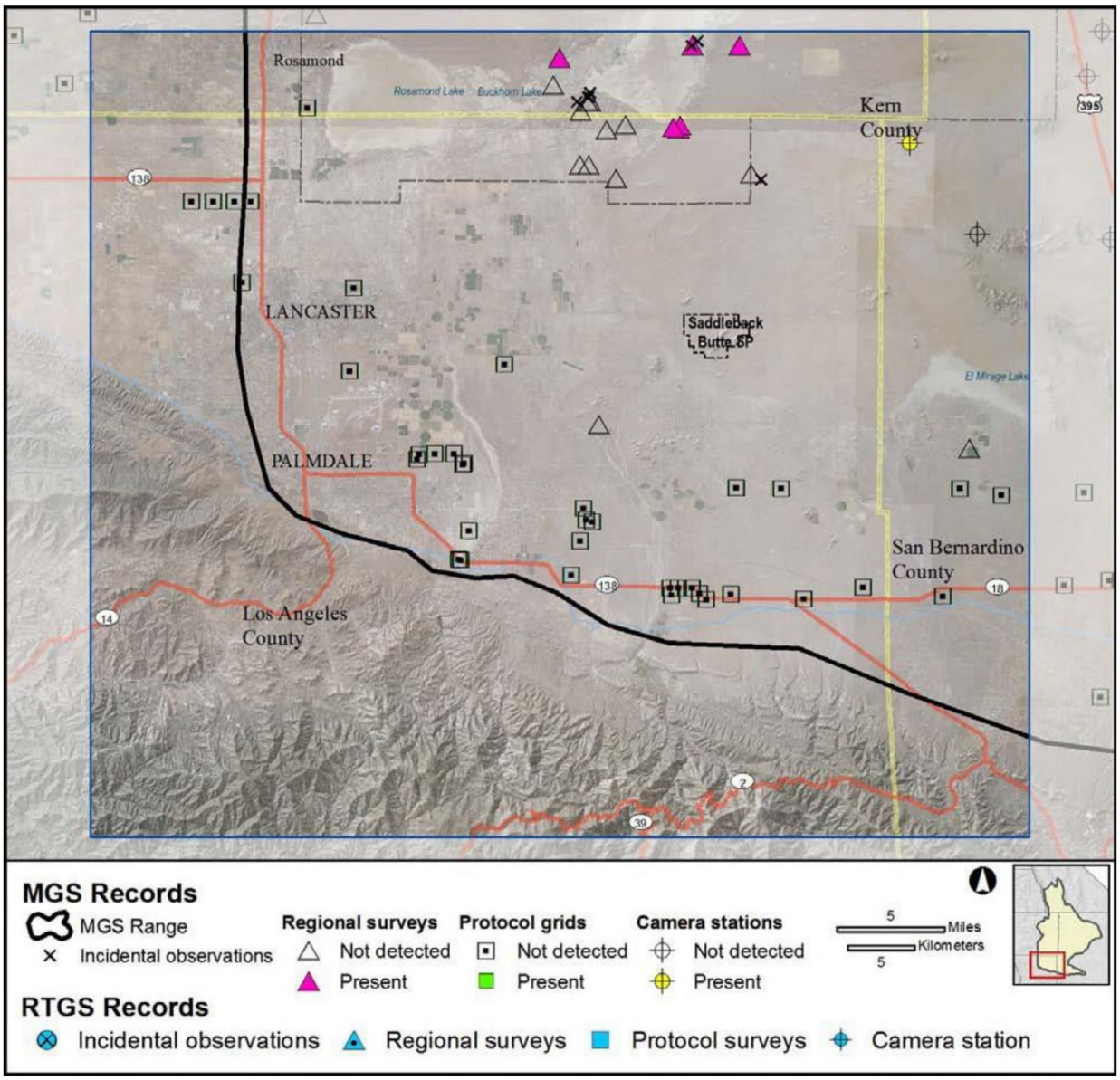

Figure 5. Mohave Ground Squirrel (*Xerospermophilus mohavensis*) range in Los Angeles County, California. Symbols indicate locations of 2008–2012 Mohave Ground Squirrel records, both positive and negative.

Appendix B - Photos

	Photo 1 – Eastern corner of parcel, facing west. Showing rubber rabbitbrush scrub and ruderal vegetation.
	Photo 2 – Northeast corner, facing southwest. Showing rabbitbrush scrub and ruderal vegetation.

	Photo 3 – Northwest corner of parcel, facing southeast. Showing rabbitbrush scrub and ruderal vegetation.
	Photo 4 – Center portion of parcel, facing west. Showing rabbitbrush scrub and ruderal vegetation.

	Photo 5 – Center portion of parcel, facing southeast. Showing bare ground and ruderal vegetation.

Appendix C – Regulatory Framework

1.1 FEDERAL JURISDICTION

1.1.1 United States Army Corps of Engineers

Pursuant to Section 404 of the CWA, the United States Army Corps of Engineers (USACE) regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined by 33 Code of Federal Regulations (CFR) Part 328 and currently includes: (1) all navigable waters (including all waters subject to the ebb and flow of the tide), (2) all interstate waters and wetlands, (3) all other waters (e.g., lakes, rivers, intermittent streams) that could affect interstate or foreign commerce, (4) all impoundments of waters mentioned above, (5) all tributaries to waters mentioned above, (6) the territorial seas, and (7) all wetlands adjacent to waters mentioned above. Waters of the United States do not include (1) waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (CWA), and (2) prior converted cropland. Waters of the United States typically are separated into two types: (1) wetlands and (2) "other waters" (non-wetlands) of the United States.

Wetlands are defined by 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support … a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987, USACE published a manual (1987 Wetland Manual) to guide its field personnel in determining jurisdictional wetland boundaries. This manual was amended in 2008 to the USACE 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (2008 Arid West Supplement). Currently, the 1987 Wetland Manual and the 2008 Arid West Supplement provide the legally accepted methodology for identification and delineation of USACE-jurisdictional wetlands in southern California.

In the absence of wetlands, the limits of USACE jurisdiction in nontidal waters, including intermittent Relatively Permanent Water (RPW) streams, extend to the Ordinary High Water Mark (OHWM), which is defined by 33 CFR 328.3(e) as:

> … that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

On January 9, 2001, the U.S. Supreme Court ruled (in Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers) (SWANCC) that USACE jurisdiction does not extend to previously regulated isolated waters, including but not limited to isolated ponds, reservoirs, and wetlands. Examples of isolated waters that are affected by this ruling include vernal pools, stock ponds, lakes (without outlets), playa lakes, and desert washes that are not tributary to navigable or interstate waters or to other jurisdictional waters. A joint legal memorandum by EPA and USACE was signed on January 15, 2003.

In May 2007, USACE and EPA jointly published and authorized the use of the Jurisdictional Determination Form Instructional Guidebook (USACE 2007). The form and guidebook define how to determine if an area is USACE jurisdictional and if a significant nexus exists per the Rapanos decision. A nexus must have more than insubstantial and speculative effects on the downstream TNW to be considered a significant nexus. This guidebook is updated by the 2008 Arid West Supplement, the 2010 Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, and the 2011 Ordinary High Flows and the Stage-Discharge Relationship in the Arid West Region.

A joint guidance by EPA and USACE was issued on June 5, 2007, and revised on December 2, 2008, is consistent with the Supreme Court's decision in the consolidated cases Rapanos v. United States and Carabell v. United States (126 S. Ct. 2208 [2006]) (Rapanos), which addresses the jurisdiction over waters of the United States under the CWA (33 U.S.C. §1251 et seq.). A draft guidance was circulated in April 2011 to supercede both the 2003 SWANCC guidance and 2008 Rapanos decision; however, this guidance is not finalized and lacks the force of law.

USACE will continue to assert jurisdiction over Traditionally Navigable Waters (TNWs), wetlands adjacent to TNW, non-navigable tributaries of TNW that are Relatively Permanent Waters (RPW) where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months), and wetlands that directly abut such tributaries.

USACE generally will not assert jurisdiction over swales or erosional features (e.g., gullies or small washes characterized by low volume, infrequent, or short duration flow) or nontidal drainage ditches (including roadside ditches) that are (1) excavated wholly in and draining only uplands and (2) that do not carry a relatively permanent flow of water. USACE defines a drainage ditch as:

> A linear excavation or depression constructed for the purpose of conveying surface runoff or groundwater from one area to another. An "upland drainage ditch" is a drainage ditch constructed entirely in uplands (i.e., not in waters of the United States) and is not a water of the United States, unless it becomes tidal or otherwise extends the ordinary high water line of existing waters of the United States.

Furthermore, USACE generally does not consider "[a]rtificially irrigated areas which would revert to upland if the irrigation ceased" to be subject to their jurisdiction. Such irrigation ditches are linear excavations constructed for the purpose of conveying agricultural water from the adjacent fields. Therefore, such agricultural ditches are not considered to be subject to USACE jurisdiction.

USACE will use fact-specific analysis to determine whether waters have a significant nexus with (1) TNW for nonnavigable tributaries that are not relatively permanent (non-RPW); (2) wetlands adjacent to nonnavigable tributaries that are not relatively permanent; and (3) wetlands adjacent to, but that do not directly abut, a relatively permanent nonnavigable tributary. According to USACE, "a significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to

determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters," including consideration of hydrologic and ecologic factors. A primary component of this determination lies in establishing the connectivity or lack of connectivity of the subject drainages to a TNW.

1.2 STATE JURISDICTION

The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the CWA as well as the California Porter-Cologne Water Quality Control Act (Porter-Cologne; California Water Code, Division 7, §13000 et seq.). Waters of the State are defined by Porter-Cologne as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code Section 13050(e)). Waters of the State broadly includes all waters within the State's boundaries (public or private), including waters in both natural and artificial channels.

1.2.1 Regional Water Quality Control Board

Under Porter-Cologne, the State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Boards (RWQCB) regulate the discharge of waste into waters of the State. Discharges of waste include "fill, any material resulting from human activity, or any other 'discharge' that may directly or indirectly impact 'waters of the state.'" Porter-Cologne reserves the right for the State to regulate activities that could affect the quantity and/or quality of surface and/or groundwaters, including isolated wetlands, within the State. Wetlands were defined as waters of the State if they demonstrated both wetland hydrology and hydric soils. Waters of the State determined to be jurisdictional for these purposes require, if impacted, waste discharge requirements (WDRs).

When an activity results in fill or discharge directly below the OHWM of jurisdictional waters of the United States (federal jurisdiction), including wetlands, a CWA Section 401 Water Quality Certification is required. If a proposed project is not subject to CWA Section 401 certification but involves activities that may result in a discharge to waters of the State, the project may still be regulated under Porter-Cologne and may be subject to waste discharge requirements. In cases where waters apply to both CWA and Porter-Cologne, RWQCB may consolidate permitting requirements to one permit.

1.2.2 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, the California Department of Fish and Wildlife (CDFW) regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other

aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation" (California Code of Regulations, Title 14, Section 1.72). The jurisdiction of CDFW may include areas in or near intermittent streams, ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams that are indicated on USGS maps, watercourses that may contain subsurface flows, or within the flood plain of a water body. CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW limits of jurisdiction typically include the maximum extents of the uppermost bank-to-bank distance and/or the outermost extent of riparian vegetation dripline, whichever measurement is greater.

In a CDFW guidance of stream processes and forms in dryland watersheds (Vyverberg 2010), streams are identified as having one or more channels that may all be active or receive water only during some high flow event. Subordinate features, such as low flow channels, active channels, banks associated with secondary channels, floodplains, and stream-associated vegetation, may occur within the bounds of a single, larger channel. The water course is defined by the topography or elevations of land that confine a stream to a definite course when its waters rise to their highest level. A watercourse is defined as a stream with boundaries defined by the maximal extent or expression on the landscape even though flow may otherwise be intermittent or ephemeral.

Artificial waterways such as ditches (including roadside ditches), canals, aqueducts, irrigation ditches, and other artificially created water conveyance systems also may be under the jurisdiction of CDFW. CDFW may claim jurisdiction over these features based on the presence of habitat characteristics suitable to support aquatic life, riparian vegetation, and/or stream-dependent terrestrial wildlife. As with natural waterways, the limit of CDFW jurisdiction of artificial waterways includes the uppermost bank-to-bank distance and/or the outermost extent of riparian vegetation dripline, whichever measurement is greater.

CDFW does not have jurisdiction over wetlands but has jurisdiction to protect against a net loss of wetlands. CDFW supports the wetland criteria recognized by USFWS; one or more indicators of wetland conditions must exist for wetlands conditions to be considered present. The following is the USFWS accepted definition of a wetland:

> Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the lands supports hydrophytes, (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated withwater or covered by shallow water at some time during the growing season of each year (Cowardin et al. 1979).

In A Clarification of the U.S. Fish and Wildlife Service's Wetland Definition (Tiner 1989), the USFWS definition was further clarified "that in order for any area to be classified as wetland by the Service, the area must be periodically saturated or covered by shallow water, whether wetland vegetation and/or hydric soils are present or not; this hydrologic requirement is

addressed in the first sentence of the definition." When considering whether an action would result in a net loss of wetlands, CDFW will extend jurisdiction to USFWS-defined wetland conditions where such conditions exist within the riparian vegetation that is associated with a stream or lake and does not depend on whether those features meet the three-parameter USACE methodology of wetland determination. If impacts to wetlands under the jurisdiction of CDFW are unavoidable, a mitigation plan will be implemented in coordination with CDFW to support the CDFW policy of "no net loss" of wetland habitat.

Appendix D – Tables

Table 1. Species Observed On-Site

Common Name	Scientific Name
Plants	
Wall barley	*Hordeum murinum*
Common fiddleneck	*Amsinckia intermedia*
London rocket	*Sisymbrium irio*
Pineapple weed	*Matricaria discoidea*
Common storks bill	*Erodium cicutarium*
Baker's goldfield	*Lasthenia californica ssp. bakeri*
Siberian elm	*Ulmus pumila*
Rubber rabbitbrush	*Ericameria nauseosa*
Red willow	*Salix laevigata*
Fremont Cottonwood	*Populus fremontii*
Birds	
Mourning dove	
House finch	*Haemorhous mexicanus*
House sparrow	*Passer domesticus*
Anna's hummingbird	*Calypte anna*
Northern mocking bird	*Mimus polyglottos*
Yellow-rumped warbler	*Setophaga coronata*

Table 2 – CNDDB Potential to Occur for the *Palmdale* USGS 7.5 minute Quadrangles

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Accipiter cooperii	Cooper's hawk	None, None	G5, S4, CDFW-WL	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Agelaius tricolor	tricolored blackbird	None, Threatened	G1G2, S1S2, CDFW-SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Anniella pulchra	Northern California legless lizard	None, None	G3, S3, CDFW-SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Arizona elegans occidentalis	California glossy snake	None, None	G5T2, S2, CDFW-SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Astragalus hornii var. hornii	Horn's milk-vetch	None, None	GUT1, S1, 1B.1	Meadows and seeps, playas. Lake margins, alkaline sites. 75-350 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Athene cunicularia	burrowing owl	None, None	G4, S3, CDFW-SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Bombus crotchii	Crotch bumble bee	None, None	G3G4, S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Buteo swainsoni	Swainson's hawk	None, Threatened	G5, S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Charadrius montanus	mountain plover	None, None	G3, S2S3, CDFW-SSC	Short grasslands, freshly plowed fields, newly sprouting grain fields, and sometimes sod farms. Short vegetation, bare ground, and flat topography. Prefers grazed areas and areas with burrowing rodents.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Helminthoglypta fontiphila	Soledad shoulderband	None, None	G1, S1	Air-breathing terrestrial snail. Known from type locality, Little Rock Creek Cyn on north side of San Gabriels; west to Santa Clarita in Soledad Cyn; east to the vicinity of Big Rock Creek; and north to Elizabeth Lake Cyn in the Sierra Pelona Mtns. Frequently found in riparian habitat (springs, seeps, along streams). May be found in rock piles, flood-borne debris, or under dead yuccas where other cover is not available.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Lanius ludovicianus	loggerhead shrike	None, None	G4, S4, CDFW-SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Loeflingia squarrosa var. artemisiarum	sagebrush loeflingia	None, None	G5T3, S2, 2B.2	Great Basin scrub, Sonoran desert scrub, desert dunes. Sandy flats and dunes. Sandy areas around clay slicks w/Sarcobatus, Atriplex, Tetradymia, etc. 700-1615 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Opuntia basilaris var. brachyclada	short-joint beavertail	None, None	G5T3, S3, 1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. Sandy soil or coarse, granitic loam. 425-2015 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Perognathus inornatus	San Joaquin pocket mouse	None, None	G2G3, S2S3	Grassland, oak savanna and arid scrubland in the southern Sacramento Valley, Salinas Valley, San Joaquin Valley and adjacent foothills, south to the Mojave Desert. Associated with fine-textured, sandy, friable soils.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Phrynosoma blainvillii	coast horned lizard	None, None	G3G4, S3S4, CDFW-SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Toxostoma lecontei	Le Conte's thrasher	None, None	G4, S3, CDFW-SSC	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Vireo bellii pusillus	least Bell's vireo	Endangered, Endangered	G5T2, S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Xerospermophilus mohavensis	Mohave ground squirrel	None, Threatened	G2G3, S2S3	Open desert scrub, alkali scrub and Joshua tree woodland. Also feeds in annual grasslands. Restricted to Mojave Desert. Prefers sandy to gravelly soils, avoids rocky areas. Uses burrows at base of shrubs for cover. Nests are in burrows.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Coding and Terms

E = Endangered T = Threatened C = Candidate FP = Fully Protected WL = Watch List SSC = Species of Special Concern R = Rare

State Species of Special Concern: An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code: "It is unlawful to take, possess or destroy any birds in the orders Falconiformes or Strigiformes or to take, possess or destroy the nest or eggs of any such bird."

State Fully Protected: The classification of Fully Protected was the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians and reptiles. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Global Rankings (Species or Natural Community Level):

G1 = Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = Secure – Common; widespread and abundant.
? = Uncertainty in the exact status of an element (could move up or down one direction from current rank)

Subspecies Level: Taxa which are subspecies or varieties receive a taxon rank (T-rank**)** attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. For example: the Point Reyes mountain beaver, *Aplodontia rufa* ssp. *phaea* is ranked G5T2. The G-rank refers to the whole species range i.e., *Aplodontia rufa.* The T-rank refers only to the global condition of ssp. *phaea*.

State Ranking:

S1 = Critically Imperiled – Critically imperiled in the State because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.
S2 = Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the State.
S3 = Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the State.
S4 = Apparently Secure – Uncommon but not rare in the State; some cause for long-term concern due to declines or other factors.
S5 = Secure – Common, widespread, and abundant in the State.

California Rare Plant Rankings (CNPS List):

1A = Plants presumed extirpated in California and either rare or extinct elsewhere.
1B = Plants rare, threatened, or endangered in California and elsewhere.
2A = Plants presumed extirpated in California, but common elsewhere.
2B = Plants rare, threatened, or endangered in California, but more common elsewhere.
3 = Plants about which more information is needed; a review list.
4 = Plants of limited distribution; a watch list.

Threat Ranks:

.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)