Appendix B: Habitat Assessment, Jurisdictional Delineation, Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis, Focused Crotch's Bumble Bee and Burrowing Owl Survey Results

May 28, 2026 13153.41

Britney Schopf and Bridget Canty
Seaflower Energy, LLC
5521 La Jolla Blvd
La Jolla, CA 92037

Subject: Habitat Assessment for the Seaflower Battery Energy Storage Project, City of Menifee, California

Dear Britney Schopf and Bridget Canty,

Dudek has completed the habitat assessment for the approximately 3.84-acre Seaflower Battery Energy Storage Project (Project); consisting of Assessor Parcel Numbers 331-250-021 and 331-250-002 located in the City of Menifee, Riverside County, California (see Figure 1, Project Location; all figures are provided in Appendix A). The Project includes development of an up to 400 megawatt-hour (MWh) outdoor utility scale energy storage system including electrical facilities, telecommunication facilities, and a generation interconnection transmission (gen-tie) line. An overhead or underground gen-tie line would be constructed to transfer power between the Project site and the existing Southern California Edison (SCE) Valley Substation, located approximately 0.4 miles to the north. If installed overhead, an appropriate number of 115 kilovolt (kV) transmission structures including insulator/hardware assemblies, and appropriate number of conductor spans between the last structure and the dead-end substation structure at the SCE Valley Substation would be installed. The final alignment, pole heights, number of structures, structure types, conductor spans, and location of the gen-tie line will be finalized with detailed engineering design.

The Project area is located on privately owned land in the City of Menifee, approximately 0.50 miles south of Highway 74, west of Menifee Road, and north of Matthews Road (Figure 1). The Project site falls within the Romoland U.S. Geological Survey 7.5-minute quadrangle. The Project area spans Section 14, Township 5 South, and Range 3 West.

This report provides a description of the current site conditions per the vegetation mapping assessment and a general reconnaissance assessment of potential special-status biological resources located within the approximately 3.85-acre Project area, as well as a list of constraints and recommended future surveys. The findings presented in this report can support a potential Project design or support potential mitigation needs. Focused surveys may need to be performed at a later date.

1 Regulatory Compliance

1.1 Federal

1.1.1 Federal Endangered Species Act

The federal Endangered Species Act (ESA) (16 USC 1531 et seq.) is implemented by the U.S. Fish and Wildlife Service (USFWS) through a program that identifies and provides for protection of various species of fish, wildlife, and plants deemed to be in danger of or threatened with extinction. As part of this regulatory act, ESA provides for designation of critical habitat, defined in ESA Section 3(5)(A) as specific areas within the geographical range occupied by a species where physical or biological features "essential to the conservation of the species" are found and that "may require special management considerations or protection." Critical habitat may also include areas outside the current geographical area occupied by the species that are nonetheless "essential for the conservation of the species." The Project site does not overlap with critical habitat (USFWS 2024a, 2024b).

1.1.2 Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the Migratory Bird Treaty Act, "take" is defined as pursuing, hunting, taking, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). USFWS reviews actions that might affect these species.

1.2 State

1.2.1 California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA) (California Fish and Game Code [CFGC] Section 2050 et seq.), which prohibits the "take" of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, take is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA Section 2053 stipulates that state agencies may not approve Projects that will "jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

CFGC Sections 3511, 4700, and 5515 designate certain birds, mammals, and fish as "fully protected" species. These species may not be taken or possessed without a permit from the California Fish and Game Commission, and such take may only occur pursuant to scientific research or in connection with an authorized Natural Communities Conservation Plan. No "incidental take" of fully protected species is allowed.

CESA Sections 2080 through 2085 address the taking of threatened, endangered, or candidate species by stating, "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the Commission determines to be an endangered species or a

threatened species, or attempt any of those acts, except as otherwise provided in this chapter, the Native Plant Protection Act (CFGC Sections 1900–1913), or the California Desert Native Plants Act (Food and Agricultural Code, Section 80001)."

Section 2081(b) and (c) of the CFGC authorize take of endangered, threatened, or candidate species if take is incidental to otherwise lawful activity and if specific criteria are met. In such cases, CDFW issues the applicant an incidental take permit, which functions much like an incidental take statement in the federal context. Sections 2081(b) and (c) also require CDFW to coordinate consultations with USFWS for actions involving federally listed species that are also state-listed species. In certain circumstances, Section 2080.1 of CESA allows CDFW to adopt a federal incidental take statement or a 10(a) permit as its own, based on its findings that the federal permit adequately protects the species and is consistent with state law. As mentioned above, CDFW may not issue a Section 2081(b) incidental take permit for take of "fully protected" species. The CFGC lists the fully protected species in Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish).

1.2.2 California Fish and Game Code

Birds and Mammals

According to Sections 3511 and 4700 of the CFGC, which regulate birds and mammals, a fully protected species may not be taken or possessed. CDFW may not authorize the take of such species except (1) for necessary scientific research, (2) for the protection of livestock, and (3) when the take occurs for fully protected species within an approved Natural Communities Conservation Plan, such as the South County Multiple Species Conservation Plan.

Resident and Migratory Birds

The CFGC provides protection for wildlife species. It states that no mammals, birds, reptiles, amphibians, or fish species listed as fully protected can be "taken or possessed at any time." In addition, CDFW affords protection over the destruction of nests or eggs of native bird species (CFGC Section 3503), and it states that no birds in the orders of Falconiformes or Strigiformes (birds of prey) can be taken, possessed, or destroyed (CFGC Section 3503.5). CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock (CFGC Section 3511). Separate from federal and state designations of species, CDFW designates certain vertebrate species as Species of Special Concern based on declining population levels, limited ranges, and/or continuing threats that have made them vulnerable to extinction.

California Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (CFGC Sections 1900–1913) directed CDFW to conduct the legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare," and to protect endangered and rare plants from take. When CESA was passed in 1984, it expanded on the original NPPA, enhanced legal protection for plants, and created the categories of "threatened" and "endangered" species to parallel ESA. CESA categorized all rare animals as threatened species under CESA, but did not do so for rare plants, which resulted in three listing categories for plants in California: rare, threatened, and endangered. The NPPA

remains part of the CFGC, and mitigation measures for impacts on rare plants are specified in a formal agreement between CDFW and Project proponents.

1.2.3 California Environmental Quality Act

The California Environmental Quality Act (CEQA; California Public Resources Code, Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.) require identification of a Project's potentially significant impacts on biological resources and feasible mitigation measures and alternatives that could avoid or reduce significant impacts. CEQA Guidelines Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors" (14 CCR 15000 et seq.). A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not currently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c). CEQA also requires identification of a Project's potentially significant impacts on riparian habitats (such as wetlands, bays, estuaries, and marshes) and other sensitive natural communities, including habitats occupied by endangered, rare, and threatened species.

1.3 Regional

1.3.1 Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multijurisdictional habitat conservation plan focusing on conservation of species and their associated habitats in Western Riverside County. The MSHCP is one of several large, multijurisdictional habitat-planning efforts in Southern California with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. The MSHCP allows Riverside County and its cities, including the City of Menifee, to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal endangered species acts (County of Riverside 2003).

The MSHCP serves as a habitat conservation plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act (16 USC 1531 et seq.), as well as a Natural Communities Conservation Plan under the Natural Community Conservation Planning Act of 2001 (Fish and Game Code, Section 2800 et seq.). The MSHCP allows the participating jurisdictions to authorize "take" of plant and wildlife species identified within the Plan Area. USFWS and CDFW have authority to regulate the take of threatened, endangered, and rare species. Under the MSHCP, the wildlife agencies have granted "take authorization" for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the MSHCP conservation area, in exchange for the assembly and management of a coordinated MSHCP conservation area.

The Project site is in the MSHCP Harvest Valley/Winchester Area Plan and must comply with relevant sections of the MSHCP. The Project site is not within an MSHCP Criteria Cell (Figure 2, Western Riverside MSHCP Plan Area); therefore, no Reserve Assembly requirements would apply to the Project site. The Project site is not located within MSHCP Section 6.1.3 Narrow Endemic Species Survey Area or MSHCP Section 6.3.2 Additional Survey Needs and Procedures for Criteria Area Plant Species, Mammals, or Amphibians; therefore, additional survey requirements for these would not apply to the Project site and are not further discussed. The Project site is located within MSHCP Section 6.3.2 Additional Survey Needs and Procedures for burrowing owl (*Athene cunicularia*) which is discussed further below in Section 4.

Local Development Mitigation Fee

The Western Riverside MSHCP involves acquiring and conserving certain lands that support covered species to implement its goals and objectives and to mitigate the impacts caused by new development. A MSHCP Local Development Mitigation Fee is necessary to supplement the financing of the acquisition of lands supporting species covered by the MSHCP and to pay for new development's fair share of this cost (County of Riverside 2003). The MSHCP Local Development Mitigation Fee assists in the maintenance of biological diversity and protects vegetation communities that are known to support threatened, endangered, or sensitive populations of plant and wildlife species.

As mentioned above, the Project site is located within the Western Riverside MSHCP, but outside of a Criteria Cell. A Criteria Cell is an approximately 160-acre area overlaid onto parcels within the Western Riverside MSHCP Plan Area that has areas described for conservation. While the Project is outside of a Criteria Cell, it is covered by the Western Riverside MSHCP and the Local Development Mitigation Fee will apply. The current Local Development Mitigation Fee Schedule can be found at the link included below. The fee is charged on a per acre basis and will be administered by the City of Menifee, which is a permittee of the Western Riverside MSHCP. Battery storage facilities are not explicitly called out in the Local Development Fee Schedule, but it is anticipated that the Project will be classified as commercial or industrial development. The per acre fee for commercial and industrial development is the same cost at $20,191.00 per acre as of July 1, 2025.

https://www.wrc-rca.org/development-applications/permits-and-fees/

2 Methods

2.1 Vegetation Mapping

Vegetation communities and land covers within the Project area were mapped in the field following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018) and California Natural Community List (CDFW 2023), also referred to as the Natural Communities List, based on A Manual of California Vegetation, Online Edition (CNPS 2024a). Modifications, such as the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986; Oberbauer et al. 2008), were incorporated to accommodate the lack of conformity of the observed communities to those included in these references. Data was recorded using the ArcGIS Field Maps application over aerial base map imagery of the Project area, and a geographic information system coverage was created. Following fieldwork, remaining vegetation mapping was completed using ArcGIS on a desktop.

2.2 Pre-field Literature Review Plants and Wildlife

Prior to conducting the field investigation, a review of existing biological resources within the vicinity of the Project site was conducted using the California Natural Diversity Database (CDFW 2024a), California Native Plant Society's Online Inventory of Rare and Endangered Vascular Plants (CNPS 2024b), and USFWS Information for Planning and Consultation (USFWS 2024a) and occurrence data (USFWS 2024b). The purpose of this review was to determine if sensitive plant and wildlife species were known to occur within the Project area or in the nearby vicinity and what constraints these occurrences might have on the Project based on regional planning and guidelines. The California Natural Diversity Database and California Native Plant Society inventories were searched based on the U.S. Geological survey 7.5-minute topographic quadrangle maps for Romoland, where the Project is located, and the surrounding eight quadrangle maps: Perris, Lakeview, Winchester, Bachelor Mountain, Murrieta, Wildomar, Lake Elsinore, and Steele Peak. Additionally, Dudek reviewed U.S. Geological Survey topographic maps (1:24,000-scale), aerial photographs (Google Earth 2024; NETR 2024), the USFWS National Wetland Inventory database (USFWS 2024c), and the National Hydrography Dataset and Watershed Boundary Dataset (USGS 2024) to assess the potential for historical drainages and aquatic features to be present.

2.3 Field Survey and Conditions

On September 4, 2024, Dudek Biologist Allison Johnson conducted a general reconnaissance survey of the Project area. The survey was conducted from 7:30 a.m. to 9:30 a.m.; the temperature ranged from 88°F to 92°F; cloud cover was 0%; and wind speeds ranged from 0 mph to 2 mph. A general map of the vegetation communities within the Project area was documented, along with all wildlife and plant species observed or detected during the survey. Concurrently, a general habitat assessment was conducted for special-status species identified during the database review as having potential to occur, and an aquatic resources delineation was performed to identify potentially jurisdictional aquatic resources.

A delineation verification was conducted on April 1, 2026, by Dudek Biologist Katelin Pedersen, to refine the jurisdictional extent of aquatic features within and adjacent to the Project site. The delineation was conducted from 8:45 a.m. to 11 a.m.; temperature ranged from 62°F to 69°F; cloud cover ranged from 40% to 80%; and wind speeds ranged from 0 mph to 1 mph.

3 Results and Discussion

3.1 Soils

Two soil types are present within the Project site and are summarized in Table 1 below and shown in Figure 3, Soils.

Table 1. Summary of Soil Units in the Project Site

Soil Map Unit Name	Landform	Drainage Class	Acres	Hydric*
Exeter sandy loam, 0% to 2% percent slopes	Terraces and fans	Well drained	2.09	No

Table 1. Summary of Soil Units in the Project Site

Soil Map Unit Name	Landform	Drainage Class	Acres	Hydric*
Exeter sandy loam, 2% to 8% percent slopes, eroded	Terraces and fans	Well drained	1.76	No

Source: USDA 2024.
Note:
* Hydric soil as defined by the U.S. Department of Agriculture (i.e., formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part), if hydric conditions are present within the soil unit.

3.2 Vegetation Mapping Results

The majority of the Project site is mapped as developed land, consisting of a large, heavily compacted gravel lot used to stage trucks and large equipment, along with two trailers/temporary office units (Figure 4, Vegetation Communities and Land Covers). Although the developed portion is surfaced with compacted gravel, areas of exposed native sandy soil occur as a narrow strip of disturbed habitat along the outer edge of the Project site, primarily along the southwestern boundary. These sandy soils are consistent with the mapped Exeter sandy loam soil units described in Section 3.1. The perimeter area had recently been cleared, allowing vegetation to reestablish. Dominant species within the disturbed habitat included sacred thorn-apple (*Datura wrightii*), flatspine bur ragweed (*Ambrosia acanthicarpa*), and dove weed (*Croton setiger*), all of which are associated with disturbed soils. No naturally occurring vegetation communities are present within the Project site.

3.3 Special-Status Plant and Wildlife Species

Special-status species are those defined as covered under the MSHCP or other regulatory agency as species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened population sizes; or species recognized by local and regional resource agencies as sensitive. Below is a summary of the special-status species and their potential to occur on site as well as recommended surveys.

3.3.1 Special-Status Wildlife

Species defined as "special-status wildlife species" in this report include wildlife species listed as federal/state endangered or threatened, those proposed for listing, those candidate for listing, those fully protected by CDFW, those on the California Watch List, and California species of special concern in the context of the federal ESA and CESA. CDFW assigns Species of Special Concern status to species whose population levels are declining, have limited ranges, and/or are vulnerable to extinction due to continuing threats (CDFW 2024b). In addition, Fully Protected species are protected by CDFW, and Watch List species are candidates for higher sensitive status. USFWS assigns the Birds of Conservation Concern status to migratory and non-migratory bird species that meet the requirements of the 1988 amendment to the Fish and Wildlife Conservation Act that mandates USFWS to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973" (16 USC 1531–1544).

A total of five wildlife species were detected during the reconnaissance survey and can be found in Appendix B, Wildlife Compendium. These species include house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), mourning dove (*Zenaida macroura*), killdeer (*Charadrius vociferus*), and western fence lizard (*Sceloporus occidentalis*). No federally or state-listed special-status species were observed during the reconnaissance survey. Special-status wildlife species with potential to occur within the Project site are presented in Appendix C. Based on review of literature, data, and site conditions, four special-status wildlife species have moderate potential to occur within the study area (western spadefoot [*Spea hammondii*], Crotch's bumble bee [*Bombus crotchii*], western yellow bat [*Lasiurus xanthinus*], and pocketed free-tailed bat [*Nyctinomops femorosaccus*]). While no specific evidence was observed within the Project site indicating presence, the determination for potential to occur is based on recorded occurrences within the last 5 years and proximity to the Project site (Figure 3, CNDDB Occurrences), combined with the presence of vegetation communities and land cover types known to provide habitat to these species. The four special-status species with moderate potential to occur are addressed herein.

Western Spadefoot

The western spadefoot toad is proposed for listing as a federally threatened species and is covered under the WRMSHCP. This species is endemic to California and northern Baja California and ranges from the north end of the great Central Valley south, east of the Sierras and the deserts, into northwest Baja California (Jennings and Hayes 1994). The species is most common in grasslands with vernal pools or mixed grassland/coastal sage scrub areas. Suitable habitat for this species includes open areas with sandy or gravelly soils in a variety of habitats, including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, river floodplains, alluvial fans, playas and alkali flats (Holland and Goodman 1998). Riparian habitats with suitable water resources may also be used. The western spadefoot is almost completely terrestrial, remaining underground in burrows eight to ten months of the year and entering water only to breed when rain thresholds are met.

A drainage feature potentially suitable for breeding by this species was observed along Matthews Road, a portion of which extends into the southwestern boundary of the Project site. Although most of the Project site consists of a heavily compacted gravel lot, exposed sandy soils occur within the disturbed habitat along the site perimeter. Small mammal burrows were observed within these limited areas of exposed sandy soil. Because western spadefoot may utilize small mammal burrows and friable sandy soils for aestivation, these features could provide potential aestivation habitat; however, the burrows were not evaluated for depth, occupancy, or subsurface conditions during the reconnaissance survey. In addition, western spadefoot has been documented immediately adjacent to the Project site in 2012 (CNDDB Occurrence No. 968, CDFW 2024c). Western spadefoot is a covered species under the WRMSHCP, therefore any Project impacts to this species or its habitat would be fully covered through the payment of the Local Development Mitigation Fee.

Crotch's Bumble Bee

Crotch's bumble bee is a candidate to become a state-listed endangered species. This species is known to occur almost exclusively in California and has historically occupied grasslands and shrublands in Southern to Central California (CDFW 2019). Suitable habitat for this species may include (1) areas of grasslands and upland scrub that contain requisite habitat elements, such as small mammal burrows and forage plants; (2) potential nest habitat (late February through late October) containing underground abandoned small mammal burrows, perennial bunch

grasses, and/or thatched annual grasses, brush piles, old bird nests, dead trees, or hollow logs (Williams et al. 2014; Hatfield et al. 2015); and (3) overwintering sites (November through early February).

The Project site has potential to support Crotch's bumble bee given that the host plant, *Heliotropium curassavicum*, was observed on site (Appendix B). The presence of burrows along the perimeter of the Project site may offer potential nesting habitat, as Crotch's bumble bee typically nests underground in abandoned burrows or similar cavities. Furthermore, the site is located within the known geographic range of this species and is in close proximity to grassland habitat that is consistent with documented occurrences.

Given that the Project site is primarily a heavily disturbed gravel lot with imported materials with only limited areas of native soil supporting small mammal burrows and sparse floral resources along the boundary, it is not expected to support Crotch's bumble bee. However, the Project will conduct a pre-construction nest survey to confirm the absence prior to ground-disturbing activities.

The pre-construction survey for Crotch's bumble bee shall be conducted within the construction footprint prior to the start of ground-disturbing construction activities occurring during the colony active period (April 1 through August 31 for Crotch's bumble bee). If ground-disturbing activities occur outside the period, no further mitigation would be required. The survey shall ensure that no nests for Crotch's bumble bee are located within the construction area.

The focused survey shall be performed by a biologist with expertise in surveying for bumble bees. Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling) and surveyors shall wait at least 1 hour following rain. Optimal surveys are when there are sunny to partly sunny skies and a temperature greater than 60°F. Surveys may be conducted earlier if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the potential nest resources for up to 5 minutes, looking for exiting or entering worker bumble bees. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point, but this limit shall not exceed 50 feet. The biologist will reduce the 50-foot limit as necessary to ensure 100% visual coverage of potential burrow resources depending on topography, vegetation height and cover, and other factors. This approach should allow the biologist to assess multiple burrows at one time to sufficiently determine if bees are entering/exiting them. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). A photo voucher of the bee species shall be collected, and the location mapped. If required, any capture of bumble bees will be conducted by a biologist with a valid CESA Memorandum of Understanding (MOU) and Scientific Collecting Permit (SCP) for Crotch's bumble bee. If a bumble bee worker is detected, then a representative shall be identified to species.

If Crotch's bumble bee nests are not detected, no further mitigation would be required.

If a Crotch's bumble bee nest is detected, the Project biologist will establish, monitor, and maintain a no-work buffer around the nest. The size and configuration of the no-work buffer will be based on best professional judgement of the Project biologist in consultation with CDFW. The buffer will provide at least 50 feet of clearance around the nest entrance(s). Construction activities will not occur within the no-work buffer until the colony is no longer active. To determine that a nest is no longer active, the nest will be observed for a minimum of 60 minutes each day across

a minimum of 3 days during suitable flight weather (i.e., ambient air temperature between 60- and 90-degrees Fahrenheit, winds under 10 mph, and no precipitation more than a drizzling rain). If no bees are seen flying in or out of the nest by the end of the observation period, it will be determined that the nest is no longer active. If Project activities occur outside of the Colony Active Period, then pre-construction surveys for active bee nests and avoidance measures are not required.

A written survey report shall be submitted to the City within 30 days of the pre-construction survey. The report shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and a detailed habitat assessment. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report.

If the above measures are followed, it is assumed that the Project shall not need to obtain authorization from CDFW through the CESA Incidental Take Permit process. If the nest resources cannot be avoided, as outlined in this measure, the Project applicant shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this habitat assessment report and shall be incorporated into the habitat mitigation and monitoring plan.

In the event an Incidental Take Permit is needed, mitigation for direct impacts to Crotch's bumble bee shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, and lands are conserved separately, a cost estimate shall be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a Project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record shall take into account all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development.

Western Yellow Bat and Pocketed Free-Tailed Bat

Western yellow bat and pocketed free-tailed bat have moderate potential to occur on the Project site due to the presence of several semi-permanent structures (e.g., trailers and temporary office units) and Mexican fan palm (*Washingtonia robusta*), which are known to provide suitable roosting habitat for these species.

Western yellow bats are closely associated with palm trees, particularly fan palms, which offer dense frond layers that mimic the structure of natural roosts. These trees provide shelter from predators and temperature extremes, making them ideal day roosts. In urban and semi-urban environments, western yellow bats have also been documented roosting in man-made structures that offer similar protective features, such as overhangs, eaves, and crevices.

Pocketed free-tailed bats typically roost in rock crevices and cliff faces, but they are also known to adapt to anthropogenic structures such as buildings, bridges, and tunnels. The semi-permanent structures on site may offer narrow gaps, cavities, or sheltered spaces that resemble their natural roosting preferences. These bats are highly mobile and capable of exploiting a variety of roosting substrates, especially in areas where natural features are limited.

Due to the moderate potential for these species to occur on site, a pre-construction bat survey is recommended to assess the presence or absence of roosting individuals prior to the removal of potentially suitable roosting habitat (palm trees and semi-permanent structures) or the initiation of ground-disturbing activities. A qualified biologist shall conduct a pre-construction survey to determine whether potential roosting sites for bats are occupied. The survey will include visual inspection of palm fronds and structures for signs of bat occupancy, such as urine staining, bat guano, or direct observation of individuals. The survey should be conducted during the active season (mid-March through late October) when bats are most likely to occupy roosts.

If roosting bats are detected, a Bat Monitoring and Management Plan shall be prepared and approved by CDFW prior to any disturbance. The plan will outline exclusion methods, timing, and procedures to avoid mortality. If no roosting bat species are found, tree/structure removal procedures and ground disturbing activities can proceed without additional measures.

Nesting Birds

The Project site contains suitable nesting habitat, including existing buildings and equipment, for migratory bird species acclimated to disturbed sites. Native nesting birds are protected under the Migratory Bird Treaty Act, and compliance with these regulations is required. Removal of vegetation considered suitable for nests has the potential to impact these species. Additionally, indirect impacts to nesting birds from short-term, construction-related noise could result in decreased reproductive success or abandonment of an area used for nesting if construction is conducted during the nesting season (i.e., February through August).

Focused Surveys for Special-Status Bird Species

Burrowing owls have low potential to occupy the site in the future, primarily due to the site's current condition and land use. The Project site is almost entirely a gravel lot actively used for staging trucks and equipment, which results in frequent human disturbance, compacted substrate, and a lack of suitable vegetation or open ground typically required for nesting and foraging. These conditions significantly reduce the likelihood of burrowing owl presences, as the species prefers open, sparsely vegetated areas such as grasslands, agricultural fields, and disturbed lands with minimal human activity.

However, the presence of culverts adjacent to the site introduces a limited potential for occupancy, as burrowing owls are known to use artificial structures for nesting or shelter when natural burrows are unavailable. These features may mimic the structural characteristics of natural burrows, especially if they are surrounded by open habitat and have low levels of disturbance. Given this context, and to ensure compliance with the WRMSHCP burrowing owl survey requirements (RCA 2006), the following actions are necessary:

- A focused breeding season survey (March 1 through August 31) must be conducted to determine if burrowing owls are present or using the site or adjacent areas.

- The survey must include a pedestrian walk-through of the entire Project site and a 150-meter buffer zone, with transects spaced no more than 30 meters to allow 100% visual coverage.
- All natural burrows and suitable human-made structures must be documented, and follow-up focused surveys must be conducted if any are found.
- If no suitable burrows or structures are present, additional focused breeding surveys will not be required.
- Regardless of breeding season survey results, a pre-construction take avoidance survey must be completed within 30 days prior to ground disturbance to confirm the absence of burrowing owls.

3.3.2 Special-Status Plants

Endangered, rare, or threatened plant species, as defined in CEQA Guidelines Section 15380(b) (14 CCR 15000 et seq.), are referred to as "special-status plant species" in this report and include (1) endangered or threatened plant species recognized in the context of CESA and ESA and (2) plant species with a California Rare Plant Rank of 1 or 2 (CNPS 2024c).

A list of all special-status plant species with their habitat requirements and potential to occur at the Project site was generated as part of the literature review (Appendix E). The list also provides evaluations for each of the special-status species' occurrence in the vicinity of the Project site and its potential to occur based on known geographic range, habitat associations, preferred soil substrate, life form, elevation, and blooming period. No special-status plants were observed during the biological reconnaissance survey. Based on a review of the potential species to occur within the region, the habitat conditions identified for the Project site and the results of the reconnaissance survey, no special-status plant species have potential to occur within the Project site.

A total of 16 species of native or naturalized plants, 10 native (63%) and 6 non-native (38%), were recorded on site (see Appendix D, Plant Compendium).

3.4 Aquatic Resources

The aquatic resources delineation identified one constructed drainage ditch located along Matthews Road, a portion of which lies within the southwestern boundary of the Project site. The drainage ditch originates at a culvert under Menifee Road approximately 700 feet to the southeast, and flows northwest along Matthews Road past the Project site, turning into sheet flow approximately 500 feet northwest of the Project site.

The drainage ditch is an unpaved, man-made, feature excavated entirely within upland and appears to have been constructed to convey agricultural and stormwater runoff from adjacent developed and disturbed lands.

The ditch was dry during both delineation efforts (September 4, 2024, and April 1, 2026) and exhibits ephemeral hydrology, conveying surface flow only during and immediately following precipitation events. No evidence of sustained or relatively permanent flow was observed during either site visit.

Ordinary high water mark (OHWM) indicators included a bed and bank, a break in slope, a natural line impressed on the bank, changes in the character of soil, vegetation matted down, bent, or absent, sediment sorting, scour, deposition, and a change in plant community and/or cover.

Soils within the ditch and adjacent Project site consist of Exeter sandy loam (0–2 percent slopes and 2–8 percent slopes, eroded), which are well-drained, nonhydric soils. Vegetation within and adjacent to the ditch is dominated by disturbance-associated upland species and nonnative species. Upland vegetation included sacred thorn-apple (*Datura wrightii*) (upland [UPL]), dove weed (*Croton setiger*) (UPL) and Canadian horseweed *(Erigeron canadensis*) (facultative upland [FACU]). Bank vegetation included flatspine bur ragweed (*Ambrosia acanthicarpa) (*UPL), Washington fan palm *(Washingtonia robusta) (*facultative wet [FACW]) and salt heliotrope (*Heliotropium curassavicum*) (FACU).

The ditch does not appear to have a relatively permanent, continuous surface connection to a Traditional Navigable Water or other waters of the United States or state. The feature does not support wetland hydrology, hydrophytic vegetation, or hydric soils and does not provide aquatic or riparian habitat. Therefore, the drainage ditch is anticipated to be excluded from USACE jurisdiction under Section 404 of the Clean Water Act pursuant to 33 CFR Section 328.3(b)(3). The drainage ditch may be regulated by the RWQCB and/or the CDFW under applicable state definitions and procedures. These findings are preliminary and subject to verification by the appropriate regulatory agencies.

4 Western Riverside County MSHCP Consistency Analysis

The Project site is in the MSHCP Harvest Valley/Winchester Area Plan and must comply with relevant sections of the MSHCP. The Project site is not located within MSHCP Section 6.1.3 Narrow Endemic Species Survey Area or MSHCP Section 6.3.2 Additional Survey Needs and Procedures for Criteria Area Plant Species, Mammals, or Amphibians; therefore, additional survey requirements for these would not apply to the Project site and are not further discussed. The Project's compliance with the relevant sections of the MSHCP is discussed below.

4.1 MSHCP Section 6.1.2 Riparian/Riverine Resources and Vernal Pools

The identification of Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) riparian/riverine resources is based on the potential for the habitat to support, or be a tributary to habitat that supports, WRMSHCP riparian/riverine Covered Species. WRMSHCP riparian/riverine Covered Species are identified in the WRMSHCP Section 6.1.2. The WRMSHCP defines riparian/riverine habitat as "lands which contain Habitat dominated by [trees], shrubs, persistent emergent, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year" (County of Riverside 2003). The WRMSHCP further clarifies those areas "demonstrating characteristics as described above which are artificially created are not included in these definitions" (County of Riverside 2003).

The WRMSHCP defines vernal pools as "seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season" (County of Riverside 2003). Artificially created wetlands, except for those created intentionally to provide habitat or resulting from the creation of open waters or alteration of natural stream courses, are not considered WRMSHCP vernal pools.

The WRMSHCP defines suitable fairy shrimp habitat as "stock ponds, ephemeral pools and other features…as determined appropriate by a qualified biologist" for Riverside fairy shrimp (*Streptocephalus woottoni*), vernal pool fair shrimp (*Branchinecta lynchi*), and Santa Rosa fairy shrimp (*Linderiella santarosae*) (County of Riverside 2003).

4.1.1 Riparian/Riverine Resources

As discussed in Section 3.4, Aquatic Resources, of this memorandum, an updated aquatic resources delineation found that a portion of the drainage ditch located along Matthews Road is within the southwestern boundary of the Project site (Figure 4). No other aquatic resources were observed within, nor immediately adjacent to, the Project site.

The drainage ditch does not meet the definition of a riparian/riverine resource under Section 6.1.2 of the WRMSHCP. The WRMSHCP defines riparian/riverine resources as lands that support habitat dominated by trees, shrubs, or persistent emergent vegetation dependent on a freshwater source, and further clarifies that artificially created features are excluded unless they were constructed for the purpose of providing wetland habitat, creating open waters, or resulted from the alteration of a natural stream course (County of Riverside 2003).

The drainage ditch is a man-made feature excavated in uplands and was likely constructed to convey agricultural and stormwater runoff associated with adjacent roadway and land uses. The feature is ephemeral, conveying flow only during and immediately following storm events, and does not support native riparian or wetland vegetation, aquatic habitat, or ecological functions characteristic of natural riparian or riverine systems. Soils within the ditch consist of non-hydric upland soil types, and vegetation within and adjacent to the ditch is dominated by disturbance-associated and non-native upland species.

On the south-southeastern boundary of the Project site, a single individual of Goodding's willow (*Salix gooddingii*) is present. Although *Salix gooddingii* is a riparian-associated species, this isolated individual does not constitute riparian habitat as defined by the WRMSHCP. The tree lacks an associated native riparian understory, persistent freshwater source, or canopy structure indicative of a riparian-dominated habitat and therefore does not meet the criteria for a riparian/riverine resource subject to Section 6.1.2.

Based on the artificial origin, upland setting, episodic hydrology, absence of riparian vegetation, and lack of ecological functions associated with natural stream systems, impacts to the drainage ditch would not constitute impacts to WRMSHCP riparian/riverine resources, and preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) is not warranted.

4.1.2 Riparian Birds

The Project site consists predominantly of developed land, with a narrow strip of disturbed habitat along the site perimeter and does not support suitable riparian habitat for WRMSHCP riparian bird species. A man-made drainage ditch is located adjacent to the Project site, and a single Goodding's willow occurs outside the southernmost corner of the site. These features do not provide suitable riparian habitat for least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), or yellow-billed cuckoo (*Coccyzus americanus*). The isolated Goodding's willow lacks the understory and closed-canopy structure required by these species. No other trees or shrubs within or immediately adjacent to the Project site provide comparable riparian structure. In addition, the Project site is surrounded by developed lands to the north, east, and west and by agricultural lands consisting

of maintained non-native grasses (i.e., turf) to the south. Therefore, suitable riparian vegetation is absent from the Project site and immediate vicinity, and protocol surveys are not warranted.

4.1.3 Vernal Pools

The WRMSHCP defines vernal pools as the following (County of Riverside 2003):

> [S]easonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records.

WRMSHCP further clarifies, "With the exception of wetlands created for the purpose of providing wetlands Habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions" (County of Riverside 2003).

The Project site does not contain any areas with indicators of all three wetland/vernal pool parameters (soils, vegetation, and hydrology), nor were any vernal pool indicator species observed (Appendix B). Furthermore, the Project site contains well-draining soils (i.e., Exeter sandy loam, 0% to 2% slopes and 2% to 8% slopes, eroded), which are not associated with vernal pool habitat (Figure 5). Additionally, a review of aerial imagery of the Project site did not reveal any inundation or pooling water (Google Earth 2024; NETR 2024). Finally, the majority of the Project site is comprised of a highly disturbed and heavily compacted gravel lot where various trucks and large equipment are parked/staged along with two trailer/temporary office units. As such, there are no vernal pools located within the Project site.

4.1.4 Fairy Shrimp Habitat

In addition to vernal pools, fairy shrimp habitat also includes ephemeral pools and other features such as road ruts or stock ponds. No indicators of ephemeral pools, depressions, or road ruts capable of holding water long enough to support WRMSHCP fairy shrimp were observed within the Project site during the habitat assessment. The Project site does not contain any stock ponds or other features where water could pool. In addition, as discussed above related to vernal pools, the soils present within the Project site (i.e., Exeter sandy loam, 0% to 2% slopes and 2% to 8% slopes, eroded) are well-draining soils. As such, it is unlikely the Project site would hold water for prolonged periods of time to support WRMSHCP fairy shrimp species. Furthermore, a review of historical aerial imagery of the Project site did not reveal any evidence of ponding, moist soils, inundation, or pooling water within the Project site

(Google Earth 2024; NETR 2024). Therefore, the Project site lacks suitable fairy shrimp habitat, and focused surveys are not warranted.

4.2 MSHCP Section 6.3.2 Additional Survey Area Needs and Procedures

Section 6.3.2 of the MSHCP establishes habitat assessment requirements for certain species of plants, birds, mammals, and amphibians. The Project site is in a required habitat assessment area for burrowing owl. As discussed above under Section 3.3.1, Special-Status Wildlife, of this report, the Step I habitat assessment did identify potential burrowing owl habitat, including disturbed land and suitable human made structures (culverts). As such, Step II (focused surveys, census, and mapping) will be required in accordance with the Burrowing Owl Survey Instructions for the MSHCP Area (RCA 2006).

5 Summary and Conclusions

Based on the results of the biological reconnaissance survey, literature review, vegetation mapping, and aquatic resources delineation, the Project site consists predominantly of developed land, with a narrow strip of disturbed habitat along the site perimeter. The site does not support naturally occurring vegetation communities or sensitive natural communities. No federally or state-listed plant or wildlife species were observed during the reconnaissance survey, and no special-status plant species were determined to have potential to occur within the Project site.

Four special-status wildlife species (western spadefoot, Crotch's bumble bee, western yellow bat, and pocketed free-tailed bat) were determined to have moderate potential to occur within the Project site (see Appendix C). Although burrowing owls were determined to have a low potential to occur due to the site's current condition and land use, the artificial structures adjacent to the Project site introduce a potential for occupancy, as burrowing owls could use these for potential nesting and sheltering habitat. To avoid impacts to sensitive species, Dudek recommends implementing several pre-construction measures. A focused breeding season survey for burrowing owl should be conducted to determine if burrowing owls are present or using the site or adjacent areas, and regardless of results, a pre-construction take avoidance survey should occur within 30 days prior to ground disturbance to confirm absence. In addition, a pre-construction nest survey for Crotch's bumble bee should be conducted within the construction footprint prior to ground-disturbing activities occurring during the colony active period (April 1 through August 31). If nests are detected, avoidance buffers will be established and coordination with CDFW will occur regarding potential incidental take authorization. Similarly, prior to removal of palm trees or structures, a qualified biologist will conduct a pre-construction survey to determine whether potential bat roosting sites are occupied. If roosting bats are detected, a Bat Monitoring and Management Plan will be prepared and approved by CDFW prior to disturbance. Finally, Dudek recommends a general nesting bird survey if vegetation removal or ground disturbance will occur during the nesting season (February through August).

Western spadefoot is a Covered Species under the Western Riverside County MSHCP. Accordingly, any Project-related impacts to western spadefoot or its habitat would be fully mitigated through payment of the MSHCP Local Development Mitigation Fee, and no separate species-specific mitigation is required.

One constructed drainage ditch located along Matthews Road was identified during the general reconnaissance survey in September 2024 and re-evaluated in April 2026 to refine the jurisdictional extent of the drainage feature. The drainage ditch is a man-made, upland feature that is ephemeral, lacks riparian or wetland vegetation, does not support aquatic habitat, and does not provide ecological functions associated with natural riparian or riverine systems. As such, the drainage ditch does not meet the definition of a riparian/riverine resource under Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) Section 6.1.2, and impacts to the feature would not constitute impacts to MSHCP riparian/riverine resources. The ditch is not anticipated to meet the current definition of a waters of the U.S. regulated by USACE, but may be regulated by RWQCB and/or CDFW.

Although no riparian/riverine resources subject to WRMSHCP Section 6.1.2 are present within the Project site, the Project will implement the Urban/Wildlands Interface Guidelines contained in WRMSHCP Section 6.1.4 to minimize the potential for indirect effects to adjacent biological resources during construction and operation. Implementation of the measures outlined above will ensure that the Project avoids or minimizes impacts to special-status wildlife species and complies with applicable federal and state regulations, including the Migratory Bird Treaty Act, California Endangered Species Act, and Western Riverside County MSHCP requirements.

Please reach out with any questions or concerns regarding the contents of this report.

Sincerely,

Michelle Leis

Michelle Leis
Biologist

App.: *A, Figures*
B, Wildlife Compendium
C, Special-Status Wildlife Species Potential to Occur
D, Plant Compendium
E, Special-Status Plant Species Potential to Occur
F, Photo Log
cc: *Keith Carwana and Katelin Pedersen, Dudek*

6 References

CDFW (California Department of Fish and Wildlife). 2018. "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." March 20, 2018. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline.

CDFW (California Department of Fish and Wildlife). 2019. *Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered under the California Endangered Species Act*. April 4, 2019. Accessed October 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=166804&inline.

CDFW. 2023. "California Natural Community List." June 1, 2023. Accessed July 2024. https://nrm.dfg.ca.gov

CDFW. 2024a. California Natural Diversity Database (CNDDB). RareFind, Version 5.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Accessed September 2024. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data.

CDFW. 2024b. "Special Animals List." California Natural Diversity Database (CNDDB). Sacramento, California: CDFW, Biographic Data Branch. June 28, 2024. Accessed September 11, 2024. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline=1.

CDFW. 2024c. California Natural Diversity Database (CNDDB), RareFind 5. Occurrence Record No. 968. Sacramento, California: CDFW Biogeographic Data Branch. Accessed September 2025.

CNPS (California Native Plant Society). 2024a. *Manual of California Vegetation, Online Edition.* California Native Plant Society, Sacramento, California. Accessed September 2024. https://vegetation.cnps.org/

CNPS. 2024b. *Inventory of Rare and Endangered Plants* (online ed., v-9.5). Sacramento: CNPS, Rare Plant Program. Accessed September 2024. https://www.rareplants.cnps.org.

CNPS. 2024c. *California Rare Plant Ranks*. Accessed September 2024. https://www.cnps.org/rare-plants/california-rare-plant-ranks.

County of Riverside. 2003. *Western Riverside County Multiple Species Habitat Conservation Plan*. Riverside, California: County of Riverside, Transportation and Land Management Agency, Riverside County Integrated Project. Adopted June 17, 2003. Accessed September 2024. https://www.wrc-rca.org/Permit_Docs/MSHCP/MSHCP-Volume%201.pdf.

Google Earth. 2024. Aerials centered on the Project site. Accessed November 2024. https://www.google.com/earth/.

Hatfield, R., S. Colla, S. Jepsen, L. Richardson, R. Thorp, and S.F. Jordan. 2015. *IUCN Assessments for North American Bombus spp.* The Xerces Society for Invertebrate Conservation, Portland, Oregon. Updated March 2, 2015.

Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Nongame-Heritage Program, California Department of Fish and Game. October 1986.

Holland, Dan C., and Robert H. Goodman. 1998. "Western Spadefoot (*Spea hammondii*) Status and Distribution". California Department of Fish and Game, Inland Fisheries Division.

Jennings, Mark R., and Marc P. Hayes. 1994. "Amphibian and Reptile Species of Special Concern in California". California Department of Fish and Game, Inland Fisheries Division.

NETR (Nationwide Environmental Title Research). 2024. Historic aerials of the Project site [online viewer]. Accessed August 2024. https://www.historicaerials.com/viewer.

Oberbauer, T., M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County*. March 2008. Accessed July 2024.

RCA (Regional Conservation Authority of Western Riverside County). 2006. "Burrowing Owl Survey Instructions For the Western Riverside Multiple Species Habitat Conservation Plan Area." March 29, 2006. Accessed September 2024. https://www.wrc-rca.org/species/survey_protocols/burrowing_owl_survey_instructions.pdf.

USDA (U.S. Department of Agriculture). 2024. *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils, Version 8.2, 2024*. Edited by L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz. USDA, Natural Resources Conservation Service, in cooperation with the National Technical Committee for Hydric Soils. https://www.nrcs.usda.gov/resources/guides-and-instructions/field-indicators-of-hydric-soils.

USFWS (U.S. Fish and Wildlife Service). 2024a. "Information for Planning and Consultation". Accessed September 2024. https://ipac.ecosphere.fws.gov/.

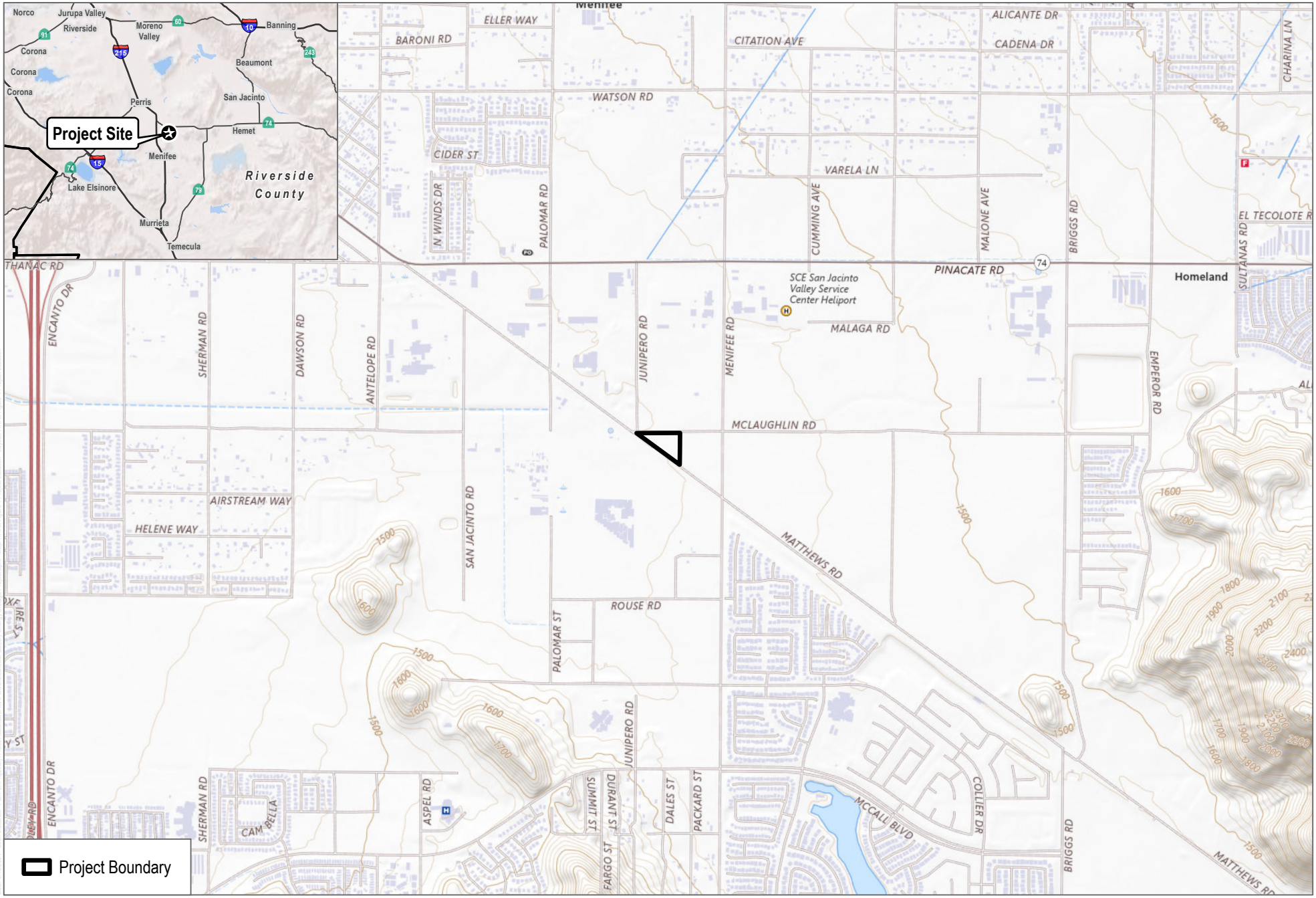
USFWS. 2024b. "Critical Habitat and Occurrence Data" [map]. Accessed September 2024. http://www.fws.gov/data.

USFWS. 2024c. "National Wetlands Inventory" [map]. U.S. Department of the Interior. Accessed September 2024. https://www.fws.gov/program/national-wetlands-inventory

USGS (U.S. Geological Survey). 2024. "National Hydrography and Watershed Boundary Dataset" [online database]. USGS National Hydrography Products. Accessed September 2024. https://www.usgs.gov/core-science-systems/ngp/national-hydrography/watershed-boundary-dataset?qt-science_support_page_related_con=4#qt-science_support_page_related_con.

Williams, P.H., R.W. Thorp, L.L. Richardson, and S.R. Colla. 2014. *Bumble Bees of North America: An Identification Guide*. Princeton, New Jersey: Princeton University Press.

Appendix A
Figures



SOURCE: USGS National Map 2024

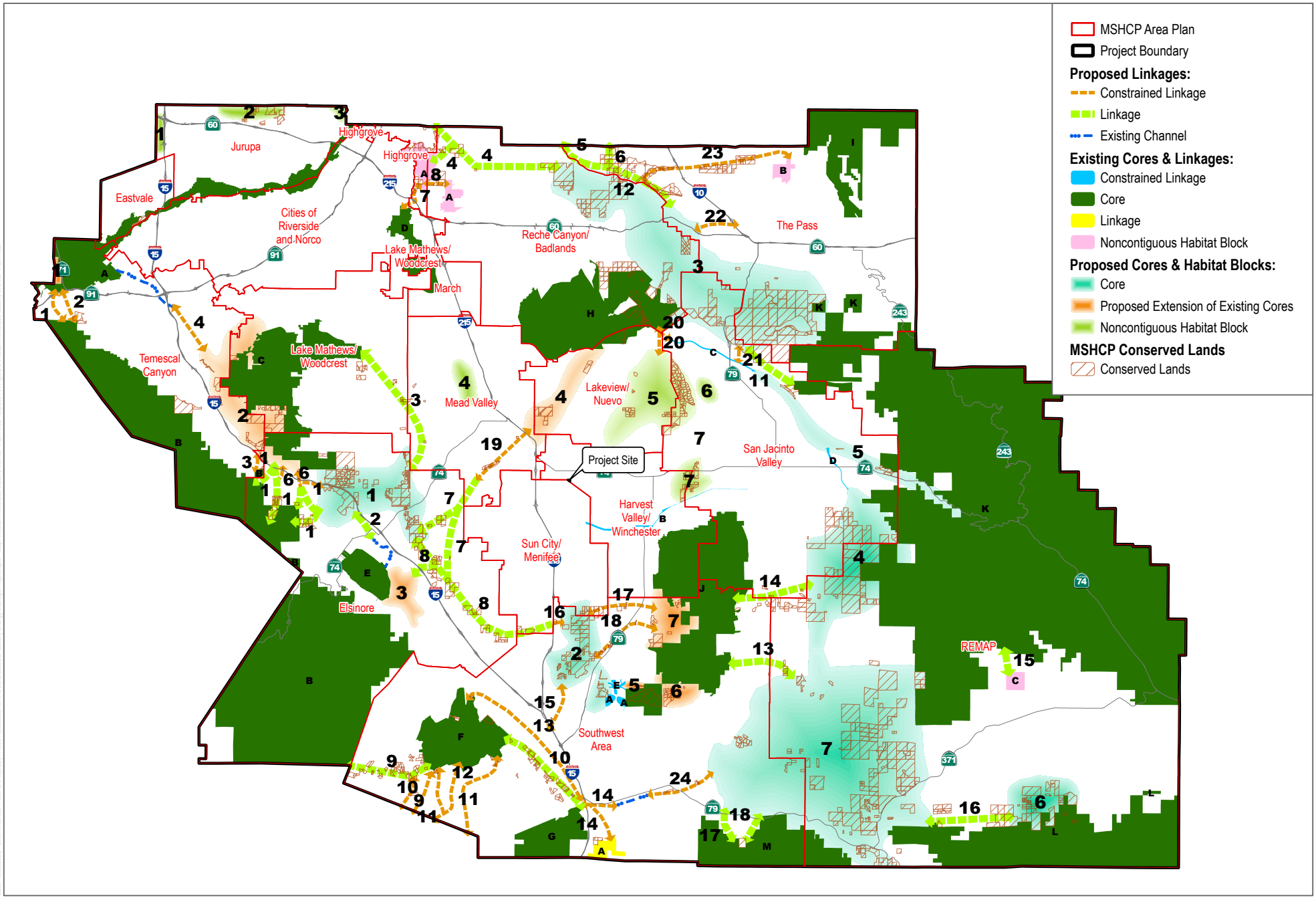
DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

Seaflower Battery Energy Storage Project



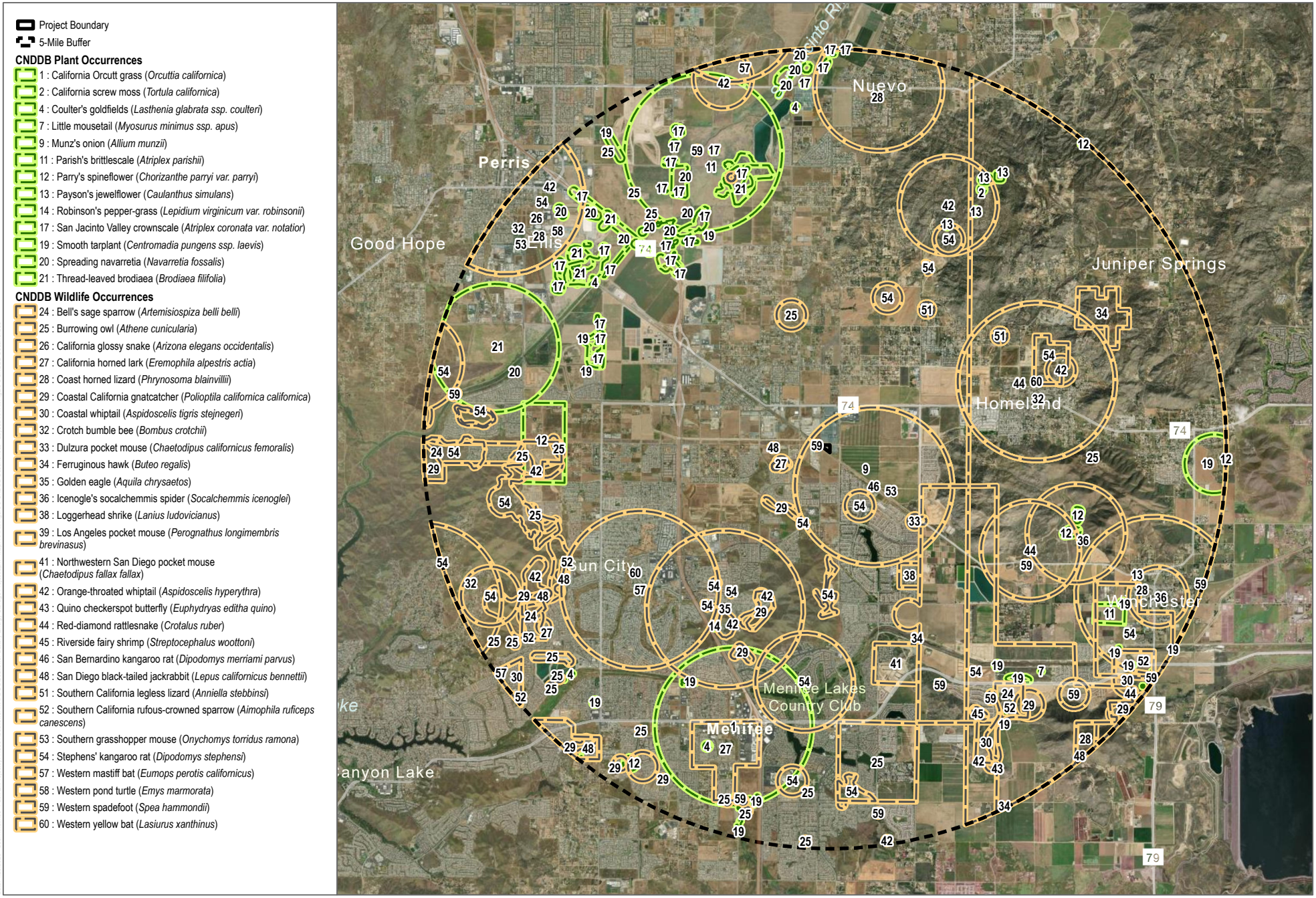
SOURCE: Western Riverside County Regional Conservation Authority 2015; County of Riverside 2015

DUDEK

FIGURE 2

Western Riverside County MSHCP Plan Area

Seaflower Battery Energy Storage Project



SOURCE: CNDDB

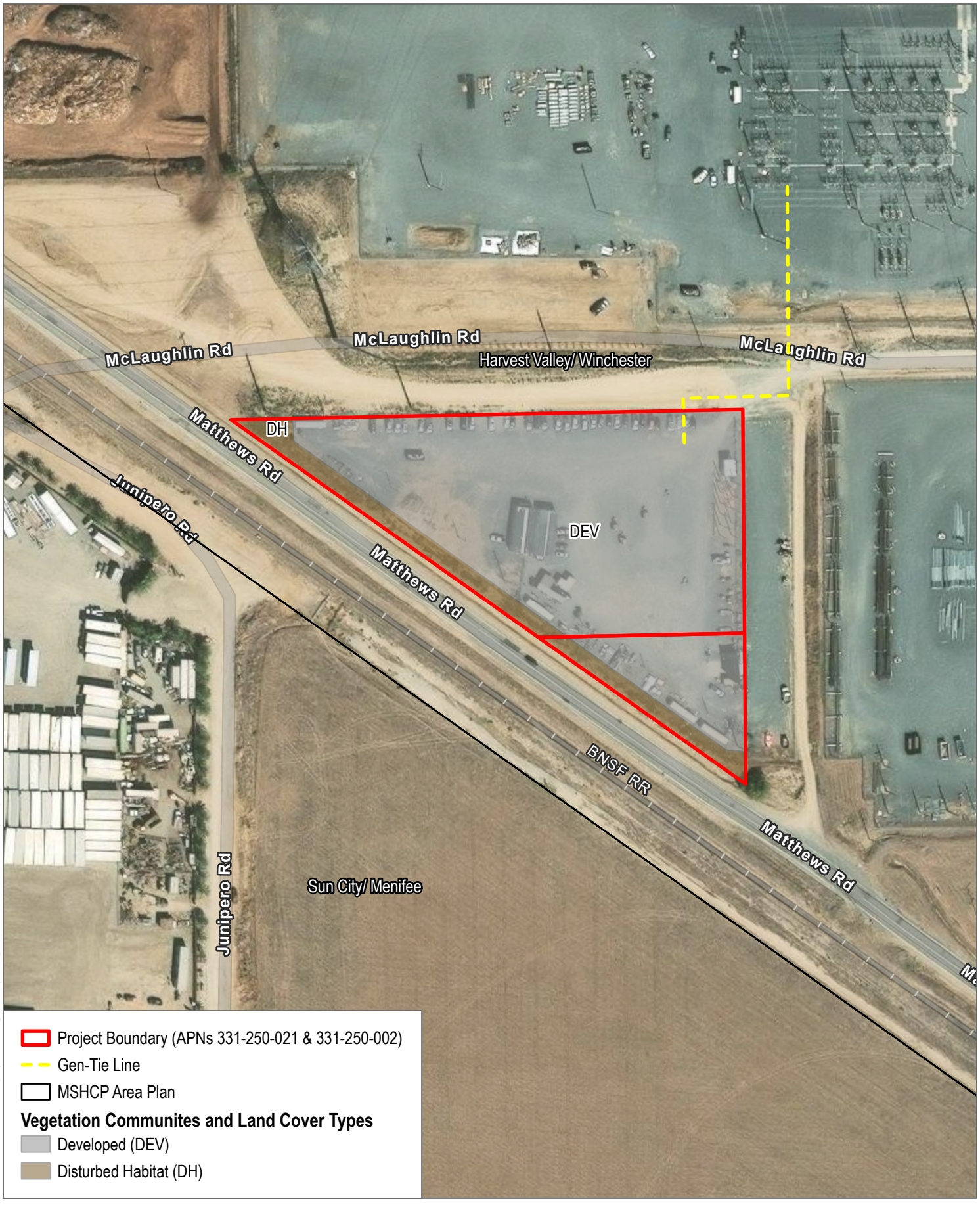
DUDEK

0 4,250 8,500 Feet

FIGURE 3

CNDDB Occurrences

Seaflower Battery Energy Storage Project



SOURCE: MAXAR, 2024; Riverside County

DUDEK

0 80 160 Feet

FIGURE 4

Vegetation Communities and Land Covers

Seaflower Battery Energy Storage System Project

Appendix B
Wildlife Compendium

Birds

Finches

FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus – house finch

Old World Sparrows

PASSERIDAE – OLD WORLD SPARROWS

* *Passer domesticus* – house sparrow

Pigeons and Doves

COLUMBIDAE – PIGEONS AND DOVES

Zenaida macroura – mourning dove

Shorebirds

CHARADRIIDAE – LAPWINGS AND PLOVERS

Charadrius vociferus – killdeer

Reptiles

Lizards

PHRYNOSOMATIDAE – IGUANID LIZARDS

Sceloporus occidentalis – western fence lizard

* Signifies introduced (non-native) species

INTENTIONALLY LEFT BLANK

Appendix C

Special-Status Wildlife Species Potential to Occur

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
Amphibians					
Anaxyrus californicus	arroyo toad	FE/SSC	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	**Not expected to occur.** No suitable vegetation or aquatic resources present.	Covered
Rana draytonii	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	**Not expected to occur.** No suitable vegetation or aquatic resources present.	Covered
Spea hammondii	western spadefoot	FPT/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	**Moderate potential to occur.** CNDDB record on site (Occurrence No.968, 2012). Suitable soil is present on site. Suitable grassland habitat exists adjacent to the project site.	Covered
Reptiles					
Anniella stebbinsi	southern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	**Not expected to occur**. No suitable vegetation present.	None
Arizona elegans occidentalis	California glossy snake	None/SSC	Arid scrub, rocky washes, grasslands, chaparral, open areas with loose soil	**Not expected to occur**. No suitable vegetation present.	None
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	**Not expected to occur.** No suitable vegetation present.	None

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
Coleonyx variegatus abbotti	San Diego banded gecko	None/SSC	Rocky areas within coastal scrub and chaparral	**Not expected to occur**. No suitable vegetation present.	Covered
Crotalus ruber	red diamondback rattlesnake	None/SSC	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	**Not expected to occur**. No suitable vegetation present.	Covered
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	**Not expected to occur**. No suitable vegetation present.	None
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	**Not expected to occur.** No suitable vegetation present.	None
Thamnophis hammondii	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	**Not expected to occur.** No suitable vegetation present.	None
Actinemys pallida	southwestern pond turtle	FPT/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	**Not expected to occur**. No suitable vegetation or aquatic resources present.	None
Birds					
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	**Not expected to nest or forage**. No suitable vegetation present.	Covered
Aquila chrysaetos (nesting and wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	**Not expected to nest or forage.** No suitable vegetation present.	Covered
Asio otus (nesting)	long-eared owl	None/SSC	Nests in riparian habitat, live oak thickets, other dense stands of trees, edges of coniferous forest; forages in nearby open habitats	**Not expected to nest or forage**. No suitable vegetation present.	None

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	SCE/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	**Low potential to occur**. The project site is a gravel lot used for staging trucks/equipment, which results in frequent human disturbance. Combined with the lack of suitable substrate and vegetation, it is unlikely that burrowing owl will occur. However, there is potential for the culvert adjacent to the project site to provide suitable nesting/shelter habitat.	Covered
Buteo swainsoni (nesting)	Swainson's hawk	None/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	**Not expected to nest or forage.** No suitable vegetation present.	Covered
Charadrius nivosus nivosus (nesting)	western snowy plover	FT, BCC/SSC	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds	**Not expected to nest or forage.** No suitable vegetation present.	None
Circus hudsonius (nesting)	northern harrier	BCC/SSC	Nests in open wetlands (marshy meadows, wet lightly grazed pastures, old fields, freshwater and brackish marshes); also in drier habitats (grassland and grain fields); forages in grassland, scrubs, rangelands, emergent wetlands, and other open habitats	**Not expected to nest or forage.** No suitable vegetation present.	None

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
Elanus leucurus (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	**Not expected to nest or forage.** No suitable vegetation present.	Covered
Haliaeetus leucocephalus (nesting and wintering)	bald eagle	FPD/FP, SE	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains	**Not expected to nest or forage**. No suitable vegetation or aquatic resources present.	Covered
Icteria virens (nesting)	yellow-breasted chat	None/SSC	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	**Not expected to nest or forage**. No suitable vegetation present.	Covered
Lanius ludovicianus (nesting)	loggerhead shrike	None/SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches	**Not expected to nest or forage**. No suitable vegetation present.	Covered
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	**Not expected to nest or forage**. No suitable vegetation present.	Covered
Setophaga petechia (nesting)	yellow warbler	None/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	**Not expected to nest or forage**. No suitable vegetation present.	None
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	**Not expected to nest or forage.** No suitable vegetation present.	Covered
Xanthocephalus xanthocephalus (nesting)	yellow-headed blackbird	None/SSC	Nests in marshes with tall emergent vegetation, often along borders of lakes and ponds; forages in emergent wetlands, open areas, croplands, and muddy shores of lacustrine habitat	**Not expected to nest or forage.** No suitable vegetation present.	None
Fishes					
Gila orcuttii	arroyo chub	None/SSC	Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams at depths	**Not expected to occur.** No suitable	Covered

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
			>40 centimeters (16 inches); substrates of sand or mud	aquatic resources present.	
Mammals					
Lasiurus xanthinus	western yellow bat	None/SSC	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	**Moderate potential to occur**. Several semi-permanent structures are located within the project site that could provide suitable roosting habitat. Additionally, *Washingtonia robusta*, which was observed during the reconnaissance survey, could provide roosting habitat.	None
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE/SSC, SCE	Sparse scrub habitat, alluvial scrub/coastal scrub habitats on gravelly and sandy soils near river and stream terraces	**Not expected to occur.** No stream terraces present.	None
Dipodomys stephensi	Stephens' kangaroo rat	FT/ST	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas	**Low potential to occur.** CNDDB occurrence, No suitable vegetation present.	Covered
Eumops perotis californicus	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	**Not expected to occur**. No suitable vegetation present.	None
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	**Not expected to occur.** No suitable vegetation present.	Covered

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	**Moderate potential to occur**. Several semi-permanent structures located within the project site could provide suitable roosting habitat. Additionally, *Washingtonia robusta*, which was observed during the reconnaissance survey, could provide roosting habitat.	None
Onychomys torridus ramona	southern grasshopper mouse	None/SSC	Grassland and sparse coastal scrub	**Not expected to occur**. No suitable vegetation present.	None
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None/SSC	Lower-elevation grassland, alluvial sage scrub, and coastal scrub	**Not expected to occur.** No suitable vegetation present.	Covered
Perognathus longimembris internationalis	Jacumba pocket mouse	None/SSC	Desert scrub and sparse sage scrub in areas with fine sandy soils	**Not expected to occur.** No suitable vegetation present.	None
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	**Not expected to occur**. No suitable vegetation present.	None
Invertebrates					
Bombus crotchii	Crotch bumble bee	None/SCE	Open grassland and scrub communities supporting suitable floral resources.	**Moderate potential to occur**. Host plant, *Heliotropium curassavicum*, was observed on site, and burrows potentially	None

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
				suitable for colony nesting may also be present within the Project site.	
Branchinecta lynchi	vernal pool fairy shrimp	FT/None	Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats	**Not expected to occur.** No suitable vernal pools present.	Covered
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	**Not expected to occur.** No suitable vernal pools present.	None
Euphydryas editha quino	Quino checkerspot butterfly	FE/None	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include *Plantago erecta*, *P. patagonica*, and *Antirrhinum coulterianum*, among others	**Not expected to occur**. No suitable host plants present.	Covered
Streptocephalus woottoni	Riverside fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	**Not expected to occur.** No suitable vernal pools present.	Covered
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	FPT/None	Wind-protected tree groves with nectar sources and nearby water sources	**Not expected to occur.** No suitable host plants present.	None

Notes: MSHCP: Multiple Species Habitat Conservation Program Covered Species

Status Legend

Federal

BCC: USFWS—Birds of Conservation Concern
FE: Federally listed as endangered
FPD: Federally proposed for delisting
FPT: Federally proposed for listing as threatened
FT: Federally listed as threatened

State

FP: CDFW Fully Protected species
SCE: State candidate for listing as endangered
SE: State listed as endangered
SSC: California Species of Special Concern
ST: State listed as threatened

WL: CDFW Watch List species

Appendix D
Plant Compendium

Vascular Species

Eudicots

ASTERACEAE – SUNFLOWER FAMILY

Ambrosia acanthicarpa – flatspine bur ragweed
Erigeron canadensis – *Canadian horseweed*
Helianthus petiolaris – *prairie sunflower*
* *Lactuca serriola* – prickly lettuce
* *Oncosiphon pilulifer* – stinknet
Symphyotrichum chilense – Pacific aster

BORAGINACEAE – BORAGE FAMILY

Heliotropium curassavicum – salt heliotrope

CHENOPODIACEAE – GOOSEFOOT FAMILY

* *Salsola tragus* – prickly Russian thistle

EUPHORBIACEAE – SPURGE FAMILY

Croton setiger – dove weed
Euphorbia albomarginata – whitemargin sandmat

LAMIACEAE – MINT FAMILY

Trichostema lanceolatum – vinegarweed

SALICACEAE – WILLOW FAMILY

Salix gooddingii – Goodding's willow

SOLANACEAE – NIGHTSHADE FAMILY

Datura wrightii – sacred thorn-apple

Monocots

ARECACEAE – PALM FAMILY

* *Washingtonia robusta* – Washington fan palm

POACEAE – GRASS FAMILY

* *Bromus* spp. – field brome
* *Cynodon dactylon* – Bermudagrass

* Signifies introduced (non-native) species

Appendix E

Special-Status Plant Species Potential to Occur

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur	Western Riverside MSHCP
Abronia villosa var. *aurita*	chaparral sand-verbena	None/None/1B.1	Chaparral, Coastal scrub, Desert dunes; Sandy/annual herb/ (Jan) Mar–Sep/245–5,250	**Not expected to occur.** The site is outside of the species' known elevation range.	None
Allium marvinii	Yucaipa onion	None/None/1B.2	Chaparral (clay, openings)/perennial bulbiferous herb/Apr–May/ 2,495–3,495	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Allium munzii	Munz's onion	FE/ST/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland; Clay, Mesic/perennial bulbiferous herb/Mar–May/975–3,510	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Almutaster pauciflorus	alkali marsh aster	None/None/2B.2	Meadows and seeps; Alkaline/perennial herb/June–Oct/785–2,625	**Not expected to occur**. The site is outside of the species' known elevation range.	None
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Alkaline (sometimes), Clay (sometimes), Disturbed areas (often), Loam (sometimes), Sandy (sometimes)/perennial rhizomatous herb/Apr–Oct/65–1,360	**Not expected to occur**. Although disturbed habitat exists on site, the site is a gravel lot used for truck and equipment staging, and is subject to frequent human disturbance, soil compaction, and a lack of suitable microhabitat conditions. The site's gravel substrate and ongoing operational use likely prevents the establishment of native herbaceous vegetation. Furthermore, none were observed during the reconnaissance survey.	Covered
Arctostaphylos rainbowensis	Rainbow manzanita	None/None/1B.1	Chaparral/perennial evergreen shrub/Dec–Mar/675–2,200	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Astragalus pachypus var. *jaegeri*	Jaeger's milk-vetch	None/None/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; Rocky (sometimes), Sandy (sometimes)/perennial shrub/ Dec–June/1,200–3,200	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Atriplex coronata var. *notatior*	San Jacinto Valley crownscale	FE/None/1B.1	Playas, Valley and foothill grassland (mesic), Vernal pools; Alkaline/annual herb/Apr–Aug/455–1,640	**Not expected to occur.** The site is outside of the species' known elevation range.	Covered
Atriplex parishii	Parish's brittlescale	None/None/1B.1	Chenopod scrub, Playas, Vernal pools; Alkaline/annual herb/June–Oct/ 80–6,235	**Not expected to occur**. No suitable habitat is present.	Covered
Atriplex serenana var. *davidsonii*	Davidson's saltscale	None/None/1B.2	Coastal bluff scrub, Coastal scrub; Alkaline/annual herb/Apr–Oct/35–655	**Not expected to occur**. No suitable habitat is present.	Covered
Ayenia compacta	California ayenia	None/None/2B.3	Mojavean desert scrub, Sonoran desert scrub; Rocky/perennial herb/ Mar–Apr/490–3,595	**Not expected to occur**. The site is outside of the species' known elevation range.	None
Berberis nevinii	Nevin's barberry	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; Gravelly (sometimes), Sandy (sometimes)/perennial evergreen shrub/ (Feb) Mar–June/230–2,705	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/1B.1	Chaparral (openings), Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools; Clay (often)/perennial bulbiferous herb/Mar–June/80–3,675	**Not expected to occur**. No suitable habitat is present.	Covered
Brodiaea santarosae	Santa Rosa Basalt brodiaea	None/None/1B.2	Valley and foothill grassland/perennial bulbiferous herb/May–June/ 1,855–3,430	**Not expected to occur.** The site is outside of the species' known elevation range.	None
Calochortus weedii var. *intermedius*	intermediate mariposa-lily	None/None/1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; Rocky/perennial bulbiferous herb/May–July/345–2,805	**Not expected to occur.** The site is outside of the species' known elevation range.	Covered
Centromadia pungens ssp. *laevis*	smooth tarplant	None/None/1B.1	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; Alkaline/annual herb/Apr–Sep/0–2,100	**Not expected to occur**. No suitable habitat is present.	Covered
Chorizanthe parryi var. *parryi*	Parry's spineflower	None/None/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; Openings, Rocky (sometimes), Sandy (sometimes)/annual herb/Apr–June/900–4,005	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur	Western Riverside MSHCP
Chorizanthe polygonoides var. *longispina*	long-spined spineflower	None/None/1B.2	Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools; Clay (often)/annual herb/Apr–July/100–5,020	**Not expected to occur**. No suitable habitat is present.	Covered
Clinopodium chandleri	San Miguel savory	None/None/1B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland; Gabbroic (sometimes), Rocky (sometimes)/perennial shrub/Mar–July/395–3,525	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Cryptantha wigginsii	Wiggins' cryptantha	None/None/1B.2	Coastal scrub; Clay (often)/annual herb/Feb–June/65–900	**Not expected to occur**. No suitable habitat is present.	None
Dodecahema leptoceras	slender-horned spineflower	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub (alluvial fans); Sandy/annual herb/Apr–June/655–2,495	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Dudleya multicaulis	many-stemmed dudleya	None/None/1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; Clay (often)/perennial herb/Apr–July/50–2,590	**Not expected to occur**. No suitable habitat is present.	Covered
Eryngium aristulatum var. *parishii*	San Diego button-celery	FE/SE/1B.1	Coastal scrub, Valley and foothill grassland, Vernal pools; Mesic/annual/perennial herb/Apr–June/65–2,035	**Not expected to occur**. No suitable habitat is present.	Covered
Geothallus tuberosus	Campbell's liverwort	None/None/1B.1	Coastal scrub (mesic), Vernal pools/ephemeral liverwort/N.A./35–1,970	**Not expected to occur**. No suitable habitat is present.	None
Hesperocyparis forbesii	Tecate cypress	None/None/1B.1	Chaparral, Closed-cone coniferous forest; Clay, Gabbroic (sometimes)/perennial evergreen tree/N.A./260–4,920	**Not expected to occur**. The site is outside of the species' known elevation range.	None
Juncus luciensis	Santa Lucia dwarf rush	None/None/1B.2	Chaparral, Great Basin scrub, Lower montane coniferous forest, Meadows and seeps, Vernal pools/annual herb/Apr–July/985–6,695	**Not expected to occur**. The site is outside of the species' known elevation range.	None
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None/None/1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/ Feb–June/5–4,005	**Not expected to occur**. No suitable habitat is present.	None
Lilium parryi	lemon lily	None/None/1B.2	Lower montane coniferous forest, Meadows and seeps, Riparian forest, Upper montane coniferous forest; Mesic/perennial bulbiferous herb/ July–Aug/4,005–9,005	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Limnanthes alba ssp. *parishii*	Parish's meadowfoam	None/SE/1B.2	Lower montane coniferous forest, Meadows and seeps, Vernal pools; Vernally Mesic/annual herb/Apr–June/1,970–6,560	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Monardella hypoleuca ssp. *intermedia*	intermediate monardella	None/None/1B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest (sometimes)/perennial rhizomatous herb/Apr–Sep/1,310–4,100	**Not expected to occur**. The site is outside of the species' known elevation range.	None
Nama stenocarpa	mud nama	None/None/2B.2	Marshes and swamps (lake margins, riverbanks)/annual/perennial herb/Jan–July/15–1,640	**Not expected to occur**. No suitable habitat is present.	None
Navarretia fossalis	spreading navarretia	FT/None/1B.1	Chenopod scrub, Marshes and swamps (shallow freshwater), Playas, Vernal pools/annual herb/Apr–June/100–2,150	**Not expected to occur**. No suitable habitat is present.	Covered
Navarretia prostrata	prostrate vernal pool navarretia	None/None/1B.2	Coastal scrub, Meadows and seeps, Valley and foothill grassland (alkaline), Vernal pools; Mesic/annual herb/Apr–July/10–3,970	**Not expected to occur**. No suitable habitat is present.	Covered
Orcuttia californica	California Orcutt grass	FE/SE/1B.1	Vernal pools/annual herb/Apr–Aug/50–2,165	**Not expected to occur**. No suitable habitat is present.	Covered
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland; Gravelly, Sandy/perennial herb/(July)Aug–Nov(Dec)/0–6,890	**Not expected to occur**. No suitable habitat is present.	None
Scutellaria bolanderi ssp. *austromontana*	southern mountains skullcap	None/None/1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest; Mesic/perennial rhizomatous herb/June–Aug/1,395–6,560	**Not expected to occur**. The site is outside of the species' known elevation range.	None
Sibaropsis hammittii	Hammitt's clay-cress	None/None/1B.2	Chaparral (openings), Valley and foothill grassland; Clay/annual herb/ Mar–Apr/2,360–3,495	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Sidalcea neomexicana	salt spring checkerbloom	None/None/2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; Alkaline, Mesic/perennial herb/Mar–June/50–5,020	**Not expected to occur**. No suitable habitat is present.	None
Sphaerocarpos drewiae	bottle liverwort	None/None/1B.1	Chaparral, Coastal scrub; Openings/ephemeral liverwort/N.A./295–1,970	**Not expected to occur**. The site is outside of the species' known elevation range.	None

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur	Western Riverside MSHCP
Symphyotrichum defoliatum	San Bernardino aster	None/None/1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Marshes and swamps, Meadows and seeps, Valley and foothill grassland (vernally mesic); Streambanks/perennial rhizomatous herb/July–Nov/ 5–6,695	**Not expected to occur**. No suitable habitat is present.	None
Tortula californica	California screw moss	None/None/1B.2	Chenopod scrub, Valley and foothill grassland; Sandy/moss/N.A./35–4,790	**Not expected to occur**. No suitable habitat is present.	None
Trichocoronis wrightii var. *wrightii*	Wright's trichocoronis	None/None/2B.1	Marshes and swamps, Meadows and seeps, Riparian forest, Vernal pools; Alkaline/annual herb/May–Sep/15–1,425	**Not expected to occur.** No suitable habitat is present.	Covered

Notes: MSHCP = Multiple Species Habitat Conservation Program Covered Species.
Status Legend
Federal
FE: Federally listed as endangered
FT: Federally listed as threatened
State
SE: State listed as endangered
ST: State listed as threatened
CRPR: California Rare Plant Rank
1B: Plants rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California, but more common elsewhere
Threat Rank
0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
0.2 – Moderately threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)
0.3 – Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

INTENTIONALLY LEFT BLANK

Appendix F
Photo Log



Photo 1. Representative photo of project site (9/4/2024).



Photo 2. Representative photo of project site (9/4/2024).



Photo 3. Culvert outside eastern project boundary (9/4/204).



Photo 4. Drainage ditch overview, west facing. Showing recent vegetation clearing on slope (9/4/2024).



Photo 5. Photo of burrows along southern boundary upland and upper slope bank (9/4/2026).



Photo 6. Drainage ditch overview, east facing (9/4/2026).



Photo 7. Drainage ditch overview, east facing (4/1/2026).



Photo 8. Drainage ditch overview, west facing (4/1/2026).

May 28, 2026 13153.41

Britney Schopf and Bridget Canty
Seaflower Energy, LLC
5521 La Jolla Blvd
La Jolla, CA 92037

Subject: **Jurisdictional Delineation Assessment for the Seaflower Battery Energy Storage Project, Located in the City of Menifee, California**

Dear Britney Schopf and Bridget Canty,

Dudek has completed the jurisdictional delineation assessment for the approximately 3.84-acre Seaflower Battery Energy Storage Project (Project); consisting of Assessor Parcel Numbers 331-250-021 and 331-250-002 located in the City of Menifee, Riverside County, California (see Figure 1, Project Location, in Appendix A). The Project includes development of an up to 400 megawatt-hours (MWh) outdoor utility scale energy storage system including electrical facilities, telecommunication facilities, and a generation interconnection transmission (gen-tie) line. An overhead or underground gen-tie line would be constructed to transfer power between the Project site and the existing Southern California Edison (SCE) Valley Substation, located approximately 0.4 miles to the north. If installed overhead, an appropriate number of 115 kilovolt (kV) transmission structures including insulator/hardware assemblies, and appropriate number of conductor spans between the last structure and the dead-end substation structure at the SCE Valley Substation would be installed. The final alignment, pole heights, number of structures, structure types, conductor spans, and location of the gen-tie line will be finalized with detailed engineering design. This report provides a summary of the literature review and site visits.

The Project site is located on privately owned land in the City of Menifee, approximately 0.50 miles south of Highway 74, west of Menifee Road, and north of Mathew Road (Figure 1). The Project site falls within the Romoland U.S. Geological Survey 7.5-minute quadrangle. The Project site spans Section 14, Township 5 South, and Range 3 West.

1 Regulatory Compliance

1.1 Federal

Clean Water Act – Section 404

The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Under Section 404 of the CWA, USACE has the authority to regulate activities that could discharge fill or dredge material or otherwise adversely modify wetlands or other waters of the United States. The USACE implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or function.

The definition of waters of the United States establishes the geographic scope for authority under Section 404 of the CWA; however, the CWA does not specifically define waters of the United States, leaving the definition open to statutory interpretation and agency rulemaking. Under the U.S. Environmental Protection Agency's current waters

of the United States definition, a "water of the United States" includes traditional navigable waters, territorial seas, interstate waters, impoundments, and certain tributaries, wetlands, and other features that meet a "relatively permanent" standard. The relatively permanent standard generally requires standing or continuously flowing water, which may be seasonally limited. Excluded from waters of the United States are features that support surface flows only in direct response to precipitation.

The term "wetlands" (a subset of waters of the United States) is defined in 33 CFR, Section 328.3(c)(16), as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the "ordinary high water mark," which is defined in 33 CFR 328.3(c)(7) as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a 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."

1.2 State

California Fish and Game Code

Pursuant to Section 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 that supports fish or wildlife. A Streambed Alteration Agreement (California Fish and Game Code Section 1602 et seq.) is required for impacts on jurisdictional resources, including streambeds and associated riparian habitat.

Clean Water Act – Section 401

The State Water Resources Control Board has authority over wetlands through Section 401 of the CWA, as well as the Porter–Cologne Act, CCR Section 3831(k), and California Wetlands Conservation Policy. The CWA requires that an applicant for a Section 404 permit (to discharge dredge or fill material into waters of the United States) first obtain certification from the appropriate state agency stating that the fill is consistent with the state's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the State Water Resources Control Board to the nine regional boards. The Santa Ana RWQCB has authority for Section 401 compliance within the Biological Study Area (BSA). A request for certification is submitted to the regional board at the same time that an application is filed with the USACE.

The State Water Resources Control Board defines a water of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13050[e]). The State Water Resources Control Board's definition of a water of the state includes the following (SWRCB 2021):

1. Natural wetlands.
2. Wetlands created by modification of a surface water of the state.

3. Artificial wetlands that meet any of the following criteria:
    a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
    b. Specifically identified in a water quality control plan as a wetland or other water of the state;
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
    d. Greater than or equal to one acre in size unless the artificial wetland was constructed and is currently used and maintained, primarily for one or more of the following purposes: industrial or municipal wastewater treatment or disposal; settling of sediment; detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial permitting program; treatment of surface waters; agricultural crop irrigation or stock watering; fire suppression; industrial processing or cooling water; active surface mining – even if the site is managed for interim wetlands functions and values; log storage; treatment, storage, or distribution of recycled water; maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or fields flooded for rice growing.

All waters of the United States are waters of the state. Wetlands, such as isolated seasonal wetlands, that are not generally considered waters of the United States are considered waters of the state if, "under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation" (SWRCB 2021).

2 Methods and Results

2.1 Field Survey and Conditions

On September 4, 2024, Dudek Biologist Allison Johnson conducted an aquatic resources delineation to identify potentially jurisdictional aquatic resources that may be regulated by the USACE, RWQCB, and/or CDFW. The survey was conducted from 7:30 a.m. to 9:30 a.m.; the temperature ranged from 88°F to 92°F; cloud cover was 0%; and wind speeds ranged from 0 mph to 2 mph. A Photo Log documenting the field survey conditions can be found in Appendix B.

A delineation verification was conducted on April 1, 2026, to refine the mapped jurisdictional extent of the drainage feature within and adjacent to the Project site. The visit was limited to field verification and refinement of the mapping boundaries; no new delineation data sheets were completed. The updated mapping was conducted by Dudek Biologist Katelin Pedersen from 8:45 a.m. to 11:00 a.m.; temperature ranged from 62°F to 69°F; cloud cover ranged from 40% to 80%; and wind speeds ranged from 0 mph to 1 mph.

2.2 Review for Potentially Jurisdictional Aquatic Resources

Potentially jurisdictional aquatic resources include those features which are regulated by the USACE, RWQCB, and/or CDFW (collectively the "regulatory agencies"). Jurisdictional aquatic resources include non-wetland and wetland waters as regulated by the USACE and the RWQCB as well as lakes, streambed, and associated riparian habitat regulated by CDFW.

Prior to conducting the field review for potentially jurisdictional aquatic resources, aerial maps along with National Wetlands Inventory (NWI) data (USFWS 2024) and the National Hydrography Dataset (USGS 2024) were reviewed. No NWI or NHD features are documented within the Project site. The Project site falls within a small, discontinuous portion of the San Jacinto River's 100-year FEMA flood hazard area (see Figure 2, Hydrology). However, the Project site is located approximately 3.5 miles southeast of the San Jacinto River.

2.3 Soil Assessment

Two soil types are present within the Project site and are summarized in Table 1 below and shown in Figure 3, Soils.

Table 1. Summary of Soil Units in the Project Site

Soil Map Unit Name	Landform	Drainage Class	Acres	Hydric*
Exeter sandy loam, 0% to 2% percent slopes	Terraces and fans	Well drained	2.09	No
Exeter sandy loam, 2% to 8% percent slopes, eroded	Terraces and fans	Well drained	1.76	No

Source: USDA 2024.
Note:
* Hydric soil as defined by the U.S. Department of Agriculture (i.e., formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part), if hydric conditions are present within the soil unit.

2.4 Results

One constructed drainage ditch (0.28 acres; 988 linear feet) was delineated along Matthews Road, a portion of which extends into the southwestern boundary of the Project site (see Figure 4, Jurisdictional Delineation Assessment). The drainage ditch originates at a culvert under Menifee Road approximately 700 feet to the southeast, and flows northwest along Matthews Road past the Project site, turning into sheet flow approximately 500 feet northwest of the Project site.

The ditch is an unpaved, manmade feature excavated entirely within upland and appears to have been constructed to convey agricultural and stormwater runoff from adjacent developed and disturbed lands. The ditch was dry during both delineation efforts (September 4, 2024, and April 1, 2026) and exhibits ephemeral hydrology, conveying surface flow only during and immediately following precipitation events. No evidence of sustained or relatively permanent flow was observed during either site visit.

Ordinary high water mark (OHWM) indicators included a bed and bank, a break in slope, a natural line impressed on the bank, changes in the character of soil, vegetation matted down, bent, or absent, sediment sorting, scour, deposition, and a change in plant community and/or cover.

Soils within the ditch and adjacent Project site consist of Exeter sandy loam (0–2 percent slopes and 2–8 percent slopes, eroded), which are well-drained, nonhydric soils. Vegetation within and adjacent to the ditch is dominated by disturbance-associated upland species and nonnative species. Upland vegetation included sacred thorn-apple (*Datura wrightii*) (upland [UPL]), dove weed (*Croton setiger*) (UPL) and Canadian horseweed *(Erigeron canadensis*) (facultative upland [FACU]). Bank vegetation included flatspine bur ragweed (*Ambrosia acanthicarpa) (*UPL), Washington fan palm *(Washingtonia robusta) (*facultative wet [FACW]) and salt heliotrope (*Heliotropium curassavicum*) (FACU).

No other potentially jurisdictional aquatic resources were observed within or adjacent to the Project site.

3 Summary and Conclusions

The jurisdictional delineation assessment for the Project identified one constructed drainage ditch along Matthews Road, a portion of which extends into the southwestern boundary of the Project site. The ditch does not appear to have a relatively permanent, continuous surface connection to a Traditional Navigable Water or other waters of the United States or state. The feature does not support wetland hydrology, hydrophytic vegetation, or hydric soils and does not provide aquatic or riparian habitat. Therefore, the drainage ditch is anticipated to be excluded from USACE jurisdiction under Section 404 of the Clean Water Act pursuant to 33 CFR Section 328.3(b)(3). The drainage ditch may be regulated by the RWQCB and/or the CDFW under applicable state definitions and procedures. These findings are preliminary and subject to verification by the appropriate regulatory agencies.

Please reach out with any questions or concerns regarding the contents of this report.

Sincerely,

Katelin Pedersen
Biologist

Att.: *A, Figures*
B, Photo Log
C, Datasheets
cc: *Keith Carwana and Britney Shultz, Dudek*

References

SWRCB (State Water Resources Control Board). 2021. State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of the Dredges or Fill Material to Waters of the State. Adopted April 2. 2019 and Revised April 6, 2021. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2021/procedures.pdf.

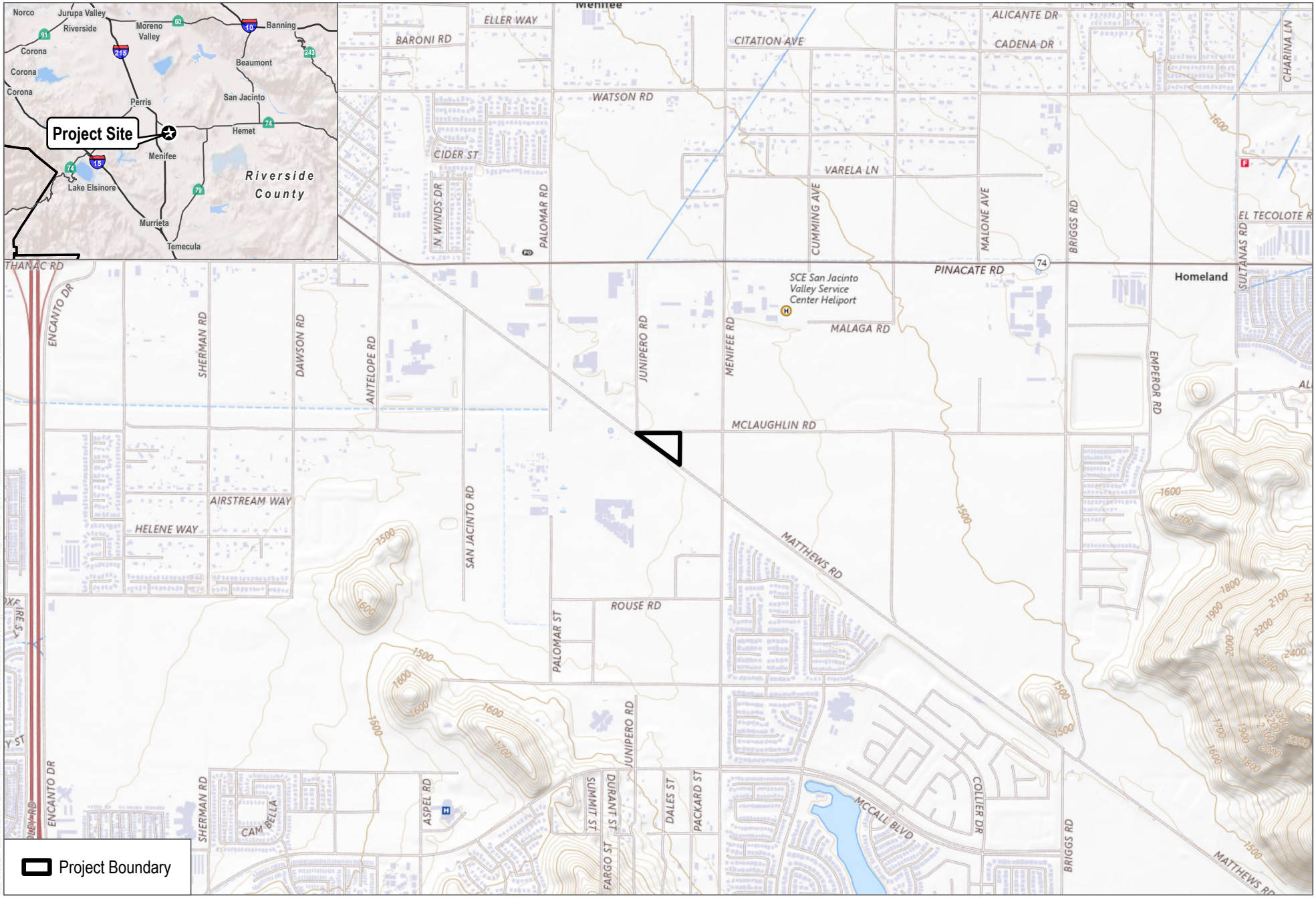
USDA (U.S. Department of Agriculture). 2024. Web Soil Survey. USDA Natural Resources Conservation Service, Soil Survey Staff. Accessed September 2024. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

USFWS (U.S. Fish and Wildlife Service). 2024. "National Wetlands Inventory (NWI), Wetlands Mapper" [online database]. Accessed September 2024. http://www.fws.gov/wetlands/.

USGS (U.S. Geological Survey). 2024. "National Hydrography and Watershed Boundary Dataset" [online database]. USGS National Hydrography Products. Accessed September 2024. https://www.usgs.gov/core-science-systems/ngp/national-hydrography/watershed-boundary-dataset?qt-science_support_page_related_con=4#qt-science_support_page_related_con.

Attachment A

Figures



SOURCE: USGS National Map 2024

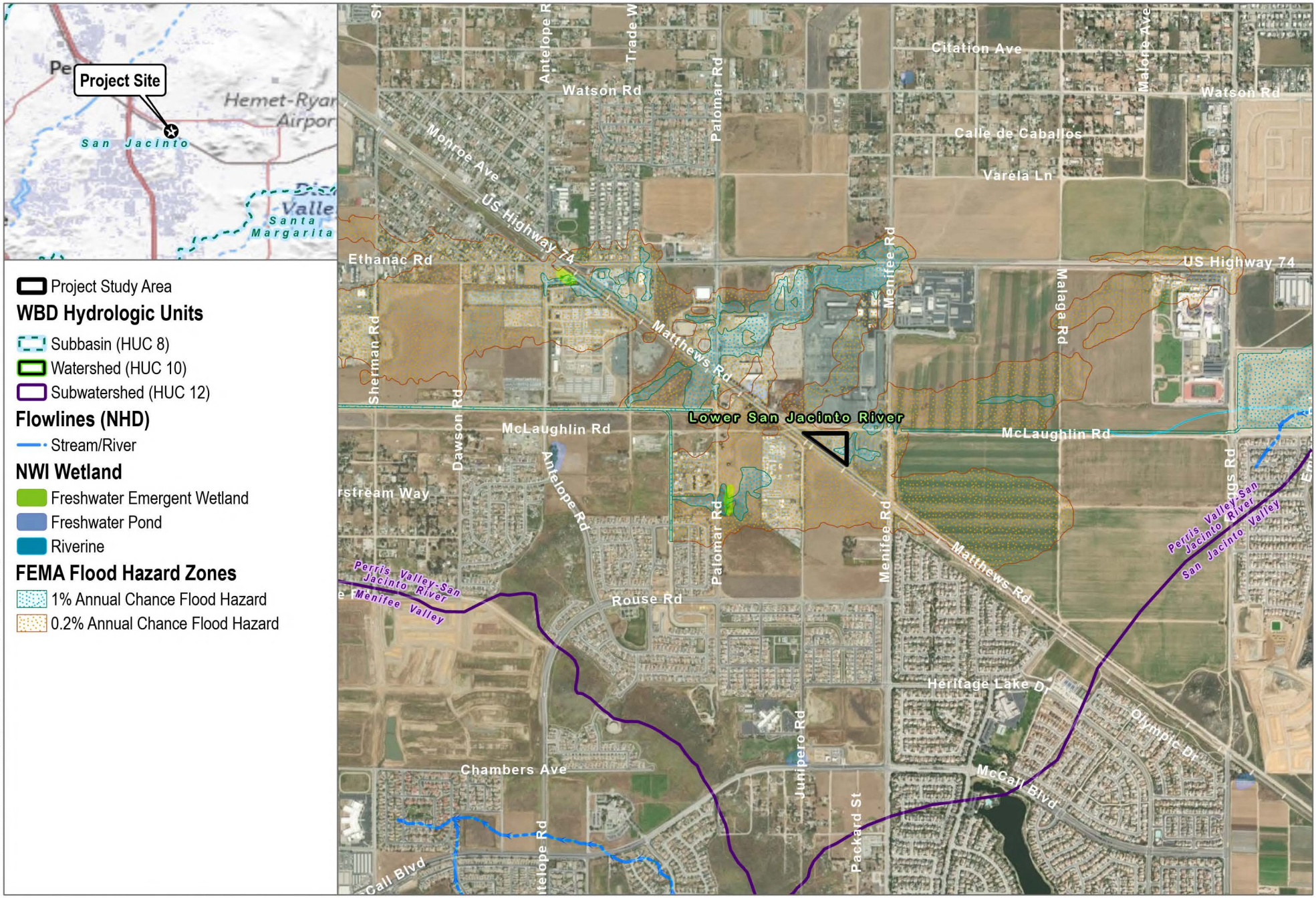
DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

Seaflower Battery Energy Storage Project



SOURCE: Maxar 2022; FEMA; USGS NHD; USFWS NWI

DUDEK

0 1,000 2,000 Feet

FIGURE 2

Hydrology

Seaflower Battery Energy Storage Project



SOURCE: USDA SSURGO

DUDEK

0 150 300 Feet

FIGURE 3

Soils

Seaflower Battery Energy Storage Project



SOURCE: Maxar 2022; Coffman Engineers, 2026

DUDEK

0 75 150 Feet

FIGURE 4

Jurisdictional Delineation Assessment

Seaflower Battery Energy Storage Project

Attachment B

Photo Log



Photo 1. Representative photo of Project site and drainage ditch (9/4/2024).



Photo 2. Representative photo of Project site (9/4/2024).



Photo 3. Culvert outside eastern Project boundary (9/4/2024).



Photo 4. Drainage ditch overview, west facing. Showing recent vegetation clearing on slope (9/4/2024).



Photo 5. Drainage ditch overview, east facing. Showing recent vegetation clearing on slope (9/4/2024).



Photo 6. Location of OHWM Transcect, T-1 (9/4/2024).



Photo 7. Drainage ditch overview, east facing (4/1/2026).



Photo 8. Drainage ditch overview, west facing (4/1/2026).

Attachment C

Datasheets

OHWM DATA SHEET

Project: Seaflower Date: 09/04/2024 Transect: T-1

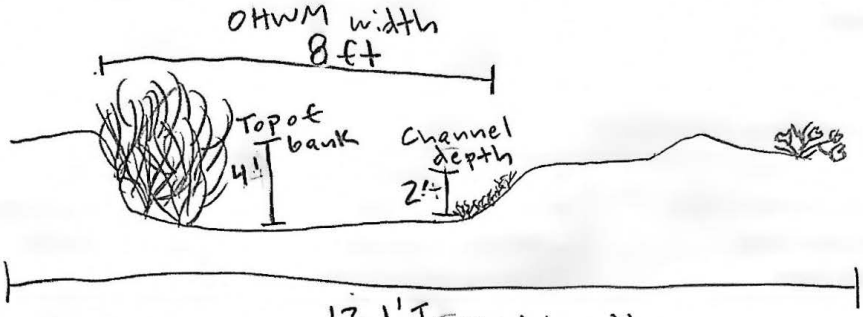
Investigator(s): Allison Johnson Feature Name: _____

Site Location: Romoland, southern parcel

Feature Type: ☐ Ephemeral ☐ Intermittent ☐ Perennial ☒ Other

Transect (cross-section) drawing(s):

View Facing: W



☒ Transect length
☒ OHWM width
☒ Channel depth
☒ Photo

Break in Slope at OHWM: ☐ Sharp (>60°) ☒ Moderate (30-60°) ☐ Gentle (<30°)

☒ Natural line impressed on the bank	☒ Sediment sorting
☐ Shelving	☐ Leaf litter disturbed or washed away
☒ Changes in the character of soil	☒ Scour
☐ Destruction of terrestrial vegetation	☒ Deposition
☐ Presence of litter and debris	☐ Bed and banks
☐ Wracking	☐ Water staining
☒ Vegetation matted down, bent, or absent	☒ Change in plant community and/or cover

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM	60	18	20	2	—
Below OHWM	15	80	5	—	—

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	—	—	55	45
Below OHWM	—	2	2	96

Stage: ☐ Early (herbs & seedlings) ☒ Mid (herbs, shrubs, saplings) ☐ Late (herbs, shrubs, mature trees)

Upland Species:	*Bank Species:*	*Emergent Species:*
- Datura wrightii - Croton setiger - Erigeron canadensis	- Ambrosia acanthicarpa - Washingtonia robusta - Heliotropium curassavicum	- Heliotropium curassavicum

OHWM DATA SHEET

Condition/Disturbances (e.g., erosion, grazing, culverts, etc.):
Erosion along bank slope, steel culverts (further east), roadside (heavy disturbance), recent vegetation clearing/grading along bank

Hydrology:

☐ Flowing water	Avg. depth:	Min. depth:
☐ Standing water	Temp:	Max. depth:
☐ Saturated		
☒ Dry		

Checklist of resources (if available):

☒ Aerial photography	☒ Vegetation maps	☒ GPS unit
☐ Remotely-sensed images	☒ Soil maps	☐ Stream gage data
☒ Topographic maps	☐ Rainfall/precipitation data	☐ Other studies:
☐ Geologic maps	☐ Existing delineation(s) for site	

Other drawings (plan view), notes:

N/A

Other forms related to this feature: ☐ Yes ☒ No

☐ Terrace, fringe, or floodplain wetland (wetland datasheet)
☐ Low flow channel or other representative section (OHWM datasheet)

DUDEK
78-075 MAIN STREET, SUITE G-203
LA QUINTA, CALIFORNIA 92253
T 760.341.6660 F 760.346.6118

MEMORANDUM

To:	Britney Schopf and Bridget Canty, Seaflower Energy, LLC
From:	Katelin Pedersen, Biologist, Dudek
Subject:	Western Riverside County Multiple Species Habitat Conservation Plan Consistency Memorandum for the Seaflower Battery Energy Storage Project, Fuentes Parcels, City of Menifee, California
Date:	May 28, 2026
cc:	Keith Carwana, Project Manager, Dudek Britney Schultz, Senior Biologist, Dudek
Attachment(s):	A, Figures B, Photo Log C, Species Compendium

This memorandum documents the existing biological conditions for the Seaflower Battery Energy Storage Project (Project) and includes a Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) consistency analysis with additional requirements needed for the Project to be consistent with the WRMSHCP.

1 Project Information

1.1 Project Location

The Project site consists of approximately 3.84 acres located within the incorporated City of Menifee (City). The Project site is located west of Menifee Road, north of Matthews Road, east of Palomar Road, and south of McLaughlin Road, approximately 0.5 miles south of Highway 74 (Figure 1, Project Location).

1.2 Project Description

Seaflower Energy, LLC (Applicant) proposes to entitle, construct, operate, and maintain the proposed Seaflower Battery Energy Storage System (Project), an up to 400 megawatt-hour (MWh) utility scale battery energy storage system (BESS). The Project would be located on two parcels identified as Assessor's Parcel Numbers (APN) 331-250-021 and 331-250-002, totaling to approximately 3.85 acres in the City of Menifee, Riverside County, California.

The Project will consist of batteries with cell chemistry of nickel manganese cobalt (NMC) or lithium iron phosphate (LFP) or other battery technology with a proven safety and performance record within a one-story enclosed building (square footage to be determined) in accordance with the City of Menifee Ordinance No. 2022-356. The building will house the batteries, control equipment, and related systems. Additional electrical equipment including

inverters, transformers, and collector substation will be sited outside the building housing the batteries, to interconnect the Project into the existing Southern California Edison (SCE) Valley Substation (point of interconnection or POI). An overhead or underground generation interconnection transmission (gen-tie) line would be constructed to transfer power between the Project site and the existing SCE Valley Substation, located approximately 0.4 miles to the north. If installed overhead, an appropriate number of 115 kilovolt (kV) transmission structures including insulator/hardware assemblies, and appropriate number of conductor spans between the last structure and the dead-end substation structure at the SCE Valley Substation would be installed. The final alignment, pole heights, number of structures, structure types, conductor spans, and location of the gen-tie line will be finalized with detailed engineering design.

The batteries will be arranged on storage racks within the enclosed building and will include relay and communications systems for automated monitoring and managing of the batteries to ensure design performance.

The Project does not require weed abatement nor fuel modifications. Finally, the Project does not include improvements to any WRMSHCP Covered Roads.

1.3 Western Riverside County Multiple Species Habitat Conservation Plan

As previously stated, the Project site is located within the boundary of the WRMSHCP. Specifically, the Project site is located within the WRMSHCP Harvest Valley/Winchester Area Plan; however, the Project site is not located within any WRMSHCP Criteria Cells (Figure 2, Western Riverside Multiple Species Habitat Conservation Plan Area). Given the Project occurs within the WRMSHCP, it must demonstrate consistency with applicable WRMSHCP requirements; however, it is not subject to Joint Project Review through the Regional Conservation Authority as it does not occur within the Criteria Area (i.e., Criteria Cells).

The WRMSHCP is a comprehensive, multi-jurisdictional habitat conservation plan focusing on the permanent conservation of 500,000 acres and the protection of 146 species, including 34 that are currently listed as threatened or endangered. The WRMSHCP is one of several large, multi-jurisdictional habitat-planning efforts in Southern California with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. The WRMSHCP will allow Riverside County and its cities, including the City of Menifee, to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal Endangered Species Acts (County of Riverside 2003).

The WRMSHCP serves as a habitat conservation plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act (16 USC 1531 et seq.) and a Natural Communities Conservation Plan under the Natural Community Conservation Planning Act of 2001 (California Fish and Game Code Section 2800 et seq.). The WRMSHCP allows the participating jurisdictions to authorize “take” of plant and wildlife species identified within the WRMSHCP area. The U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) have authority to regulate the take of threatened, endangered, and rare species. Under the WRMSHCP, the wildlife agencies (i.e., USFWS and CDFW) have granted “take authorization” for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the WRMSHCP conservation areas, in exchange for the assembly and management of a coordinated WRMSHCP conservation area.

The WRMSHCP is a "criteria-based plan" and does not rely on a hardline preserve map. Instead, within the WRMSHCP area, the WRMSHCP reserve will be assembled over time from a smaller subset of the Plan Area, referred to as the "Criteria Area." The Criteria Area consists of Criteria Cells (Cells) or Cell Groupings, and flexible guidelines (Criteria) for the assembly of conservation within the Cells or Cell Groupings. Cells and Cell Groupings also may be included within larger units known as Cores, Linkages, or Non-Contiguous Habitat Blocks.

Western Riverside County Multiple Species Habitat Conservation Plan Mitigation Fee

In accordance with the City of Menifee's obligations described in Section 13.2(B) of the WRMSHCP Implementing Agreement, the City of Menifee is required to contribute mitigation through payment of a Local Development Mitigation Fee and other relevant fees as set forth in Section 8.5 of the WRMCHSP. Such payment may be offset through acquisition of replacement habitat or creation of new habitat for the benefit of Covered Species, as appropriate. Such mitigation shall be implemented prior to impacts to Covered Species and their habitats.

2 Methods

2.1 Literature Review

Prior to conducting a habitat assessment/reconnaissance survey of the Project site, a literature search and database review were conducted by Dudek biologists to evaluate the natural resources found or potentially occurring within the Project site. The database review included the most recent versions of the California Natural Diversity Database, special-status species lists (CDFW 2024a, 2024b), the California Native Plant Society's Rare Plant Inventory (CNPS 2024a), the USFWS Information for Planning and Consultation (USFWS 2024a) and occurrence data (USFWS 2024b), and the Natural Resource Conservation Service's Web Soil Survey (USDA 2024). These databases were reviewed to identify sensitive biological resources present or potentially present for the U.S. Geological Survey 7.5-minute quadrangle in which the Project site is located (Romoland) and the eight surrounding quadrangles (Perris, Lakeview, Winchester, Bachelor Mountain, Murrieta, Wildomar, Lake Elsinore, and Steele Peak). The following resources were reviewed to assess the potential for historical drainages and aquatic features: U.S. Geological Survey topographic maps (1:24,000-scale), aerial photographs (Google Earth 2024; NETR 2024), the USFWS National Wetland Inventory database (USFWS 2024c), and the National Hydrography Dataset and Watershed Boundary Dataset (USGS 2024).

2.2 Field Survey and Conditions

On September 4, 2024, Dudek biologist Allison Johnson conducted a habitat assessment/reconnaissance survey of the Project site to document biological resources, vegetation communities, and potentially jurisdictional aquatic resources within the Project site. The assessment was conducted from 7:30 a.m. to 9:30 a.m., and ambient temperatures ranged from 88 to 92 degrees Fahrenheit with 0% cloud cover and wind speeds ranging between 0 to 2 miles per hour.

During the habitat assessment, the vegetation communities and land covers within the Project site were mapped following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018) and California Natural Community List (CDFW 2023), also referred to as the

Natural Communities List, based on A Manual of California Vegetation, Online Edition (CNPS 2024b). Modifications, such as the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986; Oberbauer et al. 2008), were incorporated to accommodate the lack of conformity of the observed communities to those included in these references.

Vegetation communities and land cover types were mapped in the field using an Esri ArcGIS mobile application. Vegetation communities were classified based on site factors, descriptions, distribution, and characteristic species present within an area. Information was recorded, including dominant species and associated cover classes, aspect, canopy height, and visible disturbance factors.

Following completion of fieldwork, Dudek geographic information system analysts digitized the vegetation boundaries as delineated by the field biologist and created a geographic information system coverage for vegetation communities. A general map of vegetation communities within the Project site was documented, along with all wildlife and plant species observed or detected. Concurrently, a general habitat assessment was conducted for special-status species identified during the database review as having potential to occur, and an aquatic resources delineation was performed to identify potentially jurisdictional aquatic features.

A delineation verification was conducted on April 1, 2026, by Dudek Biologist Katelin Pedersen, to refine the jurisdictional extent of aquatic features within and adjacent to the Project site. The delineation was conducted from 8:45 a.m. to 11 a.m.; temperature ranged from 62°F to 69°F; cloud cover ranged from 40% to 80%; and wind speeds ranged from 0 mph to 1 mph.

3 Results

3.1 Vegetation Communities and Land Covers

The majority of the Project site is mapped as developed land, consisting of a large, heavily compacted gravel lot used to stage trucks and large equipment, along with two trailers/temporary office units (Figure 3, Vegetation Communities and Land Cover Types). A narrow strip of disturbed habitat occurs along the southwestern boundary of the Project site. This perimeter area had recently been cleared, allowing vegetation to reestablish. Dominant species within the disturbed habitat included sacred thorn-apple (*Datura wrightii*), flatspine bur ragweed (*Ambrosia acanthicarpa*), and dove weed (*Croton setiger*), all of which are associated with disturbed soils (Attachment A, Photo Log). No naturally occurring vegetation communities are present within the Project site.

3.2 Plants

A list of plant species observed during the habitat assessment/reconnaissance survey are included in Attachment B, Species Compendium. A total of 16 plant species of native or naturalized plants, 10 native (63%) and 6 non-native (38%), were recorded on the site (Attachment B). No special-status plant species (i.e., listed species and California Rare Plant Rank 1 or 2 species) were observed within the Project site, The diversity of native plant species is low due to the disturbed and developed nature of the site with much of the site composed of a heavily compacted gravel lot.

3.3 Wildlife

There were five wildlife species observed within the Project site during the habitat assessment/reconnaissance survey (Attachment B). Of the five wildlife species observed, four are native (80%), and one is non-native (20%).

The potential for special-status species (species listed as federal/state endangered or threatened, those proposed for listing, those candidate for listing, those fully protected by CDFW those on the California Watch List, and California species of special concern in the context of the federal Endangered Species Act (ESA) and California Endangered Species Act (CESA) was determined based on a review of literature, data, and site conditions. From the review, four special-status wildlife species have moderate potential to occur within the Project site (western spadefoot [*Spea hammondii*], Crotch's bumble bee [*Bombus crotchii*], western yellow bat [*Lasiurus xanthinus*], and pocketed free-tailed bat [*Nyctinomops femorosaccus*]).

3.3.1 WRMSCHP Covered Species

The western spadefoot toad is proposed for listing as a federally threatened species and is covered under the WRMSHCP. This species is endemic to California and northern Baja California and ranges from the north end of the great Central Valley south, east of the Sierras and the deserts, into northwest Baja California (Jennings and Hayes 1994). The species is most common in grasslands with vernal pools or mixed grassland/coastal sage scrub areas. Suitable habitat for this species includes open areas with sandy or gravelly soils in a variety of habitats, including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, river floodplains, alluvial fans, playas and alkali flats (Holland and Goodman 1998). Riparian habitats with suitable water resources may also be used. The western spadefoot is almost completely terrestrial, remaining underground in burrows eight to ten months of the year and entering water only to breed when rain thresholds are met.

A drainage feature potentially suitable for breeding by this species was observed along Matthews Road, a portion of which extends into the southwestern boundary of the Project site. Although most of the Project site consists of a heavily compacted gravel lot, exposed sandy soils occur within the disturbed habitat along the site perimeter. Small mammal burrows were observed within these limited areas of exposed sandy soil. Because western spadefoot may utilize small mammal burrows and friable sandy soils for aestivation, these features could provide potential aestivation habitat; however, the burrows were not evaluated for depth, occupancy, or subsurface conditions during the reconnaissance survey. In addition, western spadefoot has been documented immediately adjacent to the Project site in 2012 (CNDDB Occurrence No. 968, CDFW 2024c). Western spadefoot is a covered species under the WRMSHCP, therefore any Project impacts to this species or its habitat would be fully covered through the payment of the Local Development Mitigation Fee.

3.4 Aquatic Resources

One constructed drainage ditch (0.28 acres; 988 linear feet) was delineated along Matthews Road, a portion of which extends into the southwestern boundary of the Project site (see Figure 4, Aquatic Resources). The drainage ditch originates at a culvert under Menifee Road approximately 700 feet to the southeast, and flows northwest along Matthews Road past the Project site, turning into sheet flow approximately 500 feet northwest of the Project site.

The drainage ditch is an unpaved, man-made, feature excavated entirely within upland and appears to have been constructed to convey agricultural and stormwater runoff from adjacent developed and disturbed lands. The ditch was dry during both delineation efforts (September 4, 2024, and April 1, 2026) and exhibits ephemeral hydrology, conveying surface flow only during and immediately following precipitation events. No evidence of sustained or relatively permanent flow was observed during either site visit.

Ordinary high water mark (OHWM) indicators included a bed and bank, a break in slope, a natural line impressed on the bank, changes in the character of soil, vegetation matted down, bent, or absent, sediment sorting, scour, deposition, and a change in plant community and/or cover.

Soils within the ditch and adjacent Project site consist of Exeter sandy loam (0–2 percent slopes and 2–8 percent slopes, eroded), which are well-drained, nonhydric soils. Vegetation within and adjacent to the ditch is dominated by disturbance-associated upland species and nonnative species. Upland vegetation included sacred thorn-apple (upland [UPL]), dove weed (UPL) and Canadian horseweed *(Erigeron canadensis*) (facultative upland [FACU]). Bank vegetation included flatspine bur ragweed *(*UPL), Washington fan palm *(Washingtonia robusta) (*facultative wet [FACW]) and salt heliotrope (*Heliotropium curassavicum*) (FACU).

The ditch does not appear to have a relatively permanent, continuous surface connection to a Traditional Navigable Water or other waters of the United States or state. The feature does not support wetland hydrology, hydrophytic vegetation, or hydric soils and does not provide aquatic or riparian habitat. Therefore, the drainage ditch is anticipated to be excluded from USACE jurisdiction under Section 404 of the Clean Water Act pursuant to 33 CFR Section 328.3(b)(3). The drainage ditch may be regulated by the RWQCB and/or the CDFW under applicable state definitions and procedures. These findings are preliminary and subject to verification by the appropriate regulatory agencies.

No other potentially jurisdictional aquatic resources were observed within or adjacent to the Project site.

3.5 Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

As previously stated, the Project is located within the Plan Area for the WRMSHCP. Specifically, the Project is located in the central portion of the Plan Area, in the Harvest Valley/Winchester Area Plan. The Project site is not located within any Criteria Cells (Figure 2). Given the Project occurs within the Plan Area, it is required to demonstrate consistency with applicable WRMSHCP requirements, which are detailed in this section.

3.5.1 Reserve Assembly Analysis

The Project site does not occur within any Criteria Cells; therefore, the Project is not subject to Reserve Assembly analysis. As such, no Reserve Assembly analysis is warranted.

3.5.2 Multiple Species Habitat Conservation Plan Section 6.1.2, Riparian/Riverine Resources and Vernal Pools

The identification of WRMSHCP riparian/riverine resources is based on the potential for the habitat to support, or be a tributary to habitat that supports, WRMSHCP riparian/riverine Covered Species. WRMSHCP riparian/riverine Covered Species are identified in the WRMSHCP Section 6.1.2. The WRMSHCP defines riparian/riverine habitat as "lands which contain Habitat dominated by [trees], shrubs, persistent emergent, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year" (County of Riverside 2003). The WRMSHCP further clarifies those areas "demonstrating characteristics as described above which are artificially created are not included in these definitions" (County of Riverside 2003).

The WRMSHCP defines vernal pools as "seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season" (County of Riverside 2003). Artificially created wetlands, except for those created intentionally to provide habitat or resulting from the creation of open waters or alteration of natural stream courses, are not considered WRMSHCP vernal pools.

The WRMSHCP defines suitable fairy shrimp habitat as "stock ponds, ephemeral pools and other features…as determined appropriate by a qualified biologist" for Riverside fairy shrimp (*Streptocephalus woottoni*), vernal pool fair shrimp (*Branchinecta lynchi*), and Santa Rosa fairy shrimp (*Linderiella santarosae*) (County of Riverside 2003).

3.5.2.1 Riparian/Riverine Resources

As discussed in Section 3.4, Aquatic Resources, of this memorandum, an updated aquatic resources delineation found that a portion of the drainage ditch located along Matthews Road is within the southwestern boundary of the Project site (Figure 4). No other aquatic resources were observed within, nor immediately adjacent to, the Project site.

The drainage ditch does not meet the definition of a riparian/riverine resource under Section 6.1.2 of the WRMSHCP. The WRMSHCP defines riparian/riverine resources as lands that support habitat dominated by trees, shrubs, or persistent emergent vegetation dependent on a freshwater source, and further clarifies that artificially created features are excluded unless they were constructed for the purpose of providing wetland habitat, creating open waters, or resulted from the alteration of a natural stream course (County of Riverside 2003).

The drainage ditch is a man-made feature excavated in uplands and was likely constructed to convey agricultural and stormwater runoff associated with adjacent roadway and land uses. The feature is ephemeral, conveying flow only during and immediately following storm events, and does not support native riparian or wetland vegetation, aquatic habitat, or ecological functions characteristic of natural riparian or riverine systems. Soils within the ditch consist of non-hydric upland soil types, and vegetation within and adjacent to the ditch is dominated by disturbance-associated and non-native upland species.

On the south-southeastern boundary of the Project site, a single individual of Goodding's willow (*Salix gooddingii*) is present. Although *Salix gooddingii* is a riparian-associated species, this isolated individual does not constitute riparian habitat as defined by the WRMSHCP. The tree lacks an associated native riparian understory, persistent freshwater source, or canopy structure indicative of a riparian-dominated habitat and therefore does not meet the criteria for a riparian/riverine resource subject to Section 6.1.2.

Based on the artificial origin, upland setting, episodic hydrology, absence of riparian vegetation, and lack of ecological functions associated with natural stream systems, impacts to the drainage ditch would not constitute impacts to WRMSHCP riparian/riverine resources, and preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) is not warranted.

3.5.2.2 Riparian Birds

The Project site is predominantly developed and consists primarily of a heavily compacted gravel lot, with only a small area of disturbed habitat located along the southern perimeter of the site. Neither land cover supports support suitable riparian habitat capable of supporting WRMSHCP riparian bird species, including least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), or yellow-billed cuckoo (*Coccyzus americanus*). However, the Project site is located immediately adjacent to a WRMSHCP Section 6.1.2 riparian/riverine resource (i.e., drainage ditch), as well as a single Goodding's willow located outside the southern-most corner of the Project site. These resources do not provide suitable riparian habitat capable of supporting WRMSHCP riparian bird species, including least Bell's vireo, southwestern willow flycatcher, or yellow-billed cuckoo. The single Goodding's willow does not provide a sufficient understory nor closed canopy required by WRMSHCP riparian bird species. Aside from this single Goodding's willow, there are no other trees or shrubs present within the Project site nor adjacent to the Project site that provide any sort of understory or closed-canopy features. In addition, the Project site is surrounded by developed lands to the north, east, and west, and by agricultural lands consisting of maintained non-native grasses (i.e., turf) to the south. As such, there is no riparian vegetation present within the Project site nor within the immediate surrounding vicinity of the Project site capable of supporting WRMSHCP riparian birds, and protocol surveys are not warranted.

3.5.2.3 Vernal Pools

The WRMSHCP defines vernal pools as the following (County of Riverside 2003):

> [S]easonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness

> can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records.

WRMSHCP further clarifies, "With the exception of wetlands created for the purpose of providing wetlands Habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions" (County of Riverside 2003).

The Project site does not contain any areas with indicators of all three wetland/vernal pool parameters (soils, vegetation, and hydrology), nor were any vernal pool indicator species observed (Attachment B). Furthermore, the Project site contains well-draining soils (i.e., Exeter sandy loam, 0% to 2% slopes and 2% to 8% slopes, eroded), which are not associated with vernal pool habitat (Figure 5). Additionally, a review of aerial imagery of the Project site did not reveal any inundation or pooling water (Google Earth 2024; NETR 2024). Finally, the Project site is comprised of a highly disturbed and heavily compacted gravel lot where various trucks and large equipment are parked/staged along with two trailer/temporary office units. As such, there are no vernal pools located within the Project site.

3.5.2.4 Fairy Shrimp Habitat

In addition to vernal pools, fairy shrimp habitat also includes ephemeral pools and other features such as road ruts or stock ponds. No indicators of ephemeral pools, depressions, or road ruts capable of holding water long enough to support WRMSHCP fairy shrimp were observed within the Project site during the habitat assessment. The Project site does not contain any stock ponds or other features where water could pool. A review of historical aerial imagery of the Project site did not reveal any evidence of ponding or moist soils within the Project site.

In addition, as discussed above related to vernal pools, the soils present within the Project site (i.e., Exeter sandy loam, 0% to 2% slopes and 2% to 8% slopes, eroded) are well-draining soils. As such, it is unlikely the Project site would hold water for prolonged periods of time to support WRMSHCP fairy shrimp species. Furthermore, a review of aerial imagery of the Project site did not reveal any inundation or pooling water (Google Earth 2024; NETR 2024). Therefore, the Project site lacks suitable fairy shrimp habitat, and focused surveys are not warranted.

3.5.3 Multiple Species Habitat Conservation Plan Section 6.1.3, Narrow Endemic Plant Species

The Project site is not located within a Narrow Endemic Plant Species Survey Area; therefore, focused surveys for narrow endemic plant species are not warranted.

3.5.4 Multiple Species Habitat Conservation Plan Section 6.1.4, Urban/Wildland Interface Guidelines

According to the WRMSHCP, the Urban/Wildlands Interface Guidelines are "intended to address indirect effects associated with locating Development in proximity to the WRMSHCP Conservation Area" (County of Riverside 2003). Proposed developments adjacent to WRMSHCP Conservation Areas may create edge effects that can impact conserved biological resources. The WRMSHCP provides several guidelines that address potential indirect effects

from proposed developments that are in proximity to WRMSHCP Conservation Areas. These guidelines include measures addressing the quantity and quality of runoff generated by the development (i.e., drainage and toxics), night lighting, noise, non-native invasive plant species, barriers to humans and animal predators, and grading/land development encroachment.

The Project site is not located adjacent to or near any WRMSHCP conserved lands, nor lands described for conservation; however, a portion of a constructed drainage ditch located along Matthews Road extends into the southwestern boundary of the Project site. The drainage ditch does not meet the definition of a riparian/riverine resource under Western Riverside County Multiple Species Habitat Conservation Plan Section 6.1.2, therefore, impacts to the feature would not constitute impacts to MSHCP riparian/riverine resources.

Although no riparian/riverine resources subject to WRMSHCP Section 6.1.2 are present within the Project site, the Project will implement the Urban/Wildlands Interface Guidelines contained in WRMSHCP Section 6.1.4 to minimize the potential for indirect effects to biological resources during construction and operation.

During Project construction, the Project will incorporate the following best management practices from Appendix C of the WRMSHCP in order to minimize the potential for indirect effects to biological resources during construction and operation (County of Riverside 2003):

- A water pollution and erosion control plan needs to be implemented in accordance with Regional Water Quality Control Board requirements.
- Construction limits shall be clearly flagged so that any adjacent native vegetation and other biological resources are avoided.
- Silt fencing or other sediment trapping materials need to be installed along the southwestern boundary of the Project site in order to prevent unintended runoff from draining into the drainage ditch.
- Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian/riverine areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering the drainage ditch. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project-related spills of hazardous materials shall be reported to appropriate entities, including but not limited to, the City of Menifee, USFWS, CDFW, and RWQCB and shall be cleaned up immediately, and contaminated soils shall be removed to approved disposal areas.
- Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
- To avoid attracting predators of the species of concern, the Project site shall be kept as clean of debris as possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site.

3.5.5 Multiple Species Habitat Conservation Plan Section 6.3.2, Additional Surveys

The WRMSHCP establishes habitat assessment requirements for certain species of plants, birds, mammals, amphibians, and invertebrates. The proposed Project is not located within an Additional Survey Needs and

Procedures area for amphibians, mammals, invertebrates, or criteria plant species. However, the Project site is located within a burrowing owl (*Athene cunicularia*) survey area (Figure 6). As such, the Project must adhere to the requirements set forth in the WRMSHCP regarding Projects proposed within a burrowing owl survey area.

3.5.5.1 Burrowing Owl

The Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area call for a two-step survey process. A burrowing owl habitat assessment is the first step (i.e., Step I) of this survey protocol. During the Step I habitat assessment, biologists walk the Project site and a 150-meter buffer (where legally accessible) to identify the presence of suitable burrowing owl habitat (i.e., open habitat with low growing vegetation). If suitable burrowing owl habitat is found to occur within the Project site, the second step of the survey protocol is required. This second step is broken into two parts: a Step II-A focused burrow survey and a Step II-B focused burrowing owl surveys. During the Step II-A focused burrow survey, biologists are to walk transects spaced to provide 100% visual coverage of the Project site and map all potentially suitable burrowing owl burrows (i.e., burrows at least 4 inches in diameter) and burrow surrogates (i.e., manmade features such as culverts, debris piles, etc.). If suitable burrowing owl burrows or burrow surrogates are detected, then Step II-B focused burrowing owl surveys are required. If no suitable burrowing owl burrows or burrow surrogates are detected, no further surveys are required (RCA 2006).

A Step I habitat assessment for burrowing owl was conducted concurrently during the reconnaissance survey on September 4, 2024, for the Project site in accordance with the WRMSHCP. Suitable habitat for burrowing owl was detected within the southern portion of the Project site near the drainage area (Figure 3). The suitable habitat is characterized as open, disturbed habitat with multiple small animal burrows and burrow surrogates (i.e., rock piles). The Project site contains sandy loam soils that could support burrow formation. Appendix A includes representative photographs of the suitable habitat for burrowing owl and suitable burrows along the southern portion of the Project site.

Given the presence of suitable burrowing owl habitat as well as potentially suitable burrows and burrow surrogates, the Project must include a Step II-A focused burrow survey and Step II-B focused burrowing owl surveys in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (RCA 2006). Additionally, as there is a potential for burrowing owl to move onto the Project site prior to the start of construction, a pre-construction survey for burrowing owl will be required in order for the Project to be consistent with the WRMSHCP. Therefore, as stipulated by the WRMSHCP Burrowing Owl Survey Instructions, a 30-day pre-construction clearance survey is required prior to ground disturbance to ensure that owls are absent from the Project site and will not be impacted by the Project.

4 Conclusion

The Project site is located within the WRMSHCP but outside of any Criteria Cells; therefore, the Project is not subject to Reserve Assembly analysis (Figure 2). There are no WRMSHCP Section 6.1.2 riparian/riverine resources within the Project site; as such, preparation of a Determination of Biologically Equivalent or Superior Preservation would not be required. The Project site does not encompass any riparian habitat, nor is it located adjacent to riparian habitat that provides suitable habitat for WRMSHCP riparian bird species (i.e., least Bell's vireo, southwestern willow

flycatcher, and yellow-billed cuckoo); therefore, focused WRMSHCP riparian bird focused surveys are not warranted. The Project site lacks vernal pools as well as suitable habitat for WRMSHCP fairy shrimp (i.e., Riverside, vernal pool, and Santa Rosa fairy shrimp); therefore, focused surveys for fairy shrimp are not warranted. The Project site is not located within a Narrow Endemic Plant Species Survey Area; therefore, focused surveys for rare plants are not warranted.

The Project site is not located within an Additional Survey Needs and Procedures area for amphibians, mammals, invertebrates, or criteria plant species; however, it is located within a survey area for burrowing owl (Figure 6). A Step I habitat assessment of the Project site resulted in the Project site encompassing suitable burrowing owl habitat; therefore, a Step II-A focused burrow survey and Step II-B focused burrowing owl surveys are required for the Project site. In addition, the Project site will need to undergo a pre-construction burrowing owl survey in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (RCA 2006).

Additionally, the Project site has the potential to support western spadefoot, a federally threatened species and a Covered Species under the WRMSHCP. Accordingly, any Project-related impacts to western spadefoot or its habitat would be fully mitigated through the payment of the MSHCP Local Development Mitigation Fee.

With payment of the Local Development Mitigation Fee as well as implementation of the measures listed below, the Project will be consistent with the WRMSHCP.

- Conduct Step II (A and B) focused burrowing owl surveys in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (RCA 2006)
- Conduct a pre-construction burrowing owl survey in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (RCA 2006)
- Implement WRMSHCP Section 6.1.4 Urban/Wildland Interface Guidelines (County of Riverside 2003)
- Implement applicable WRMSHCP Appendix C best management practices (County of Riverside 2003)

If there are any questions regarding the contents of this memorandum, please contact me at 619.985.1673 or kpedersen@dudek.com.

Sincerely,



Katelin Pedersen
Biologist

5 References

CDFW (California Department of Fish and Wildlife). 2018. "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." March 20, 2018. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline.

CDFW. 2023. "California Natural Community List." June 1, 2023. Accessed July 2024. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.

CDFW. 2024a. RareFind, Version 5.0 (Commercial Subscription). California Natural Diversity Database (CNDDB). Sacramento, California: CDFW, Biogeographic Data Branch. Accessed September 2024. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data.

CDFW. 2024b. "Special Animals List." California Natural Diversity Database (CNDDB). Sacramento, California: CDFW, Biographic Data Branch. July 2024. Accessed September 11, 2024. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline=1.

CDFW. 2024c. California Natural Diversity Database (CNDDB), RareFind 5. Occurrence Record No. 968. Sacramento, California: CDFW Biogeographic Data Branch. Accessed September 2025.

CNPS (California Native Plant Society). 2024a. "Rare Plant Inventory.: Online edition, v-9.5). Sacramento, California: CNPS, Rare Plant Program. Accessed September 2024. https://www.rareplants.cnps.org.

CNPS. 2024b. *A Manual of California Vegetation.* Online Edition. Accessed November 2024. https://www.cnps.org/vegetation.

County of Riverside. 2003. *Western Riverside County Multiple Species Habitat Conservation Plan*. Riverside, California: County of Riverside, Transportation and Land Management Agency, Riverside County Integrated Project. Adopted June 17, 2003. Accessed September 2024. https://planning.rctlma.org/epd/wr-mshcp.

Google Earth. 2024. Aerials centered on the Project site. Accessed November 2024. https://www.google.com/earth/.

Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Nongame-Heritage Program, California Department of Fish and Game. October 1986.

NETR (Nationwide Environmental Title Research). 2024. Historic aerials of the Project site [online viewer]. Accessed August 2024. https://www.historicaerials.com/viewer.

Oberbauer, T., M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County*. March 2008. Accessed July 2024. https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch9.0/rtcrefaletters/014%202014-12-19_OberbauerTM2008.pdf.

RCA (Regional Conservation Authority of Western Riverside County). 2006. "Burrowing Owl Survey Instructions For the Western Riverside Multiple Species Habitat Conservation Plan Area." March 29, 2006. Accessed September 2024. https://www.wrc-rca.org/species/survey_protocols/burrowing_owl_survey_instructions.pdf.

USDA (U.S. Department of Agriculture). 2024. "Web Soil Survey." USDA, Natural Resources Conservation Service, Soil Survey Staff. Accessed September 2024. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

USFWS (U.S. Fish and Wildlife Service). 2024a. "Information for Planning and Consultation." Accessed September 2024. https://ipac.ecosphere.fws.gov/.

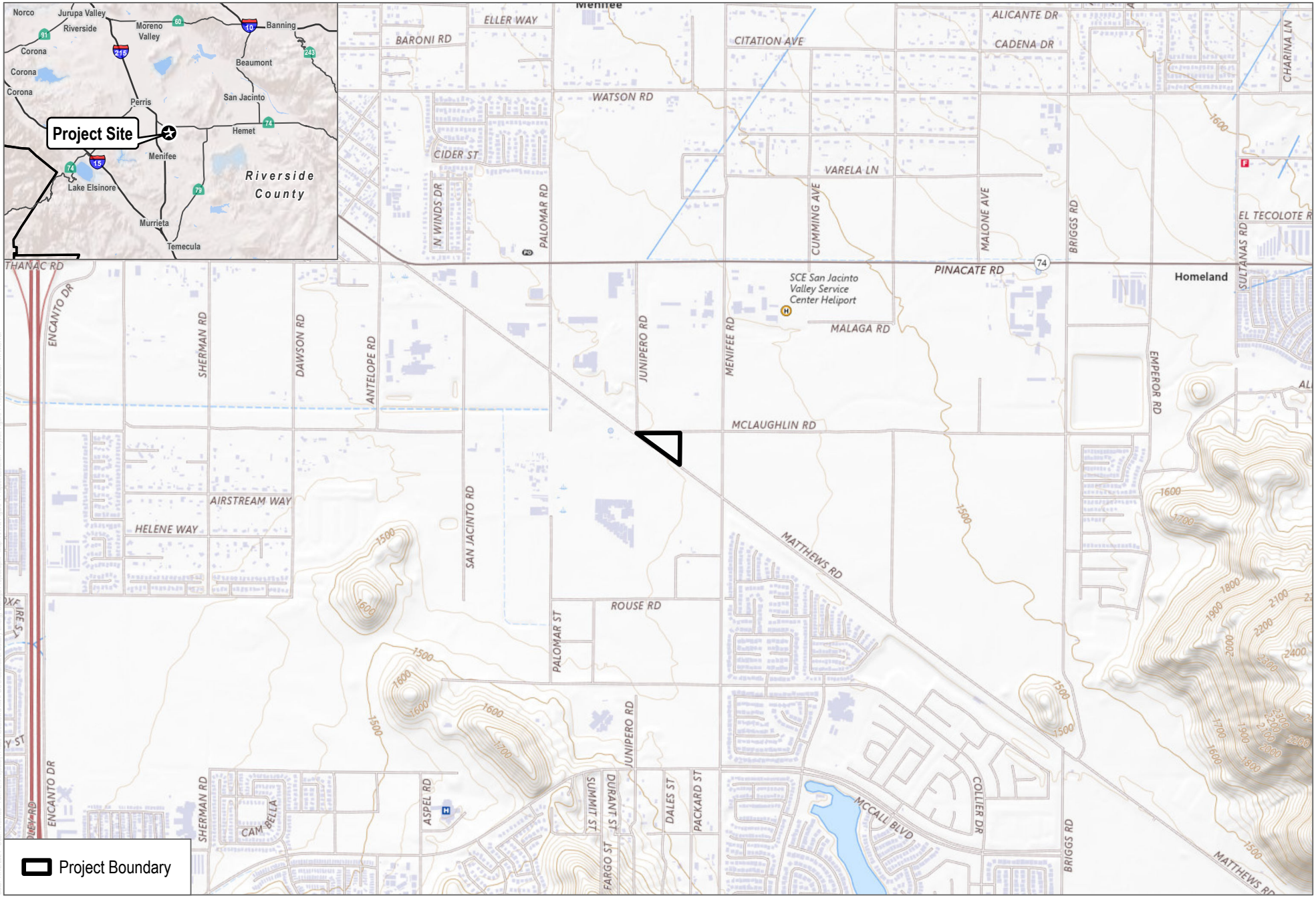
USFWS. 2024b. "Critical Habitat and Occurrence Data" [map]. Accessed September 2024. http://www.fws.gov/data.

USFWS. 2024c. "National Wetland Inventory: Wetlands Mapper" [online database]. Accessed September 2024. https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper.

USGS (U.S. Geological Survey). 2024. "National Hydrography and Watershed Boundary Dataset" [online database]. USGS National Hydrography Products. Accessed September 2024. https://www.usgs.gov/core-science-systems/ngp/national-hydrography/watershed-boundary-dataset?qt-science_support_page_related_con=4#qt-science_support_page_related_con.

Attachment A

Figures



SOURCE: USGS National Map 2024

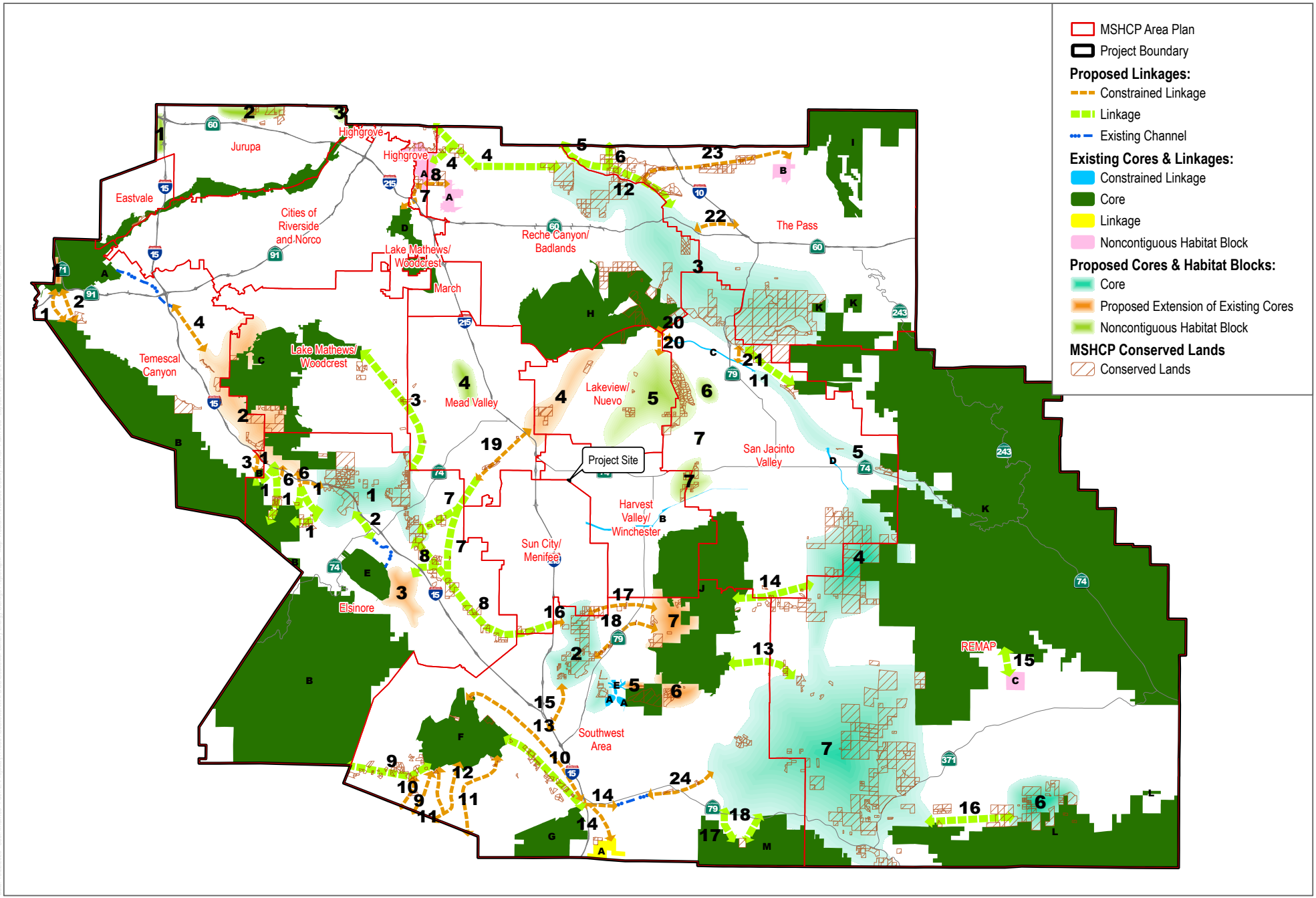
DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

Seaflower Battery Energy Storage Project - WRMSHCP Consistency Memorandum



SOURCE: Western Riverside County Regional Conservation Authority 2015; County of Riverside 2015

DUDEK

FIGURE 2

Western Riverside County MSHCP Plan Area

Seaflower Battery Energy Storage Project



SOURCE: World Imagery

DUDEK

0 105 210 Feet

FIGURE 3

Vegetation Communities and Land Cover Types

Seaflower Battery Energy Storage Project - WRMSHCP Consistency Memorandum



SOURCE: World Imagery

DUDEK

0 105 210 Feet

FIGURE 4

Aquatic Resources

Seaflower Battery Energy Storage Project - WRMSHCP Consistency Memorandum



SOURCE: USDA SSURGO

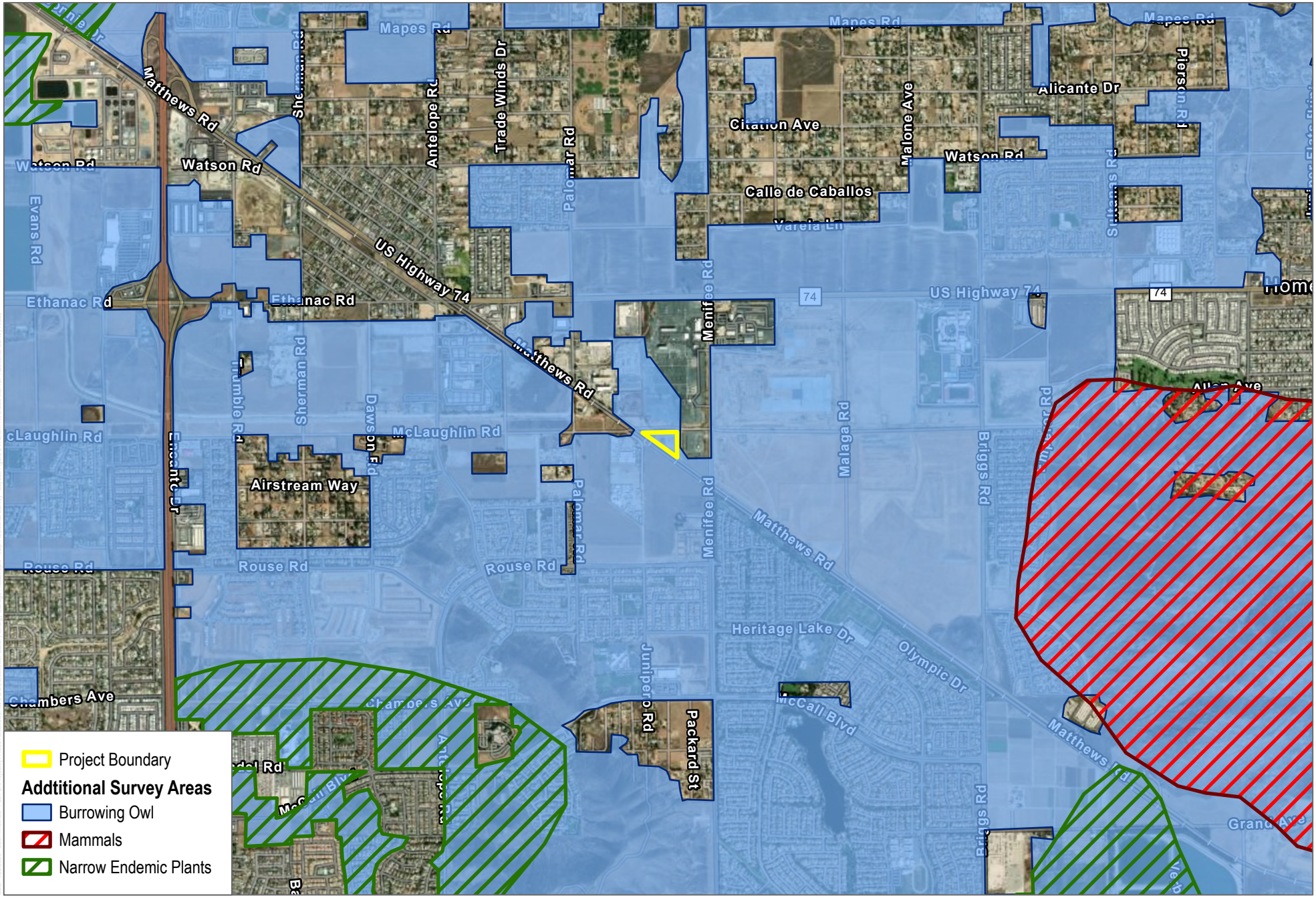
DUDEK

0 150 300 Feet

FIGURE 5

Soils

Seaflower Battery Energy Storage Project - WRMSHCP Consistency Memorandum



SOURCE: World Imagery; Riverside County

DUDEK

0 1,375 2,750 Feet

FIGURE 6

Western Riverside MSHCP Additional Survey Areas

Seaflower Battery Energy Storage Project - WRMSHCP Consistency Memorandum

Attachment B

Photo Log



Photo 1. Image of Project site showing compacted gravel lot with trucks and machinery parked in lot (9/4/2024).



Photo 2. Image of Project site showing temporary offices/trailers located in the compacted gravel lot (9/4/2024).



Photo 3. Image of drainage ditch looking upstream (9/4/2024).



Photo 4. Image of drainage ditch looking downstream (9/4/2024).



Photo 5. Image of Goodding's willow located outside of the Project site (9/4/2024).



Photo 6. Image of culverts located outside the Project site, within the drainage ditch (9/4/2024).



Photo 7. Image of potentially suitable burrowing owl habitat located within the southern portion of the Project site (9/4/2024).



Photo 8. Image of potentially suitable burrowing owl habitat located within the southern portion of the Project site (9/4/2024).



Photo 9. Drainage ditch overview, facing east (4/1/2026).



Photo 10. Drainage ditch overview, west facing (4/1/2026).

Attachment C

Species Compendium

Plant Species

VASCULAR SPECIES

EUDICOTS

ASTERACEAE—SUNFLOWER FAMILY

Ambrosia acanthicarpa—flatspine bur ragweed
Erigeron canadensis—Canadian horseweed
Helianthus petiolaris—prairie sunflower
* *Lactuca serriola*—prickly lettuce
* *Oncosiphon pilulifer*—stinknet
Symphyotrichum chilense—Pacific aster

BORAGINACEAE—BORAGE FAMILY

Heliotropium curassavicum—salt heliotrope

CHENOPODIACEAE—GOOSEFOOT FAMILY

* *Salsola tragus*—prickly Russian thistle

EUPHORBIACEAE—SPURGE FAMILY

Croton setiger—dove weed
Euphorbia albomarginata—whitemargin sandmat

LAMIACEAE—MINT FAMILY

Trichostema lanceolatum—vinegarweed

SALICACEAE—WILLOW FAMILY

Salix gooddingii—Goodding's willow

SOLANACEAE—NIGHTSHADE FAMILY

Datura wrightii—sacred thorn-apple

MONOCOTS

ARECACEAE—PALM FAMILY

* *Washingtonia robusta*—Washington fan palm

POACEAE—GRASS FAMILY

* *Bromus madritensis*—compact brome
* *Cynodon dactylon*—Bermudagrass

Wildlife Species

BIRDS

FINCHES

FRINGILLIDAE—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus—house finch

OLD WORLD SPARROWS

PASSERIDAE—OLD WORLD SPARROWS

* *Passer domesticus*—house sparrow

PIGEONS AND DOVES

COLUMBIDAE—PIGEONS AND DOVES

Zenaida macroura—mourning dove

SHOREBIRDS

CHARADRIIDAE—LAPWINGS AND PLOVERS

Charadrius vociferus—killdeer

REPTILES

LIZARDS

PHRYNOSOMATIDAE—IGUANID LIZARDS

Sceloporus occidentalis—western fence lizard

* Signifies introduced (non-native) species

DUDEK
MAIN OFFICE
687 S. COAST HIGHWAY 101, SUITE 110
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 F 760.632.0164

May 28, 2026 13153.41

Bridget Canty and Britney Schopf
Seaflower Energy, LLC
5521 La Jolla Blvd
La Jolla, CA 92037

Subject: 2026 Focused Crotch's Bumble Bee Survey Report for the Seaflower Battery Energy Storage System Project

Dear Bridget Canty and Britney Schopf:

This letter report documents the results of the habitat assessment and focused surveys for the California Endangered Species Act (CESA) Candidate Crotch's bumble bee (*Bombus crotchii*) for the Seaflower Battery Energy Storage System Project (Project).

1 Study Area and Existing Conditions

The Project site is located on two parcels identified as Assessor's Parcel Numbers (APN) 331-250-021 and 331-250-002, totaling to approximately 3.84 acres in the City of Menifee, Riverside County, California. The Project site is located west of Menifee Road, north of Matthews Road, east of Palomar Road, and south of McLaughlin Road, approximately 0.5 miles south of Highway 74 (Figure 1, Project Location). The Project site falls within the Romoland U.S. Geological Survey 7.5-minute quadrangle. The Project spans Section 14, Township 5 South, and Range 3 West.

The Project site consists entirely of disturbed habitat and is currently being used as an equipment and vehicle storage yard. The SCE Valley Substation and associated transmission line facilities are located directly to the north of the Project site. An equipment and vehicle storage yard is located adjacent to the Project site to the east. To the west and south, the Project site is directly adjacent to Matthews Road. Directly beyond Matthews Road there is an additional storage yard and undeveloped land.

2 Vegetation Communities

The entire Project site is composed of one land cover type, disturbed habitat, which is described below.

2.1 Non-Natural Land Covers

Disturbed Habitat

Disturbed habitat consists of areas that have been substantially altered by human activity such as construction, grading, utility infrastructure, and ongoing maintenance activities and cannot be classified as a native or naturalized vegetation community. However, these areas do have a recognizable soil substrate. Vegetation in these areas, if

present at all, is usually sparse and dominated by non-native weedy herbaceous species, such as Maltese star-thistle (*Centaurea melitensis*), slender oat (*Avena barbata*), and white horehound (*Marrubium vulgare*).

Disturbed habitat is not a listed vegetation community under the California Natural Community List (CDFW 2025); as such, this community is not globally or state ranked and is not considered a sensitive natural community under the California Environmental Quality Act (CEQA).

The Project site is entirely composed of disturbed habitat. Most of the site is a large, heavily compacted gravel lot where various trucks and large equipment are staged along with two trailer/temporary office units. Land along the southern boundary slope had recently been cleared allowing for native vegetation species to regrow. The dominant vegetation species along the southern boundary upland and upper slope bank consisted of sacred thorn-apple (*Datura wrightii)*, flatspine bur ragweed (*Ambrosia acanthicarpa)* and dove weed *(Croton setiger*). All dominant species listed are associated with disturbed soil. There are no naturally occurring vegetation communities within the Project site.

3 Crotch's Bumble Bee Survey

3.1 Background Information

Crotch's bumble bee is one of several bumble bee species proposed for listing as an endangered species under California's Endangered Species Act (Xerces Society for Invertebrate Conservation et al. 2018). Crotch's bumble bee is generally distributed through wildlands and rural areas in low to middle elevations (sea level to at least 6,000 feet) of California and exploits a wide range of habitats, including native and exotic grasslands, coastal marshes, scrub lands, chaparral, oak-juniper woodlands, pinon woodlands, and desert transition vegetation (on western margins of the Mojave and Colorado Deserts). The range and overall abundance of Crotch's bumble bee is believed to have declined substantially over the last two decades (Hatfield et al. 2015; Xerces Society for Invertebrate Conservation et al. 2018) due to habitat loss from urban and agricultural expansion, as well as the effects of herbicides (Motta et al. 2018) and insecticides (Muth and Leonard 2019; Whitehorn et al. 2012) in agricultural settings, especially in California's Central Valley.

Over recent centuries, competition for floral resources (as well as associated exotic diseases) from the introduced Western honeybee (*Apis mellifera*) has likely led to a decline of many bumble bee species (and many other bees) across the western hemisphere. Like most bumble bees, Crotch's bumble bee nest in cavities in the soil and often in abandoned rodent burrows. The adults (queens, workers, and males) are active in the daytime and all visit nectar and pollen resources. Crotch's bumble bees use a diverse range of floral resources, including those among Asclepiadaceae, Asteraceae, Boraginaceae, Brassicaceae, Ericaceae, Fabaceae, Hydrophyllaceae, Lamiaceae, Orobanchaceae, Plumbaginaceae, Polygonaceae, Scrophulariaceae, and Solanaceae families, and exhibit clear contextual preferences associated with flower species availability on any given time and location. Typically, *Asclepias* spp., *Salvia* spp., *Astragalus* spp., *Acmispon* spp., and *Vicia* spp. are among the preferred flowers.

Bumble bees commonly use floral resources 0.2 to 0.3 kilometers from their nests but sometimes forage more than 2 kilometers from their nests (Keyer et al. 2004; Osborne et al. 1999). This allows bumble bees to use disconnected patches of suitable forage resources on a landscape scale to allow populations to exist on habitat patches within a matrix of urban developed areas. The extent and proximity of undeveloped lands with wildland

conditions in relation to a given site, even if the site is embedded within an urban matrix, influences the likelihood of occupancy, with larger extents and closer proximities of wildlands associated with higher bumble bee diversity (McFrederick and LeBuhn 2006). Mated gynes (future founding queens) emerge in the early spring in search of nest sites to begin new colonies, provisioning their young with pollen and nectar (CDFW 2023; Xerces Society for Invertebrate Conservation 2025).

As the spring season progresses, workers (small female non-reproductive bees) are produced with increasing numbers and escalate the provisioning of the colony, which continues to grow until early to mid-summer when new males (from unfertilized eggs) are produced, along with the new generation of future queens. Workers and males live for only a few weeks. Thus, overall Crotch's bumble bee numbers are highest (including workers and males) in late spring through mid-summer seasons, very low in fall and early spring (gynes only), and virtually undetectable during the overwintering season (when dormant underground).

3.2 Methods – Habitat Assessment and Bumble Bee Surveys

The Project site was surveyed for Crotch's bumble bee by walking meandering transects throughout the vegetated areas with the highest cover of floral resources. Surveys were conducted in accordance with the CDFW Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species document (CDFW 2023) and follow the methods described below.

Dudek biologist, Luz Badillo, conducted the habitat assessment concurrently with the first focused survey on April 1, 2026 (Table 1, Schedule of Surveys). Three evenly spaced protocol-level surveys for Crotch's bumble bee were conducted in April and May 2026, consistent with the Colony Active Period (April through August), for the highest detection probability (CDFW 2023). The surveys were conducted by a qualified biologist with expertise in surveying for Crotch's bumble bee. Surveys were conducted during the morning hours, after sunrise and outside the 3-hour period preceding sunset. Surveys were not conducted during wet (e.g., foggy, raining, or drizzling) or windy conditions (i.e., sustained winds greater than 8 miles per hour). The surveys were conducted during optimal conditions when there were sunny to partly sunny skies with temperatures greater than 60°F. Suitable habitat within the Project site was visually surveyed for 1 person-hour per 3 acres of potential habitat. The biologist walked wandering transects through these resources, with a goal of observing bumble bees in passing and observing bumble bee nest sites associated with small mammal burrows or other appropriate soil cavities.

Table 1. Schedule of Surveys

Date	Survey Type	Hours	Personnel	Conditions (temperature, cloud cover, wind speed)
4/1/2026	Habitat Assessment; Focused Survey Pass 1	8:42 AM – 10:58 AM	Luz Badillo	62–69°F; 40–80% cloud cover; 0–1 mph wind
4/17/2026	Focused Survey Pass 2	9:09 AM–11:03 AM	Luz Badillo	61–69°F, 0% cloud cover; 1–3 mph wind
5/15/2026	Focused Survey Pass 3	10:00 AM–11:21 AM	Luz Badillo	60–62°F; 90%–100% cloud cover; 0–2 mph wind

Note: °F = degrees Fahrenheit; mph = miles per hour

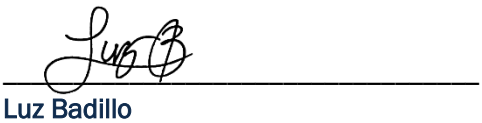
3.3 Results – Crotch's Bumble Bee Survey

No bumble bee individuals were observed during the 2026 focused surveys, including Crotch's bumble bee, and no bumble bee nests were detected within the Project site. Overall, the Project site provides low-quality habitat for bumble bees due to the predominance of heavily disturbed gravel substrate, limited native vegetation, and minimal floral resources. Although some potential nesting features, such as bare soil, brush piles, and rock piles, were observed, habitat suitability within the Project footprint is limited. A list of blooming plant species observed during the surveys that could provide potential foraging resources is included in Attachment A, Blooming Species Plant Compendium. Representative photographs of the Project site and other invertebrates observed during focused surveys are provided in Attachment B, Photo Log.

Other invertebrates observed during the surveys included western honeybee (*Apis mellifera*), digger bee (*Anthophora* spp.), carpenter bee (Xylocopinae), Acmon blue (*Plebejus acmon*), checkered white (*Pontia protodice*), painted lady (*Vanessa cardui*), spotted cucumber beetle (*Diabrotica undecimpunctata*), green dock beetle (*Gastrophysa cyanea*), convergent lady beetle (*Hippodamia convergens*), and fly (Diptera). The results of these surveys are valid until the beginning of the 2027 active season for Crotch's bumble bee (typically early February).

The information in this survey report accurately represents the work conducted by the biologist who conducted these focused surveys. Feel free to contact Luz Badillo at lbadillo@dudek.com if you have any questions regarding the contents of this report.

Sincerely,



Luz Badillo
Biologist

Att.: *Figure 1, Project Location*
A: Blooming Species Plant Compendium
B: Photo Log

References

CDFW (California Department of Fish and Wildlife). 2023. *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*. June 6, 2023. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline.

CDFW. 2025. "California Natural Community List." Sacramento, California: CDFW, Vegetation Classification and Mapping Program. February 27, 2025. Accessed May 2026. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.

Hatfield, R., S. Jepsen, R.W. Thorp, L.L. Richardson, and S Colla. 2015. "*Bombus crotchii*." The IUCN Red List of Threatened Species 2015.5: e.T44937492A46440201. http://dx.doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937492A46440201.en.

Keyer, D., A. Oed, K. Walther-Hellwig, and R. Frankl. 2004. "Are Forests Potential Landscape Barriers for Foraging Bumblebees? Landscape Scale Experiments with *Bombus terrestris agg*. and *Bombus pascuorum* (Hymenopte, Apidae)." *Elsevier Biological Conservation* 116: 111–118.

McFrederick, Q.S., and G. LeBuhn. 2006. "Are Urban Parks Refuges for Bumble Bees Bombus spp. (*Hymenoptera: Apidae*)?" *Biological Conservation* 129: 372–382.

Motta, E., K. Raymann, and N. Moran. 2018. "Glyphosate Perturbs the Gut Microbiota of Honey Bees." *Proceedings of the National Academy of Sciences of the United States of America*, 2018, 115(41), 10305–10310.

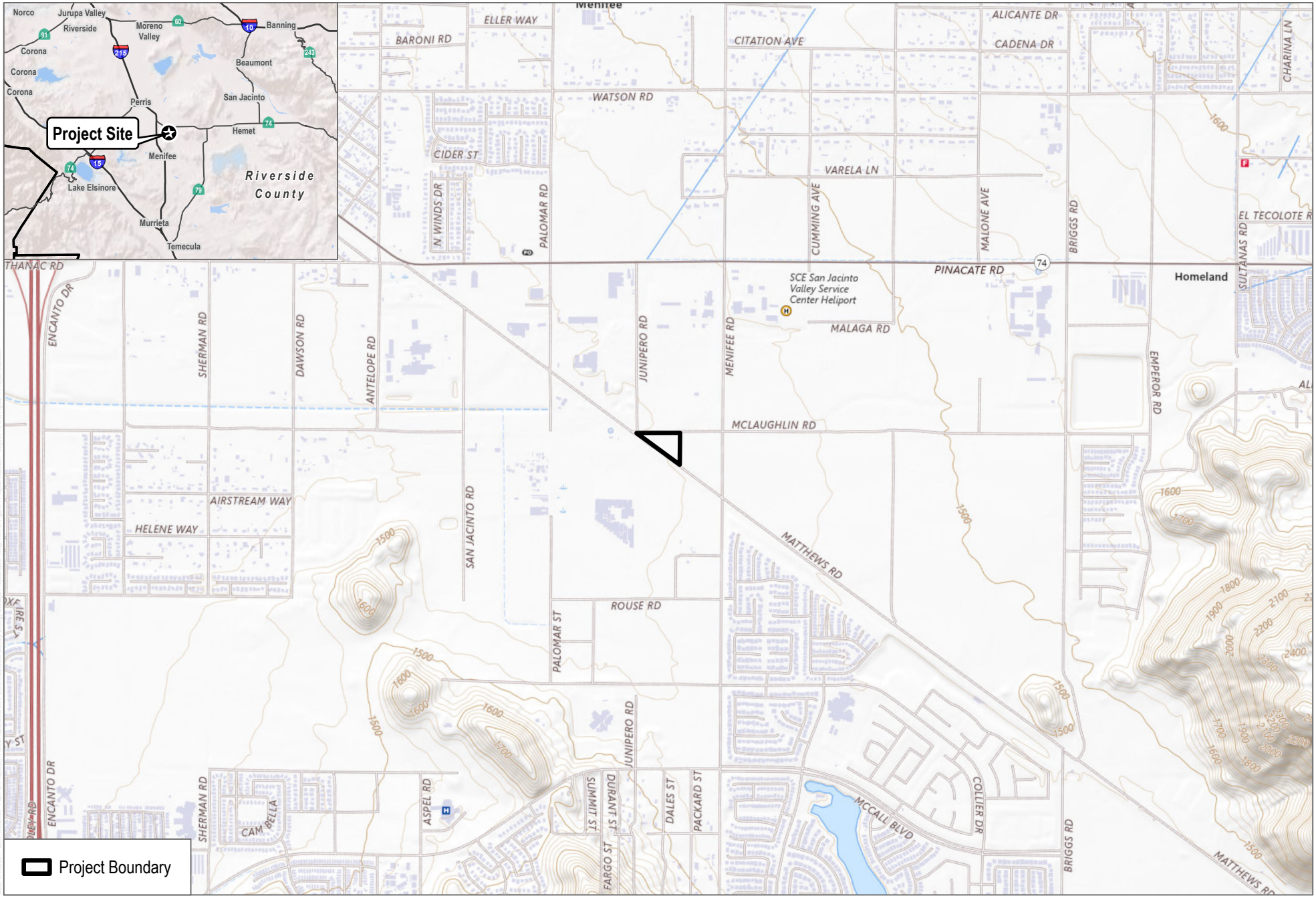
Muth, F., and A.S. Leonard. 2019. "A Neonicotinoid Pesticide Impairs Foraging, but not Learning, in Free-Flying Bumblebees." *Scientific Reports* (9) 4764.

Osborne, J.L., S.J. Clark, R.J. Morris, I.H. Williams, J.R. Riley, A.D. Smith, D.R. Reynolds, and A.S. Edwards. 1999. "A Landscape-Scale Study of Bumble Bee Foraging Range and Constancy, Using Harmonic Radar." *Journal of Applied Ecology* 36(4): 519–533.

Whitehorn, P.R., S. O'Connor, F.L. Wackers, and D. Goulson. 2012. "Neonicotinoid Pesticide Reduces Bumble Bee Colony Growth and Queen Production." *Science* 336, 351–352.

Xerces Society for Invertebrate Conservation. 2025. *Participant Handbook: California Bumble Bee Atlas.* March 2025. https://www.bumblebeeatlas.org/pages/california.

Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety. 2018. *A Petition to the State of California Fish and Game Commission to List the Crotch Bumble Bee (Bombus crotchii), Franklin's Bumble Bee (Bombus franklini), Suckley Cuckoo Bumble Bee (Bombus suckleyi), and Western Bumble Bee (Bombus occidentalis occidentalis) as Endangered under the California Endangered Species Act*. October 16, 2018. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=161902&inline.



SOURCE: USGS National Map 2024

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

Seaflower Battery Energy Storage Project

Attachment A

Blooming Species Plant Compendium

Blooming Plant Species

Eudicots

APIACEAE—CARROT FAMILY

* *Conium maculatum*—poison hemlock

ASTERACEAE—SUNFLOWER FAMILY

Baccharis salicifolia—mulefat
* *Centaurea melitensis*—Maltese star-thistle
Corethrogyne filaginifolia—sand-aster
Deinandra kelloggii—Kellogg's tarweed
Encelia farinosa—brittle bush
* *Erigeron bonariensis*—asthmaweed
Helianthus annuus—common sunflower
* *Oncosiphon pilulifer*—stinknet
Pseudognaphalium californicum—ladies' tobacco
* *Sonchus asper*—spiny sowthistle
Stephanomeria exigua—small wirelettuce

BORAGINACEAE—BORAGE FAMILY

Amsinckia menziesii—Menzies' fiddleneck
Heliotropium curassavicum—salt heliotrope

BRASSICACEAE—MUSTARD FAMILY

* *Hirschfeldia incana*—short-pod mustard

EUPHORBIACEAE—SPURGE FAMILY

Croton setiger—dove weed

FABACEAE—LEGUME FAMILY

* *Melilotus indicus*—annual yellow sweetclover

GERANIACEAE—GERANIUM FAMILY

* *Erodium cicutarium*—redstem stork's bill

HYDROPHYLLACEAE—WATERLEAF FAMILY

Emmenanthe penduliflora—whisperingbells

POLYGONACEAE—BUCKWHEAT FAMILY

* *Rumex crispus*—curly dock

SOLANACEAE—NIGHTSHADE FAMILY

Datura wrightii—sacred thorn-apple

ZYGOPHYLLACEAE—CALTROP FAMILY

* *Tribulus terrestris*—puncturevine

* signifies introduced (non-native) species

Attachment B

Photo Log

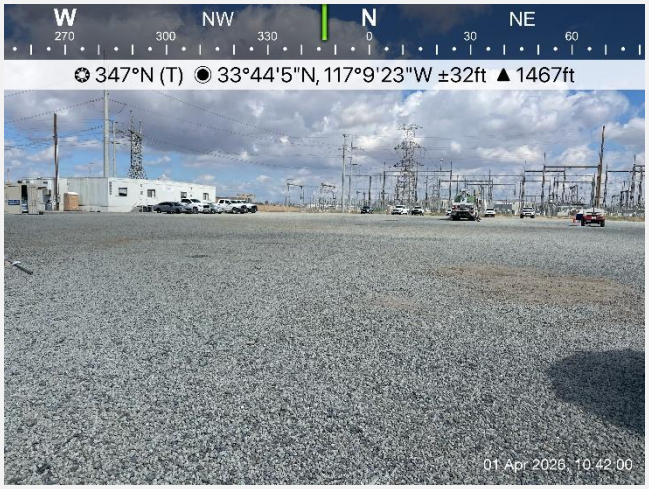


Photo 1. Representative photo of the land cover within the Project site.



Photo 2. Patch of compacted bare soil within the western portion of the Project site.



Photo 3. Floral resources within the manmade ditch in the southern portion of the Project site.



Photo 4. Representative photo of floral resources within the edges of the Project site.



Photo 5. Representative photo of potential nesting areas within the southern portion of the Project site.



Photo 6. Western honeybee (*Apis mellifera*) foraging on common sunflower (*Helianthus annuus*) within the southern portion of the Project site.



Photo 7. Green dock beetle (*Gastrophysa cyanea*) on curly dock (*Rumex crispus*) within the eastern portion of the Project site.



Photo 8. Spotted cucumber beetle (*Diabrotica undecimpunctata*) foraging on stinknet (*Oncosiphon pilulifer*) within the southern portion of the Project site.

May 28, 2026 13153.41

Britney Schopf and Bridget Canty
Seaflower Energy, LLC
5521 La Jolla Blvd
La Jolla, CA 92037

Subject: Burrowing Owl Survey Results for the Seaflower Battery Energy Storage Project, City of Menifee, California

Dear Britney Schopf and Bridget Canty,

This letter report outlines the results of focused breeding-season burrowing owl (*Athene cunicularia*; BUOW) surveys associated with the Seaflower Battery Energy Storage Project (project). The approximately 3.84-acre project site is located in the City of Menifee, Riverside County, California, and consists of Assessor's Parcel Numbers 331-250-021 and 331-250-002. The project site is located approximately 0.5 miles south of Highway 74, approximately 0.1 miles west of Menifee Road, and immediately north of Matthews Road (see Figure 1, Project Location). Representative photos of the survey area are included in Attachment A, Photo Log. The project includes development of an up to 400 megawatt-hour (MWh) outdoor utility scale energy storage system including electrical facilities, telecommunication facilities, and a generation interconnection transmission (gen-tie) line. An overhead or underground gen-tie line would be constructed to transfer power between the project site and the existing Southern California Edison (SCE) Valley Substation, located approximately 0.4 miles to the north. If installed overhead, an appropriate number of 115 kilovolt (kV) transmission structures including insulator/hardware assemblies, and appropriate number of conductor spans between the last structure and the dead-end substation structure at the SCE Valley Substation would be installed. The final alignment, pole heights, number of structures, structure types, conductor spans, and location of the gen-tie line will be finalized with detailed engineering design.

Burrowing owl is a Candidate for listing under the California Endangered Species Act and is also protected under the Migratory Bird Treaty Act (MBTA). The project site is located within the boundary of the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP). Specifically, the project site is located within the WRMSHCP Harvest Valley/Winchester Area Plan; however, the project site is not located within any Criteria Cells (see Figure 2, Western Riverside Multiple Species Habitat Conservation Plan Area).

The Burrowing Owl Survey Instructions for the WRMSHCP Plan Area (WRMSHCP Instructions) call for a two-step survey process. A burrowing owl habitat assessment is the first step (i.e., Step I) of this survey protocol. During the Step I habitat assessment, biologists walk the project site and a 150-meter buffer (where legally accessible) to identify the presence of suitable burrowing owl habitat (i.e., open habitat with low growing vegetation). If suitable burrowing owl habitat is found to occur within the project site, the second step of the survey protocol is required. The second step is broken into two parts: a Step II-A focused burrow survey and a Step II-B focused burrowing owl survey. During the Step II-A focused burrow survey, biologists are to walk transects spaced to provide 100% visual coverage of the project site and map all potentially suitable burrowing owl burrows (i.e., burrows at least 4 inches in diameter) and burrow surrogates (i.e., manmade features such as culverts, debris piles, etc.). If suitable

burrowing owl burrows or burrow surrogates are detected, then Step II-B focused burrowing owl surveys are required (RCA 2006).

A Step I habitat assessment for burrowing owl was conducted for the project site on September 4, 2024. Suitable habitat for burrowing owl was detected within the southern portion of the project site (see Attachment B, Habitat Assessment).

Given the presence of suitable burrowing owl habitat as well as potentially suitable burrows and burrow surrogates, a Step II-A focused burrow survey and Step II-B focused burrowing owl surveys were conducted in accordance with the Burrowing Owl Survey Instructions for the WRMSHCP (RCA 2006). These guidelines recommend four survey passes be conducted within the species' breeding season (March through August).

Per the WRMSHCP instructions, a Step II-A focused burrow survey was conducted concurrently with the first Step II-B focused burrowing owl survey pass. The first pass of the focused burrowing owl survey covered the entire project site with transects spaced to provide 100% visual coverage of the project site. All potentially suitable burrowing owl burrows were mapped. Suitable burrowing owl burrows and burrow surrogates were detected during this survey; therefore, three additional Step II-B focused burrowing owl surveys were conducted within areas that contained suitable burrows. The focused burrowing owl surveys included surveying for burrowing owl individuals and sign (i.e., owl pellets, molted feathers, abundant insect remains, and whitewash). All potential burrows were examined for sign. Weather conditions at the time of the survey were within protocol guidelines, and surveys were conducted under good weather conditions (i.e., no rain, high winds [>20 mph], dense fog, or temperatures exceeding 90 degrees Fahrenheit) that would permit clear detection of individuals should they occur on site. Table 1 summarizes the surveys and results.

Table 1. Burrowing Owl Surveys

Date	Staff	Environmental Conditions	BUOW and/or Burrows Observed
Step II-A Focused Burrow Survey and Concurrent Step II-B First Survey Pass: March 20, 2025			
03/20/2025	Shane Valiere	Start time: 0551, End time: 0855 Temperature: 44–63°F Cloud cover: 0%, Wind: 0–4 mph	No BUOW were observed. Three potential but inactive burrows were documented: two small mammal burrows and one culvert along Matthews Road. One of the burrows was only approximately two feet deep and unlikely to be used for nesting. No BUOW sign was observed at any of the three documented potential burrows.
Step II-B Second Survey Pass: April 4, 2025			
04/04/2025	Abby Bergsma	Start time: 0634, End time: 0829 Temperature: 41–48°F Cloud cover: 10-100%, Wind: 0–2 mph	No BUOW were observed. The three potential burrows documented on 3/20/25 were checked and no new sign was observed at any of the three burrows. Standing water was present in the culvert along Matthews Road.

Table 1. Burrowing Owl Surveys

Date	Staff	Environmental Conditions	BUOW and/or Burrows Observed
Step II-B Third Survey Pass: April 18, 2025			
04/18/2025	Abby Bergsma	Start time: 0550, End time: 0806 Temperature: 52–54°F Cloud cover: 100%, Wind: 0–2 mph	No BUOW were observed. The three previously documented potential burrows were checked and no new sign was observed at any of the three burrows. One of the burrows was observed to have fresh digging on the other end and is now open on both ends, so is unlikely to be used for nesting.
Step II-B Fourth Survey Pass: April 25, 2025			
04/25/2025	Abby Bergsma	Start time: 0544, End time: 0756 Temperature: 50–53°F Cloud cover: 70-90%, Wind: 1–3 mph	No BUOW were observed. The three previously documented potential burrows were checked and no new sign was observed at any of the three burrows. One of the burrows was observed to remain open on both ends, so is unlikely to be used for nesting.

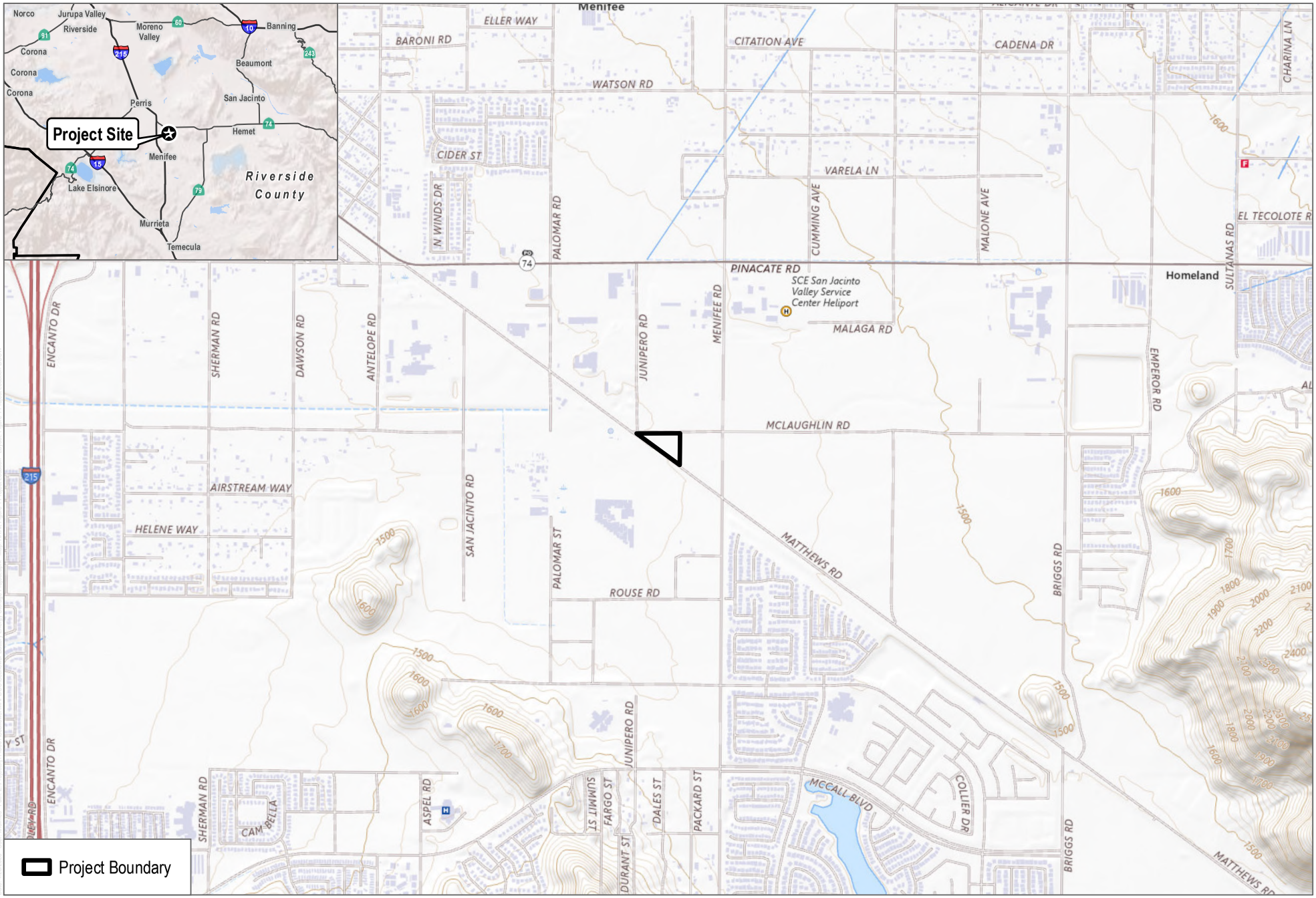
Figure 3 (Burrow Points) shows BUOW observations and suitable burrow locations. At the conclusion of the survey efforts, a total of 3 inactive burrows were documented. No live BUOW or active burrows were documented during the surveys.

Please contact me at 760.815.6813 or abergsma@dudek.com with any questions.

Sincerely,

Abby Bergsma
Biologist/Environmental Compliance Manager

Att.: *Figure 1 – Project Location*
Figure 2 – Western Riverside Multiple Species Habitat Conservation Plan Area
Figure 3 – Burrow Points
A – Photo Log
B – Habitat Assessment
cc: *Keith Carwana and Katelin Pedersen, Dudek*



SOURCE: USGS National Map 2025

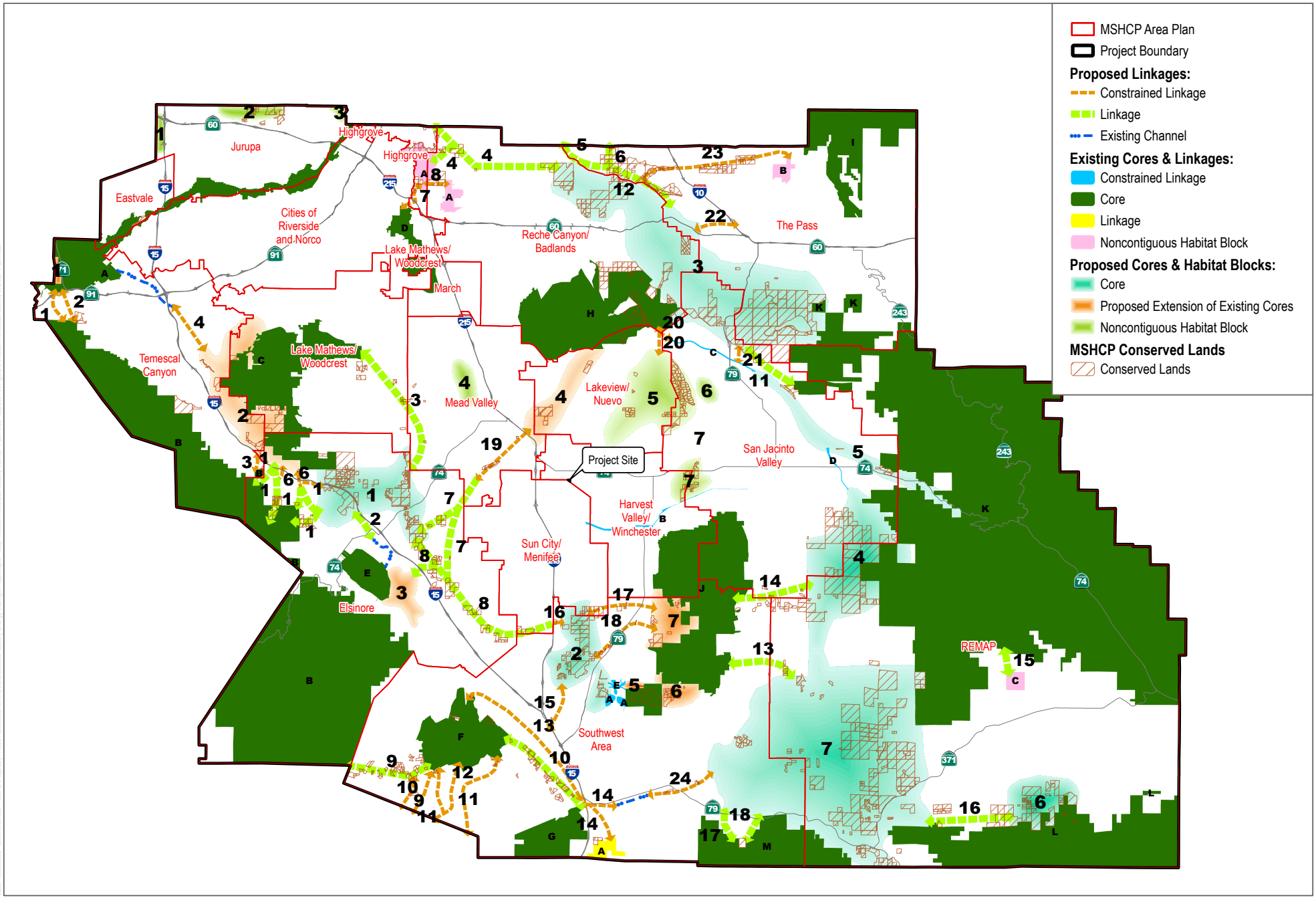
DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

Seaflower Battery Energy Storage



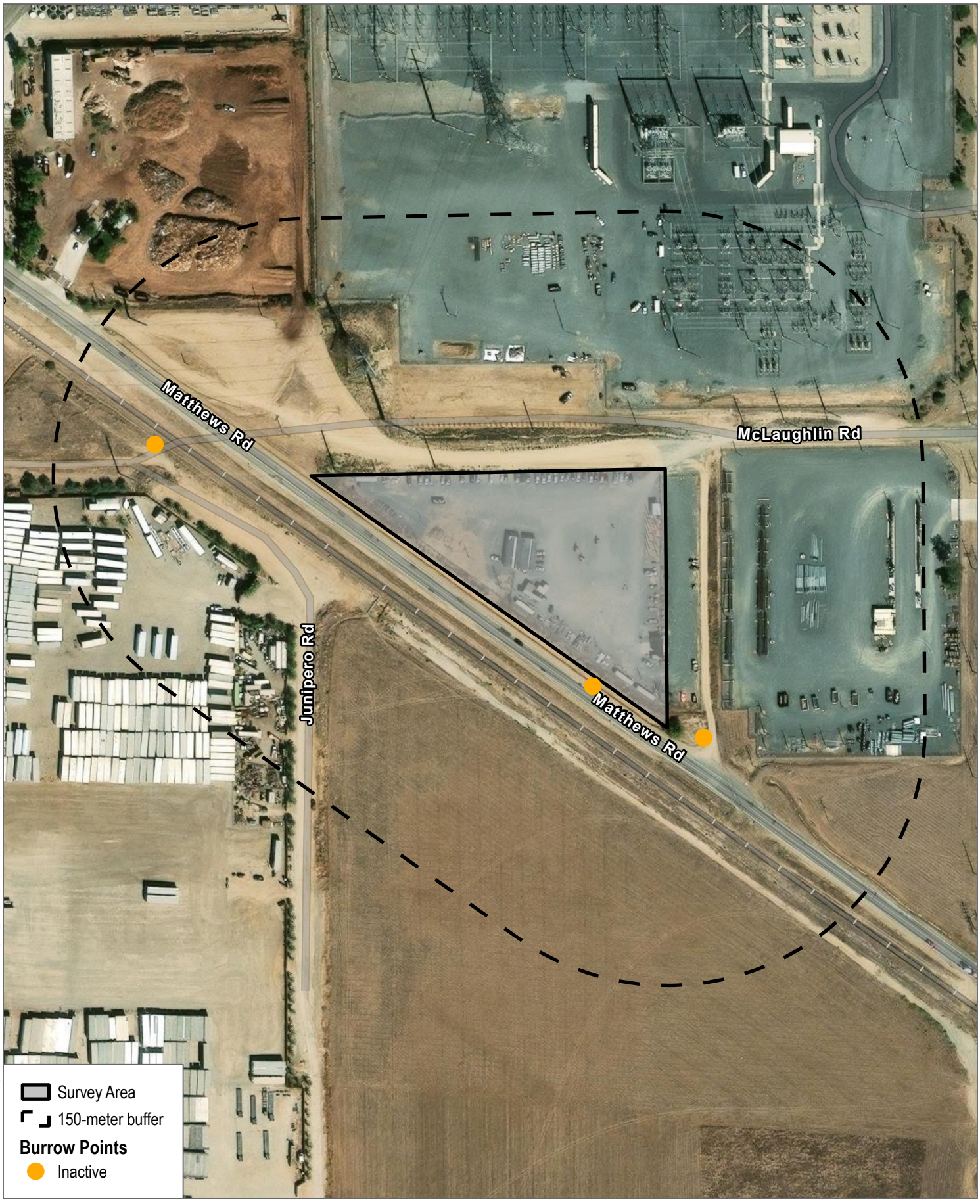
SOURCE: Western Riverside County Regional Conservation Authority 2015; County of Riverside 2015

DUDEK

FIGURE 2

Western Riverside County MSHCP Plan Area

Seaflower Battery Energy Storage Project



SOURCE: ESRI Imagery

DUDEK

0 120 240 Feet

FIGURE 3

Burrow Points

Seaflower Battery Energy Storage Project

Attachment A
Photo Log



Photo 1: Representative photograph of the surveyed area within the project site from 3/20/25.



Photo 2: Representative photograph of the surveyed area within the buffer along Matthews Road from 3/20/25.



Photo 3: Representative photograph of the surveyed area within the buffer along Matthews Road, southwest of the project site, from 3/20/25.



Photo 4: Representative photograph of the surveyed area within the buffer along McLaughlin Road, north of the project site, from 3/20/25.



Photo 5: Photograph of a small mammal burrow observed approximately 300 feet west of the project site on 3/20/25.



Photo 6: Photograph of a shallow small mammal burrow observed along Matthews Road just south of the project site on 3/20/25. The burrow is approximately two feet deep and unlikely to be used for nesting.



Photo 7: Representative photograph of the surveyed area within the buffer along Matthews Road from 4/4/25.



Photo 8: Representative photograph of the surveyed area to the east of the project site from 4/4/25.



Photo 9: Representative photograph of the surveyed area within the buffer along Matthews Road, southwest of the project site, from 4/18/25.



Photo 10: Previously documented inactive burrow along Matthews Road was found to remain inactive. No BUOW or sign observed.



Photo 11: Previously documented inactive burrow along Matthews Road was found to remain inactive on 4/18/25. Fresh digging was observed on the other end of the burrow, leaving both ends now open and unsuitable for nesting.



Photo 12: Previously documented inactive burrow along Matthews Road was found to remain inactive on 4/25/25.



Photo 13: Previously documented inactive burrow along Matthews Road was found to remain inactive on 4/25/25. The burrow remains open on both ends and is unsuitable for BUOW residence or nesting.



Photo 14: Representative photograph of the surveyed area within the buffer along McLaughlin Road, north of the project site, from 4/25/25.

Attachment B
Habitat Assessment

May 28, 2026 13153.41

Britney Schopf and Bridget Canty
Seaflower Energy, LLC
5521 La Jolla Blvd
La Jolla, CA 92037

Subject: Habitat Assessment for the Seaflower Battery Energy Storage Project, City of Menifee, California

Dear Britney Schopf and Bridget Canty,

Dudek has completed the habitat assessment for the approximately 3.84-acre Seaflower Battery Energy Storage Project (Project); consisting of Assessor Parcel Numbers 331-250-021 and 331-250-002 located in the City of Menifee, Riverside County, California (see Figure 1, Project Location; all figures are provided in Appendix A). The Project includes development of an up to 400 megawatt-hour (MWh) outdoor utility scale energy storage system including electrical facilities, telecommunication facilities, and a generation interconnection transmission (gen-tie) line. An overhead or underground gen-tie line would be constructed to transfer power between the Project site and the existing Southern California Edison (SCE) Valley Substation, located approximately 0.4 miles to the north. If installed overhead, an appropriate number of 115 kilovolt (kV) transmission structures including insulator/hardware assemblies, and appropriate number of conductor spans between the last structure and the dead-end substation structure at the SCE Valley Substation would be installed. The final alignment, pole heights, number of structures, structure types, conductor spans, and location of the gen-tie line will be finalized with detailed engineering design.

The Project area is located on privately owned land in the City of Menifee, approximately 0.50 miles south of Highway 74, west of Menifee Road, and north of Matthews Road (Figure 1). The Project site falls within the Romoland U.S. Geological Survey 7.5-minute quadrangle. The Project area spans Section 14, Township 5 South, and Range 3 West.

This report provides a description of the current site conditions per the vegetation mapping assessment and a general reconnaissance assessment of potential special-status biological resources located within the approximately 3.85-acre Project area, as well as a list of constraints and recommended future surveys. The findings presented in this report can support a potential Project design or support potential mitigation needs. Focused surveys may need to be performed at a later date.

1 Regulatory Compliance

1.1 Federal

1.1.1 Federal Endangered Species Act

The federal Endangered Species Act (ESA) (16 USC 1531 et seq.) is implemented by the U.S. Fish and Wildlife Service (USFWS) through a program that identifies and provides for protection of various species of fish, wildlife, and plants deemed to be in danger of or threatened with extinction. As part of this regulatory act, ESA provides for designation of critical habitat, defined in ESA Section 3(5)(A) as specific areas within the geographical range occupied by a species where physical or biological features "essential to the conservation of the species" are found and that "may require special management considerations or protection." Critical habitat may also include areas outside the current geographical area occupied by the species that are nonetheless "essential for the conservation of the species." The Project site does not overlap with critical habitat (USFWS 2024a, 2024b).

1.1.2 Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the Migratory Bird Treaty Act, "take" is defined as pursuing, hunting, taking, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). USFWS reviews actions that might affect these species.

1.2 State

1.2.1 California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA) (California Fish and Game Code [CFGC] Section 2050 et seq.), which prohibits the "take" of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, take is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA Section 2053 stipulates that state agencies may not approve Projects that will "jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

CFGC Sections 3511, 4700, and 5515 designate certain birds, mammals, and fish as "fully protected" species. These species may not be taken or possessed without a permit from the California Fish and Game Commission, and such take may only occur pursuant to scientific research or in connection with an authorized Natural Communities Conservation Plan. No "incidental take" of fully protected species is allowed.

CESA Sections 2080 through 2085 address the taking of threatened, endangered, or candidate species by stating, "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the Commission determines to be an endangered species or a

threatened species, or attempt any of those acts, except as otherwise provided in this chapter, the Native Plant Protection Act (CFGC Sections 1900–1913), or the California Desert Native Plants Act (Food and Agricultural Code, Section 80001)."

Section 2081(b) and (c) of the CFGC authorize take of endangered, threatened, or candidate species if take is incidental to otherwise lawful activity and if specific criteria are met. In such cases, CDFW issues the applicant an incidental take permit, which functions much like an incidental take statement in the federal context. Sections 2081(b) and (c) also require CDFW to coordinate consultations with USFWS for actions involving federally listed species that are also state-listed species. In certain circumstances, Section 2080.1 of CESA allows CDFW to adopt a federal incidental take statement or a 10(a) permit as its own, based on its findings that the federal permit adequately protects the species and is consistent with state law. As mentioned above, CDFW may not issue a Section 2081(b) incidental take permit for take of "fully protected" species. The CFGC lists the fully protected species in Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish).

1.2.2 California Fish and Game Code

Birds and Mammals

According to Sections 3511 and 4700 of the CFGC, which regulate birds and mammals, a fully protected species may not be taken or possessed. CDFW may not authorize the take of such species except (1) for necessary scientific research, (2) for the protection of livestock, and (3) when the take occurs for fully protected species within an approved Natural Communities Conservation Plan, such as the South County Multiple Species Conservation Plan.

Resident and Migratory Birds

The CFGC provides protection for wildlife species. It states that no mammals, birds, reptiles, amphibians, or fish species listed as fully protected can be "taken or possessed at any time." In addition, CDFW affords protection over the destruction of nests or eggs of native bird species (CFGC Section 3503), and it states that no birds in the orders of Falconiformes or Strigiformes (birds of prey) can be taken, possessed, or destroyed (CFGC Section 3503.5). CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock (CFGC Section 3511). Separate from federal and state designations of species, CDFW designates certain vertebrate species as Species of Special Concern based on declining population levels, limited ranges, and/or continuing threats that have made them vulnerable to extinction.

California Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (CFGC Sections 1900–1913) directed CDFW to conduct the legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare," and to protect endangered and rare plants from take. When CESA was passed in 1984, it expanded on the original NPPA, enhanced legal protection for plants, and created the categories of "threatened" and "endangered" species to parallel ESA. CESA categorized all rare animals as threatened species under CESA, but did not do so for rare plants, which resulted in three listing categories for plants in California: rare, threatened, and endangered. The NPPA

remains part of the CFGC, and mitigation measures for impacts on rare plants are specified in a formal agreement between CDFW and Project proponents.

1.2.3 California Environmental Quality Act

The California Environmental Quality Act (CEQA; California Public Resources Code, Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.) require identification of a Project's potentially significant impacts on biological resources and feasible mitigation measures and alternatives that could avoid or reduce significant impacts. CEQA Guidelines Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors" (14 CCR 15000 et seq.). A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not currently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c). CEQA also requires identification of a Project's potentially significant impacts on riparian habitats (such as wetlands, bays, estuaries, and marshes) and other sensitive natural communities, including habitats occupied by endangered, rare, and threatened species.

1.3 Regional

1.3.1 Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multijurisdictional habitat conservation plan focusing on conservation of species and their associated habitats in Western Riverside County. The MSHCP is one of several large, multijurisdictional habitat-planning efforts in Southern California with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. The MSHCP allows Riverside County and its cities, including the City of Menifee, to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal endangered species acts (County of Riverside 2003).

The MSHCP serves as a habitat conservation plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act (16 USC 1531 et seq.), as well as a Natural Communities Conservation Plan under the Natural Community Conservation Planning Act of 2001 (Fish and Game Code, Section 2800 et seq.). The MSHCP allows the participating jurisdictions to authorize "take" of plant and wildlife species identified within the Plan Area. USFWS and CDFW have authority to regulate the take of threatened, endangered, and rare species. Under the MSHCP, the wildlife agencies have granted "take authorization" for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the MSHCP conservation area, in exchange for the assembly and management of a coordinated MSHCP conservation area.

The Project site is in the MSHCP Harvest Valley/Winchester Area Plan and must comply with relevant sections of the MSHCP. The Project site is not within an MSHCP Criteria Cell (Figure 2, Western Riverside MSHCP Plan Area); therefore, no Reserve Assembly requirements would apply to the Project site. The Project site is not located within MSHCP Section 6.1.3 Narrow Endemic Species Survey Area or MSHCP Section 6.3.2 Additional Survey Needs and Procedures for Criteria Area Plant Species, Mammals, or Amphibians; therefore, additional survey requirements for these would not apply to the Project site and are not further discussed. The Project site is located within MSHCP Section 6.3.2 Additional Survey Needs and Procedures for burrowing owl (*Athene cunicularia*) which is discussed further below in Section 4.

Local Development Mitigation Fee

The Western Riverside MSHCP involves acquiring and conserving certain lands that support covered species to implement its goals and objectives and to mitigate the impacts caused by new development. A MSHCP Local Development Mitigation Fee is necessary to supplement the financing of the acquisition of lands supporting species covered by the MSHCP and to pay for new development's fair share of this cost (County of Riverside 2003). The MSHCP Local Development Mitigation Fee assists in the maintenance of biological diversity and protects vegetation communities that are known to support threatened, endangered, or sensitive populations of plant and wildlife species.

As mentioned above, the Project site is located within the Western Riverside MSHCP, but outside of a Criteria Cell. A Criteria Cell is an approximately 160-acre area overlaid onto parcels within the Western Riverside MSHCP Plan Area that has areas described for conservation. While the Project is outside of a Criteria Cell, it is covered by the Western Riverside MSHCP and the Local Development Mitigation Fee will apply. The current Local Development Mitigation Fee Schedule can be found at the link included below. The fee is charged on a per acre basis and will be administered by the City of Menifee, which is a permittee of the Western Riverside MSHCP. Battery storage facilities are not explicitly called out in the Local Development Fee Schedule, but it is anticipated that the Project will be classified as commercial or industrial development. The per acre fee for commercial and industrial development is the same cost at $20,191.00 per acre as of July 1, 2025.

https://www.wrc-rca.org/development-applications/permits-and-fees/

2 Methods

2.1 Vegetation Mapping

Vegetation communities and land covers within the Project area were mapped in the field following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018) and California Natural Community List (CDFW 2023), also referred to as the Natural Communities List, based on A Manual of California Vegetation, Online Edition (CNPS 2024a). Modifications, such as the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986; Oberbauer et al. 2008), were incorporated to accommodate the lack of conformity of the observed communities to those included in these references. Data was recorded using the ArcGIS Field Maps application over aerial base map imagery of the Project area, and a geographic information system coverage was created. Following fieldwork, remaining vegetation mapping was completed using ArcGIS on a desktop.

2.2 Pre-field Literature Review Plants and Wildlife

Prior to conducting the field investigation, a review of existing biological resources within the vicinity of the Project site was conducted using the California Natural Diversity Database (CDFW 2024a), California Native Plant Society's Online Inventory of Rare and Endangered Vascular Plants (CNPS 2024b), and USFWS Information for Planning and Consultation (USFWS 2024a) and occurrence data (USFWS 2024b). The purpose of this review was to determine if sensitive plant and wildlife species were known to occur within the Project area or in the nearby vicinity and what constraints these occurrences might have on the Project based on regional planning and guidelines. The California Natural Diversity Database and California Native Plant Society inventories were searched based on the U.S. Geological survey 7.5-minute topographic quadrangle maps for Romoland, where the Project is located, and the surrounding eight quadrangle maps: Perris, Lakeview, Winchester, Bachelor Mountain, Murrieta, Wildomar, Lake Elsinore, and Steele Peak. Additionally, Dudek reviewed U.S. Geological Survey topographic maps (1:24,000-scale), aerial photographs (Google Earth 2024; NETR 2024), the USFWS National Wetland Inventory database (USFWS 2024c), and the National Hydrography Dataset and Watershed Boundary Dataset (USGS 2024) to assess the potential for historical drainages and aquatic features to be present.

2.3 Field Survey and Conditions

On September 4, 2024, Dudek Biologist Allison Johnson conducted a general reconnaissance survey of the Project area. The survey was conducted from 7:30 a.m. to 9:30 a.m.; the temperature ranged from 88°F to 92°F; cloud cover was 0%; and wind speeds ranged from 0 mph to 2 mph. A general map of the vegetation communities within the Project area was documented, along with all wildlife and plant species observed or detected during the survey. Concurrently, a general habitat assessment was conducted for special-status species identified during the database review as having potential to occur, and an aquatic resources delineation was performed to identify potentially jurisdictional aquatic resources.

A delineation verification was conducted on April 1, 2026, by Dudek Biologist Katelin Pedersen, to refine the jurisdictional extent of aquatic features within and adjacent to the Project site. The delineation was conducted from 8:45 a.m. to 11 a.m.; temperature ranged from 62°F to 69°F; cloud cover ranged from 40% to 80%; and wind speeds ranged from 0 mph to 1 mph.

3 Results and Discussion

3.1 Soils

Two soil types are present within the Project site and are summarized in Table 1 below and shown in Figure 3, Soils.

Table 1. Summary of Soil Units in the Project Site

Soil Map Unit Name	Landform	Drainage Class	Acres	Hydric*
Exeter sandy loam, 0% to 2% percent slopes	Terraces and fans	Well drained	2.09	No

Table 1. Summary of Soil Units in the Project Site

Soil Map Unit Name	Landform	Drainage Class	Acres	Hydric*
Exeter sandy loam, 2% to 8% percent slopes, eroded	Terraces and fans	Well drained	1.76	No

Source: USDA 2024.
Note:
* Hydric soil as defined by the U.S. Department of Agriculture (i.e., formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part), if hydric conditions are present within the soil unit.

3.2 Vegetation Mapping Results

The majority of the Project site is mapped as developed land, consisting of a large, heavily compacted gravel lot used to stage trucks and large equipment, along with two trailers/temporary office units (Figure 4, Vegetation Communities and Land Covers). Although the developed portion is surfaced with compacted gravel, areas of exposed native sandy soil occur as a narrow strip of disturbed habitat along the outer edge of the Project site, primarily along the southwestern boundary. These sandy soils are consistent with the mapped Exeter sandy loam soil units described in Section 3.1. The perimeter area had recently been cleared, allowing vegetation to reestablish. Dominant species within the disturbed habitat included sacred thorn-apple (*Datura wrightii*), flatspine bur ragweed (*Ambrosia acanthicarpa*), and dove weed (*Croton setiger*), all of which are associated with disturbed soils. No naturally occurring vegetation communities are present within the Project site.

3.3 Special-Status Plant and Wildlife Species

Special-status species are those defined as covered under the MSHCP or other regulatory agency as species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened population sizes; or species recognized by local and regional resource agencies as sensitive. Below is a summary of the special-status species and their potential to occur on site as well as recommended surveys.

3.3.1 Special-Status Wildlife

Species defined as "special-status wildlife species" in this report include wildlife species listed as federal/state endangered or threatened, those proposed for listing, those candidate for listing, those fully protected by CDFW, those on the California Watch List, and California species of special concern in the context of the federal ESA and CESA. CDFW assigns Species of Special Concern status to species whose population levels are declining, have limited ranges, and/or are vulnerable to extinction due to continuing threats (CDFW 2024b). In addition, Fully Protected species are protected by CDFW, and Watch List species are candidates for higher sensitive status. USFWS assigns the Birds of Conservation Concern status to migratory and non-migratory bird species that meet the requirements of the 1988 amendment to the Fish and Wildlife Conservation Act that mandates USFWS to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973" (16 USC 1531–1544).

A total of five wildlife species were detected during the reconnaissance survey and can be found in Appendix B, Wildlife Compendium. These species include house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), mourning dove (*Zenaida macroura*), killdeer (*Charadrius vociferus*), and western fence lizard (*Sceloporus occidentalis*). No federally or state-listed special-status species were observed during the reconnaissance survey. Special-status wildlife species with potential to occur within the Project site are presented in Appendix C. Based on review of literature, data, and site conditions, four special-status wildlife species have moderate potential to occur within the study area (western spadefoot [*Spea hammondii*], Crotch's bumble bee [*Bombus crotchii*], western yellow bat [*Lasiurus xanthinus*], and pocketed free-tailed bat [*Nyctinomops femorosaccus*]). While no specific evidence was observed within the Project site indicating presence, the determination for potential to occur is based on recorded occurrences within the last 5 years and proximity to the Project site (Figure 3, CNDDB Occurrences), combined with the presence of vegetation communities and land cover types known to provide habitat to these species. The four special-status species with moderate potential to occur are addressed herein.

Western Spadefoot

The western spadefoot toad is proposed for listing as a federally threatened species and is covered under the WRMSHCP. This species is endemic to California and northern Baja California and ranges from the north end of the great Central Valley south, east of the Sierras and the deserts, into northwest Baja California (Jennings and Hayes 1994). The species is most common in grasslands with vernal pools or mixed grassland/coastal sage scrub areas. Suitable habitat for this species includes open areas with sandy or gravelly soils in a variety of habitats, including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, river floodplains, alluvial fans, playas and alkali flats (Holland and Goodman 1998). Riparian habitats with suitable water resources may also be used. The western spadefoot is almost completely terrestrial, remaining underground in burrows eight to ten months of the year and entering water only to breed when rain thresholds are met.

A drainage feature potentially suitable for breeding by this species was observed along Matthews Road, a portion of which extends into the southwestern boundary of the Project site. Although most of the Project site consists of a heavily compacted gravel lot, exposed sandy soils occur within the disturbed habitat along the site perimeter. Small mammal burrows were observed within these limited areas of exposed sandy soil. Because western spadefoot may utilize small mammal burrows and friable sandy soils for aestivation, these features could provide potential aestivation habitat; however, the burrows were not evaluated for depth, occupancy, or subsurface conditions during the reconnaissance survey. In addition, western spadefoot has been documented immediately adjacent to the Project site in 2012 (CNDDB Occurrence No. 968, CDFW 2024c). Western spadefoot is a covered species under the WRMSHCP, therefore any Project impacts to this species or its habitat would be fully covered through the payment of the Local Development Mitigation Fee.

Crotch's Bumble Bee

Crotch's bumble bee is a candidate to become a state-listed endangered species. This species is known to occur almost exclusively in California and has historically occupied grasslands and shrublands in Southern to Central California (CDFW 2019). Suitable habitat for this species may include (1) areas of grasslands and upland scrub that contain requisite habitat elements, such as small mammal burrows and forage plants; (2) potential nest habitat (late February through late October) containing underground abandoned small mammal burrows, perennial bunch

grasses, and/or thatched annual grasses, brush piles, old bird nests, dead trees, or hollow logs (Williams et al. 2014; Hatfield et al. 2015); and (3) overwintering sites (November through early February).

The Project site has potential to support Crotch's bumble bee given that the host plant, *Heliotropium curassavicum*, was observed on site (Appendix B). The presence of burrows along the perimeter of the Project site may offer potential nesting habitat, as Crotch's bumble bee typically nests underground in abandoned burrows or similar cavities. Furthermore, the site is located within the known geographic range of this species and is in close proximity to grassland habitat that is consistent with documented occurrences.

Given that the Project site is primarily a heavily disturbed gravel lot with imported materials with only limited areas of native soil supporting small mammal burrows and sparse floral resources along the boundary, it is not expected to support Crotch's bumble bee. However, the Project will conduct a pre-construction nest survey to confirm the absence prior to ground-disturbing activities.

The pre-construction survey for Crotch's bumble bee shall be conducted within the construction footprint prior to the start of ground-disturbing construction activities occurring during the colony active period (April 1 through August 31 for Crotch's bumble bee). If ground-disturbing activities occur outside the period, no further mitigation would be required. The survey shall ensure that no nests for Crotch's bumble bee are located within the construction area.

The focused survey shall be performed by a biologist with expertise in surveying for bumble bees. Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling) and surveyors shall wait at least 1 hour following rain. Optimal surveys are when there are sunny to partly sunny skies and a temperature greater than 60°F. Surveys may be conducted earlier if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the potential nest resources for up to 5 minutes, looking for exiting or entering worker bumble bees. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point, but this limit shall not exceed 50 feet. The biologist will reduce the 50-foot limit as necessary to ensure 100% visual coverage of potential burrow resources depending on topography, vegetation height and cover, and other factors. This approach should allow the biologist to assess multiple burrows at one time to sufficiently determine if bees are entering/exiting them. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). A photo voucher of the bee species shall be collected, and the location mapped. If required, any capture of bumble bees will be conducted by a biologist with a valid CESA Memorandum of Understanding (MOU) and Scientific Collecting Permit (SCP) for Crotch's bumble bee. If a bumble bee worker is detected, then a representative shall be identified to species.

If Crotch's bumble bee nests are not detected, no further mitigation would be required.

If a Crotch's bumble bee nest is detected, the Project biologist will establish, monitor, and maintain a no-work buffer around the nest. The size and configuration of the no-work buffer will be based on best professional judgement of the Project biologist in consultation with CDFW. The buffer will provide at least 50 feet of clearance around the nest entrance(s). Construction activities will not occur within the no-work buffer until the colony is no longer active. To determine that a nest is no longer active, the nest will be observed for a minimum of 60 minutes each day across

a minimum of 3 days during suitable flight weather (i.e., ambient air temperature between 60- and 90-degrees Fahrenheit, winds under 10 mph, and no precipitation more than a drizzling rain). If no bees are seen flying in or out of the nest by the end of the observation period, it will be determined that the nest is no longer active. If Project activities occur outside of the Colony Active Period, then pre-construction surveys for active bee nests and avoidance measures are not required.

A written survey report shall be submitted to the City within 30 days of the pre-construction survey. The report shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and a detailed habitat assessment. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report.

If the above measures are followed, it is assumed that the Project shall not need to obtain authorization from CDFW through the CESA Incidental Take Permit process. If the nest resources cannot be avoided, as outlined in this measure, the Project applicant shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this habitat assessment report and shall be incorporated into the habitat mitigation and monitoring plan.

In the event an Incidental Take Permit is needed, mitigation for direct impacts to Crotch's bumble bee shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, and lands are conserved separately, a cost estimate shall be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a Project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record shall take into account all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development.

Western Yellow Bat and Pocketed Free-Tailed Bat

Western yellow bat and pocketed free-tailed bat have moderate potential to occur on the Project site due to the presence of several semi-permanent structures (e.g., trailers and temporary office units) and Mexican fan palm (*Washingtonia robusta*), which are known to provide suitable roosting habitat for these species.

Western yellow bats are closely associated with palm trees, particularly fan palms, which offer dense frond layers that mimic the structure of natural roosts. These trees provide shelter from predators and temperature extremes, making them ideal day roosts. In urban and semi-urban environments, western yellow bats have also been documented roosting in man-made structures that offer similar protective features, such as overhangs, eaves, and crevices.

Pocketed free-tailed bats typically roost in rock crevices and cliff faces, but they are also known to adapt to anthropogenic structures such as buildings, bridges, and tunnels. The semi-permanent structures on site may offer narrow gaps, cavities, or sheltered spaces that resemble their natural roosting preferences. These bats are highly mobile and capable of exploiting a variety of roosting substrates, especially in areas where natural features are limited.

Due to the moderate potential for these species to occur on site, a pre-construction bat survey is recommended to assess the presence or absence of roosting individuals prior to the removal of potentially suitable roosting habitat (palm trees and semi-permanent structures) or the initiation of ground-disturbing activities. A qualified biologist shall conduct a pre-construction survey to determine whether potential roosting sites for bats are occupied. The survey will include visual inspection of palm fronds and structures for signs of bat occupancy, such as urine staining, bat guano, or direct observation of individuals. The survey should be conducted during the active season (mid-March through late October) when bats are most likely to occupy roosts.

If roosting bats are detected, a Bat Monitoring and Management Plan shall be prepared and approved by CDFW prior to any disturbance. The plan will outline exclusion methods, timing, and procedures to avoid mortality. If no roosting bat species are found, tree/structure removal procedures and ground disturbing activities can proceed without additional measures.

Nesting Birds

The Project site contains suitable nesting habitat, including existing buildings and equipment, for migratory bird species acclimated to disturbed sites. Native nesting birds are protected under the Migratory Bird Treaty Act, and compliance with these regulations is required. Removal of vegetation considered suitable for nests has the potential to impact these species. Additionally, indirect impacts to nesting birds from short-term, construction-related noise could result in decreased reproductive success or abandonment of an area used for nesting if construction is conducted during the nesting season (i.e., February through August).

Focused Surveys for Special-Status Bird Species

Burrowing owls have low potential to occupy the site in the future, primarily due to the site's current condition and land use. The Project site is almost entirely a gravel lot actively used for staging trucks and equipment, which results in frequent human disturbance, compacted substrate, and a lack of suitable vegetation or open ground typically required for nesting and foraging. These conditions significantly reduce the likelihood of burrowing owl presences, as the species prefers open, sparsely vegetated areas such as grasslands, agricultural fields, and disturbed lands with minimal human activity.

However, the presence of culverts adjacent to the site introduces a limited potential for occupancy, as burrowing owls are known to use artificial structures for nesting or shelter when natural burrows are unavailable. These features may mimic the structural characteristics of natural burrows, especially if they are surrounded by open habitat and have low levels of disturbance. Given this context, and to ensure compliance with the WRMSHCP burrowing owl survey requirements (RCA 2006), the following actions are necessary:

- A focused breeding season survey (March 1 through August 31) must be conducted to determine if burrowing owls are present or using the site or adjacent areas.

- The survey must include a pedestrian walk-through of the entire Project site and a 150-meter buffer zone, with transects spaced no more than 30 meters to allow 100% visual coverage.
- All natural burrows and suitable human-made structures must be documented, and follow-up focused surveys must be conducted if any are found.
- If no suitable burrows or structures are present, additional focused breeding surveys will not be required.
- Regardless of breeding season survey results, a pre-construction take avoidance survey must be completed within 30 days prior to ground disturbance to confirm the absence of burrowing owls.

3.3.2 Special-Status Plants

Endangered, rare, or threatened plant species, as defined in CEQA Guidelines Section 15380(b) (14 CCR 15000 et seq.), are referred to as "special-status plant species" in this report and include (1) endangered or threatened plant species recognized in the context of CESA and ESA and (2) plant species with a California Rare Plant Rank of 1 or 2 (CNPS 2024c).

A list of all special-status plant species with their habitat requirements and potential to occur at the Project site was generated as part of the literature review (Appendix E). The list also provides evaluations for each of the special-status species' occurrence in the vicinity of the Project site and its potential to occur based on known geographic range, habitat associations, preferred soil substrate, life form, elevation, and blooming period. No special-status plants were observed during the biological reconnaissance survey. Based on a review of the potential species to occur within the region, the habitat conditions identified for the Project site and the results of the reconnaissance survey, no special-status plant species have potential to occur within the Project site.

A total of 16 species of native or naturalized plants, 10 native (63%) and 6 non-native (38%), were recorded on site (see Appendix D, Plant Compendium).

3.4 Aquatic Resources

The aquatic resources delineation identified one constructed drainage ditch located along Matthews Road, a portion of which lies within the southwestern boundary of the Project site. The drainage ditch originates at a culvert under Menifee Road approximately 700 feet to the southeast, and flows northwest along Matthews Road past the Project site, turning into sheet flow approximately 500 feet northwest of the Project site.

The drainage ditch is an unpaved, man-made, feature excavated entirely within upland and appears to have been constructed to convey agricultural and stormwater runoff from adjacent developed and disturbed lands.

The ditch was dry during both delineation efforts (September 4, 2024, and April 1, 2026) and exhibits ephemeral hydrology, conveying surface flow only during and immediately following precipitation events. No evidence of sustained or relatively permanent flow was observed during either site visit.

Ordinary high water mark (OHWM) indicators included a bed and bank, a break in slope, a natural line impressed on the bank, changes in the character of soil, vegetation matted down, bent, or absent, sediment sorting, scour, deposition, and a change in plant community and/or cover.

Soils within the ditch and adjacent Project site consist of Exeter sandy loam (0–2 percent slopes and 2–8 percent slopes, eroded), which are well-drained, nonhydric soils. Vegetation within and adjacent to the ditch is dominated by disturbance-associated upland species and nonnative species. Upland vegetation included sacred thorn-apple (*Datura wrightii*) (upland [UPL]), dove weed (*Croton setiger*) (UPL) and Canadian horseweed *(Erigeron canadensis*) (facultative upland [FACU]). Bank vegetation included flatspine bur ragweed (*Ambrosia acanthicarpa) (*UPL), Washington fan palm *(Washingtonia robusta) (*facultative wet [FACW]) and salt heliotrope (*Heliotropium curassavicum*) (FACU).

The ditch does not appear to have a relatively permanent, continuous surface connection to a Traditional Navigable Water or other waters of the United States or state. The feature does not support wetland hydrology, hydrophytic vegetation, or hydric soils and does not provide aquatic or riparian habitat. Therefore, the drainage ditch is anticipated to be excluded from USACE jurisdiction under Section 404 of the Clean Water Act pursuant to 33 CFR Section 328.3(b)(3). The drainage ditch may be regulated by the RWQCB and/or the CDFW under applicable state definitions and procedures. These findings are preliminary and subject to verification by the appropriate regulatory agencies.

4 Western Riverside County MSHCP Consistency Analysis

The Project site is in the MSHCP Harvest Valley/Winchester Area Plan and must comply with relevant sections of the MSHCP. The Project site is not located within MSHCP Section 6.1.3 Narrow Endemic Species Survey Area or MSHCP Section 6.3.2 Additional Survey Needs and Procedures for Criteria Area Plant Species, Mammals, or Amphibians; therefore, additional survey requirements for these would not apply to the Project site and are not further discussed. The Project's compliance with the relevant sections of the MSHCP is discussed below.

4.1 MSHCP Section 6.1.2 Riparian/Riverine Resources and Vernal Pools

The identification of Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) riparian/riverine resources is based on the potential for the habitat to support, or be a tributary to habitat that supports, WRMSHCP riparian/riverine Covered Species. WRMSHCP riparian/riverine Covered Species are identified in the WRMSHCP Section 6.1.2. The WRMSHCP defines riparian/riverine habitat as "lands which contain Habitat dominated by [trees], shrubs, persistent emergent, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year" (County of Riverside 2003). The WRMSHCP further clarifies those areas "demonstrating characteristics as described above which are artificially created are not included in these definitions" (County of Riverside 2003).

The WRMSHCP defines vernal pools as "seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season" (County of Riverside 2003). Artificially created wetlands, except for those created intentionally to provide habitat or resulting from the creation of open waters or alteration of natural stream courses, are not considered WRMSHCP vernal pools.

The WRMSHCP defines suitable fairy shrimp habitat as "stock ponds, ephemeral pools and other features…as determined appropriate by a qualified biologist" for Riverside fairy shrimp (*Streptocephalus woottoni*), vernal pool fair shrimp (*Branchinecta lynchi*), and Santa Rosa fairy shrimp (*Linderiella santarosae*) (County of Riverside 2003).

4.1.1 Riparian/Riverine Resources

As discussed in Section 3.4, Aquatic Resources, of this memorandum, an updated aquatic resources delineation found that a portion of the drainage ditch located along Matthews Road is within the southwestern boundary of the Project site (Figure 4). No other aquatic resources were observed within, nor immediately adjacent to, the Project site.

The drainage ditch does not meet the definition of a riparian/riverine resource under Section 6.1.2 of the WRMSHCP. The WRMSHCP defines riparian/riverine resources as lands that support habitat dominated by trees, shrubs, or persistent emergent vegetation dependent on a freshwater source, and further clarifies that artificially created features are excluded unless they were constructed for the purpose of providing wetland habitat, creating open waters, or resulted from the alteration of a natural stream course (County of Riverside 2003).

The drainage ditch is a man-made feature excavated in uplands and was likely constructed to convey agricultural and stormwater runoff associated with adjacent roadway and land uses. The feature is ephemeral, conveying flow only during and immediately following storm events, and does not support native riparian or wetland vegetation, aquatic habitat, or ecological functions characteristic of natural riparian or riverine systems. Soils within the ditch consist of non-hydric upland soil types, and vegetation within and adjacent to the ditch is dominated by disturbance-associated and non-native upland species.

On the south-southeastern boundary of the Project site, a single individual of Goodding's willow (*Salix gooddingii*) is present. Although *Salix gooddingii* is a riparian-associated species, this isolated individual does not constitute riparian habitat as defined by the WRMSHCP. The tree lacks an associated native riparian understory, persistent freshwater source, or canopy structure indicative of a riparian-dominated habitat and therefore does not meet the criteria for a riparian/riverine resource subject to Section 6.1.2.

Based on the artificial origin, upland setting, episodic hydrology, absence of riparian vegetation, and lack of ecological functions associated with natural stream systems, impacts to the drainage ditch would not constitute impacts to WRMSHCP riparian/riverine resources, and preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) is not warranted.

4.1.2 Riparian Birds

The Project site consists predominantly of developed land, with a narrow strip of disturbed habitat along the site perimeter and does not support suitable riparian habitat for WRMSHCP riparian bird species. A man-made drainage ditch is located adjacent to the Project site, and a single Goodding's willow occurs outside the southernmost corner of the site. These features do not provide suitable riparian habitat for least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), or yellow-billed cuckoo (*Coccyzus americanus*). The isolated Goodding's willow lacks the understory and closed-canopy structure required by these species. No other trees or shrubs within or immediately adjacent to the Project site provide comparable riparian structure. In addition, the Project site is surrounded by developed lands to the north, east, and west and by agricultural lands consisting

of maintained non-native grasses (i.e., turf) to the south. Therefore, suitable riparian vegetation is absent from the Project site and immediate vicinity, and protocol surveys are not warranted.

4.1.3 Vernal Pools

The WRMSHCP defines vernal pools as the following (County of Riverside 2003):

> [S]easonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records.

WRMSHCP further clarifies, "With the exception of wetlands created for the purpose of providing wetlands Habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions" (County of Riverside 2003).

The Project site does not contain any areas with indicators of all three wetland/vernal pool parameters (soils, vegetation, and hydrology), nor were any vernal pool indicator species observed (Appendix B). Furthermore, the Project site contains well-draining soils (i.e., Exeter sandy loam, 0% to 2% slopes and 2% to 8% slopes, eroded), which are not associated with vernal pool habitat (Figure 5). Additionally, a review of aerial imagery of the Project site did not reveal any inundation or pooling water (Google Earth 2024; NETR 2024). Finally, the majority of the Project site is comprised of a highly disturbed and heavily compacted gravel lot where various trucks and large equipment are parked/staged along with two trailer/temporary office units. As such, there are no vernal pools located within the Project site.

4.1.4 Fairy Shrimp Habitat

In addition to vernal pools, fairy shrimp habitat also includes ephemeral pools and other features such as road ruts or stock ponds. No indicators of ephemeral pools, depressions, or road ruts capable of holding water long enough to support WRMSHCP fairy shrimp were observed within the Project site during the habitat assessment. The Project site does not contain any stock ponds or other features where water could pool. In addition, as discussed above related to vernal pools, the soils present within the Project site (i.e., Exeter sandy loam, 0% to 2% slopes and 2% to 8% slopes, eroded) are well-draining soils. As such, it is unlikely the Project site would hold water for prolonged periods of time to support WRMSHCP fairy shrimp species. Furthermore, a review of historical aerial imagery of the Project site did not reveal any evidence of ponding, moist soils, inundation, or pooling water within the Project site

(Google Earth 2024; NETR 2024). Therefore, the Project site lacks suitable fairy shrimp habitat, and focused surveys are not warranted.

4.2 MSHCP Section 6.3.2 Additional Survey Area Needs and Procedures

Section 6.3.2 of the MSHCP establishes habitat assessment requirements for certain species of plants, birds, mammals, and amphibians. The Project site is in a required habitat assessment area for burrowing owl. As discussed above under Section 3.3.1, Special-Status Wildlife, of this report, the Step I habitat assessment did identify potential burrowing owl habitat, including disturbed land and suitable human made structures (culverts). As such, Step II (focused surveys, census, and mapping) will be required in accordance with the Burrowing Owl Survey Instructions for the MSHCP Area (RCA 2006).

5 Summary and Conclusions

Based on the results of the biological reconnaissance survey, literature review, vegetation mapping, and aquatic resources delineation, the Project site consists predominantly of developed land, with a narrow strip of disturbed habitat along the site perimeter. The site does not support naturally occurring vegetation communities or sensitive natural communities. No federally or state-listed plant or wildlife species were observed during the reconnaissance survey, and no special-status plant species were determined to have potential to occur within the Project site.

Four special-status wildlife species (western spadefoot, Crotch's bumble bee, western yellow bat, and pocketed free-tailed bat) were determined to have moderate potential to occur within the Project site (see Appendix C). Although burrowing owls were determined to have a low potential to occur due to the site's current condition and land use, the artificial structures adjacent to the Project site introduce a potential for occupancy, as burrowing owls could use these for potential nesting and sheltering habitat. To avoid impacts to sensitive species, Dudek recommends implementing several pre-construction measures. A focused breeding season survey for burrowing owl should be conducted to determine if burrowing owls are present or using the site or adjacent areas, and regardless of results, a pre-construction take avoidance survey should occur within 30 days prior to ground disturbance to confirm absence. In addition, a pre-construction nest survey for Crotch's bumble bee should be conducted within the construction footprint prior to ground-disturbing activities occurring during the colony active period (April 1 through August 31). If nests are detected, avoidance buffers will be established and coordination with CDFW will occur regarding potential incidental take authorization. Similarly, prior to removal of palm trees or structures, a qualified biologist will conduct a pre-construction survey to determine whether potential bat roosting sites are occupied. If roosting bats are detected, a Bat Monitoring and Management Plan will be prepared and approved by CDFW prior to disturbance. Finally, Dudek recommends a general nesting bird survey if vegetation removal or ground disturbance will occur during the nesting season (February through August).

Western spadefoot is a Covered Species under the Western Riverside County MSHCP. Accordingly, any Project-related impacts to western spadefoot or its habitat would be fully mitigated through payment of the MSHCP Local Development Mitigation Fee, and no separate species-specific mitigation is required.

One constructed drainage ditch located along Matthews Road was identified during the general reconnaissance survey in September 2024 and re-evaluated in April 2026 to refine the jurisdictional extent of the drainage feature. The drainage ditch is a man-made, upland feature that is ephemeral, lacks riparian or wetland vegetation, does not support aquatic habitat, and does not provide ecological functions associated with natural riparian or riverine systems. As such, the drainage ditch does not meet the definition of a riparian/riverine resource under Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) Section 6.1.2, and impacts to the feature would not constitute impacts to MSHCP riparian/riverine resources. The ditch is not anticipated to meet the current definition of a waters of the U.S. regulated by USACE, but may be regulated by RWQCB and/or CDFW.

Although no riparian/riverine resources subject to WRMSHCP Section 6.1.2 are present within the Project site, the Project will implement the Urban/Wildlands Interface Guidelines contained in WRMSHCP Section 6.1.4 to minimize the potential for indirect effects to adjacent biological resources during construction and operation. Implementation of the measures outlined above will ensure that the Project avoids or minimizes impacts to special-status wildlife species and complies with applicable federal and state regulations, including the Migratory Bird Treaty Act, California Endangered Species Act, and Western Riverside County MSHCP requirements.

Please reach out with any questions or concerns regarding the contents of this report.

Sincerely,

Michelle Leis

Michelle Leis
Biologist

App.: *A, Figures*
B, Wildlife Compendium
C, Special-Status Wildlife Species Potential to Occur
D, Plant Compendium
E, Special-Status Plant Species Potential to Occur
F, Photo Log
cc: *Keith Carwana and Katelin Pedersen, Dudek*

6 References

CDFW (California Department of Fish and Wildlife). 2018. "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." March 20, 2018. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline.

CDFW (California Department of Fish and Wildlife). 2019. *Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered under the California Endangered Species Act*. April 4, 2019. Accessed October 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=166804&inline.

CDFW. 2023. "California Natural Community List." June 1, 2023. Accessed July 2024. https://nrm.dfg.ca.gov

CDFW. 2024a. California Natural Diversity Database (CNDDB). RareFind, Version 5.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Accessed September 2024. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data.

CDFW. 2024b. "Special Animals List." California Natural Diversity Database (CNDDB). Sacramento, California: CDFW, Biographic Data Branch. June 28, 2024. Accessed September 11, 2024. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline=1.

CDFW. 2024c. California Natural Diversity Database (CNDDB), RareFind 5. Occurrence Record No. 968. Sacramento, California: CDFW Biogeographic Data Branch. Accessed September 2025.

CNPS (California Native Plant Society). 2024a. *Manual of California Vegetation, Online Edition.* California Native Plant Society, Sacramento, California. Accessed September 2024. https://vegetation.cnps.org/

CNPS. 2024b. *Inventory of Rare and Endangered Plants* (online ed., v-9.5). Sacramento: CNPS, Rare Plant Program. Accessed September 2024. https://www.rareplants.cnps.org.

CNPS. 2024c. *California Rare Plant Ranks*. Accessed September 2024. https://www.cnps.org/rare-plants/california-rare-plant-ranks.

County of Riverside. 2003. *Western Riverside County Multiple Species Habitat Conservation Plan*. Riverside, California: County of Riverside, Transportation and Land Management Agency, Riverside County Integrated Project. Adopted June 17, 2003. Accessed September 2024. https://www.wrc-rca.org/Permit_Docs/MSHCP/MSHCP-Volume%201.pdf.

Google Earth. 2024. Aerials centered on the Project site. Accessed November 2024. https://www.google.com/earth/.

Hatfield, R., S. Colla, S. Jepsen, L. Richardson, R. Thorp, and S.F. Jordan. 2015. *IUCN Assessments for North American Bombus spp.* The Xerces Society for Invertebrate Conservation, Portland, Oregon. Updated March 2, 2015.

Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Nongame-Heritage Program, California Department of Fish and Game. October 1986.

Holland, Dan C., and Robert H. Goodman. 1998. "Western Spadefoot (*Spea hammondii*) Status and Distribution". California Department of Fish and Game, Inland Fisheries Division.

Jennings, Mark R., and Marc P. Hayes. 1994. "Amphibian and Reptile Species of Special Concern in California". California Department of Fish and Game, Inland Fisheries Division.

NETR (Nationwide Environmental Title Research). 2024. Historic aerials of the Project site [online viewer]. Accessed August 2024. https://www.historicaerials.com/viewer.

Oberbauer, T., M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County*. March 2008. Accessed July 2024.

RCA (Regional Conservation Authority of Western Riverside County). 2006. "Burrowing Owl Survey Instructions For the Western Riverside Multiple Species Habitat Conservation Plan Area." March 29, 2006. Accessed September 2024. https://www.wrc-rca.org/species/survey_protocols/burrowing_owl_survey_instructions.pdf.

USDA (U.S. Department of Agriculture). 2024. *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils, Version 8.2, 2024*. Edited by L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz. USDA, Natural Resources Conservation Service, in cooperation with the National Technical Committee for Hydric Soils. https://www.nrcs.usda.gov/resources/guides-and-instructions/field-indicators-of-hydric-soils.

USFWS (U.S. Fish and Wildlife Service). 2024a. "Information for Planning and Consultation". Accessed September 2024. https://ipac.ecosphere.fws.gov/.

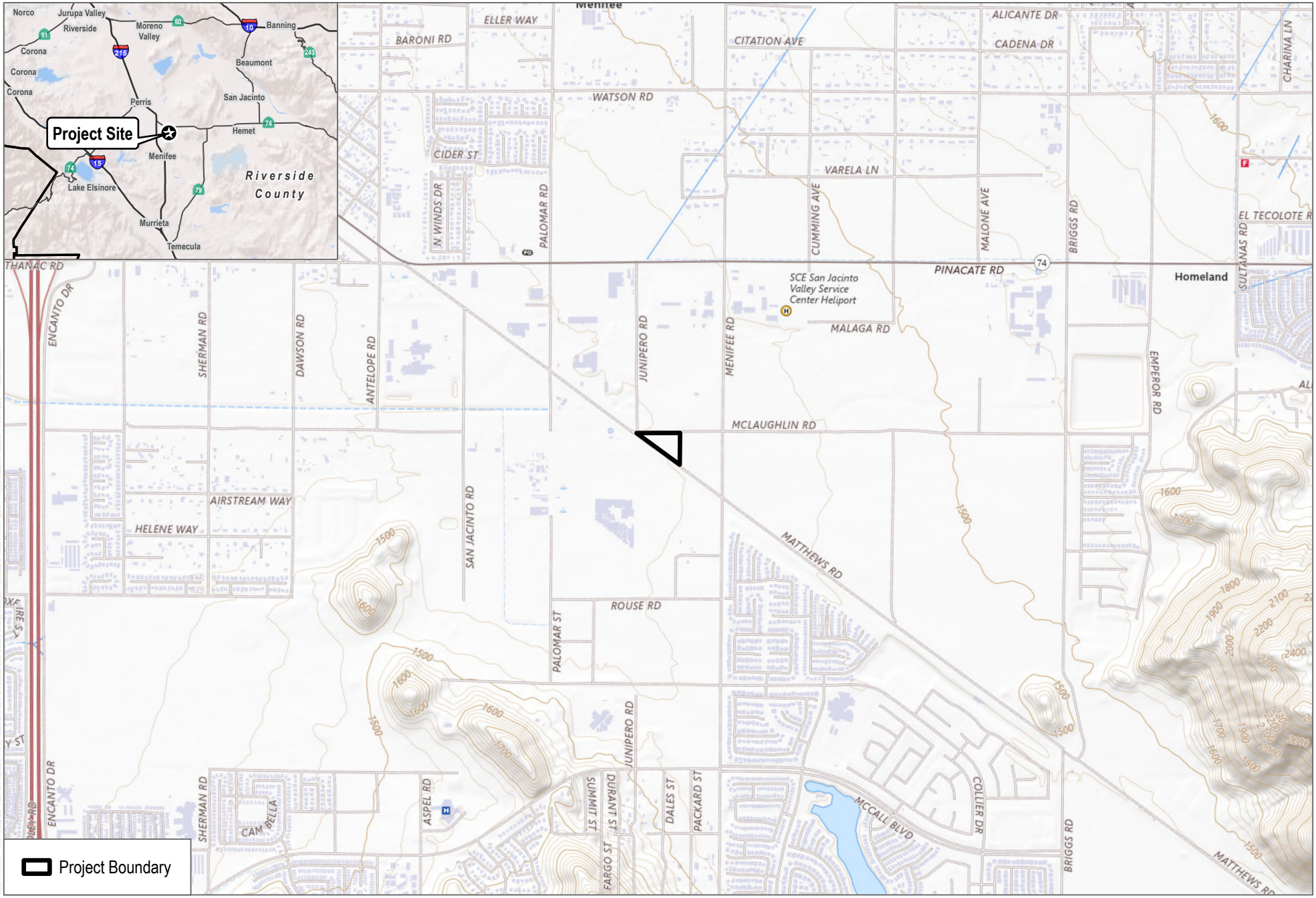
USFWS. 2024b. "Critical Habitat and Occurrence Data" [map]. Accessed September 2024. http://www.fws.gov/data.

USFWS. 2024c. "National Wetlands Inventory" [map]. U.S. Department of the Interior. Accessed September 2024. https://www.fws.gov/program/national-wetlands-inventory

USGS (U.S. Geological Survey). 2024. "National Hydrography and Watershed Boundary Dataset" [online database]. USGS National Hydrography Products. Accessed September 2024. https://www.usgs.gov/core-science-systems/ngp/national-hydrography/watershed-boundary-dataset?qt-science_support_page_related_con=4#qt-science_support_page_related_con.

Williams, P.H., R.W. Thorp, L.L. Richardson, and S.R. Colla. 2014. *Bumble Bees of North America: An Identification Guide*. Princeton, New Jersey: Princeton University Press.

Appendix A
Figures



SOURCE: USGS National Map 2024

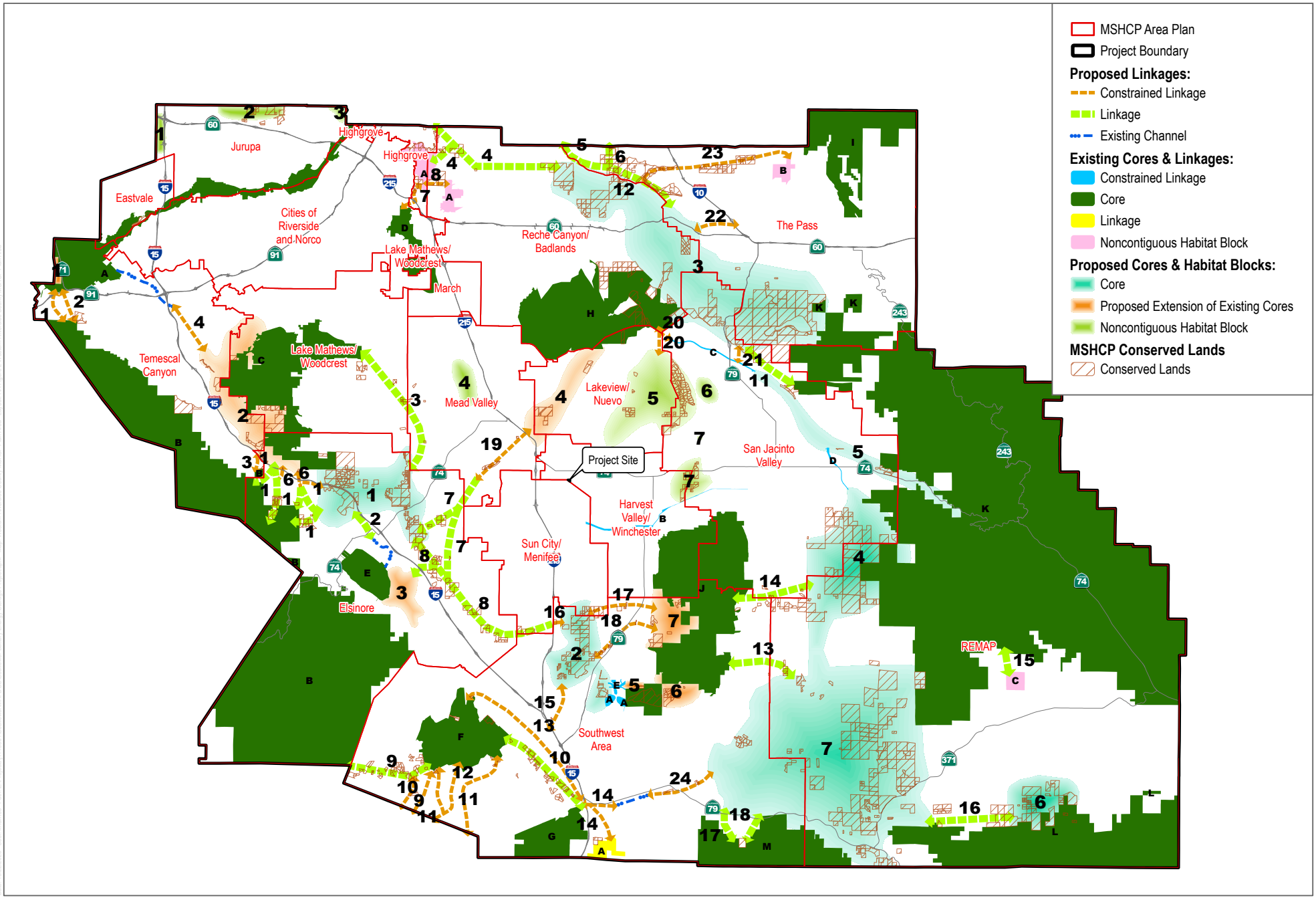
DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

Seaflower Battery Energy Storage Project



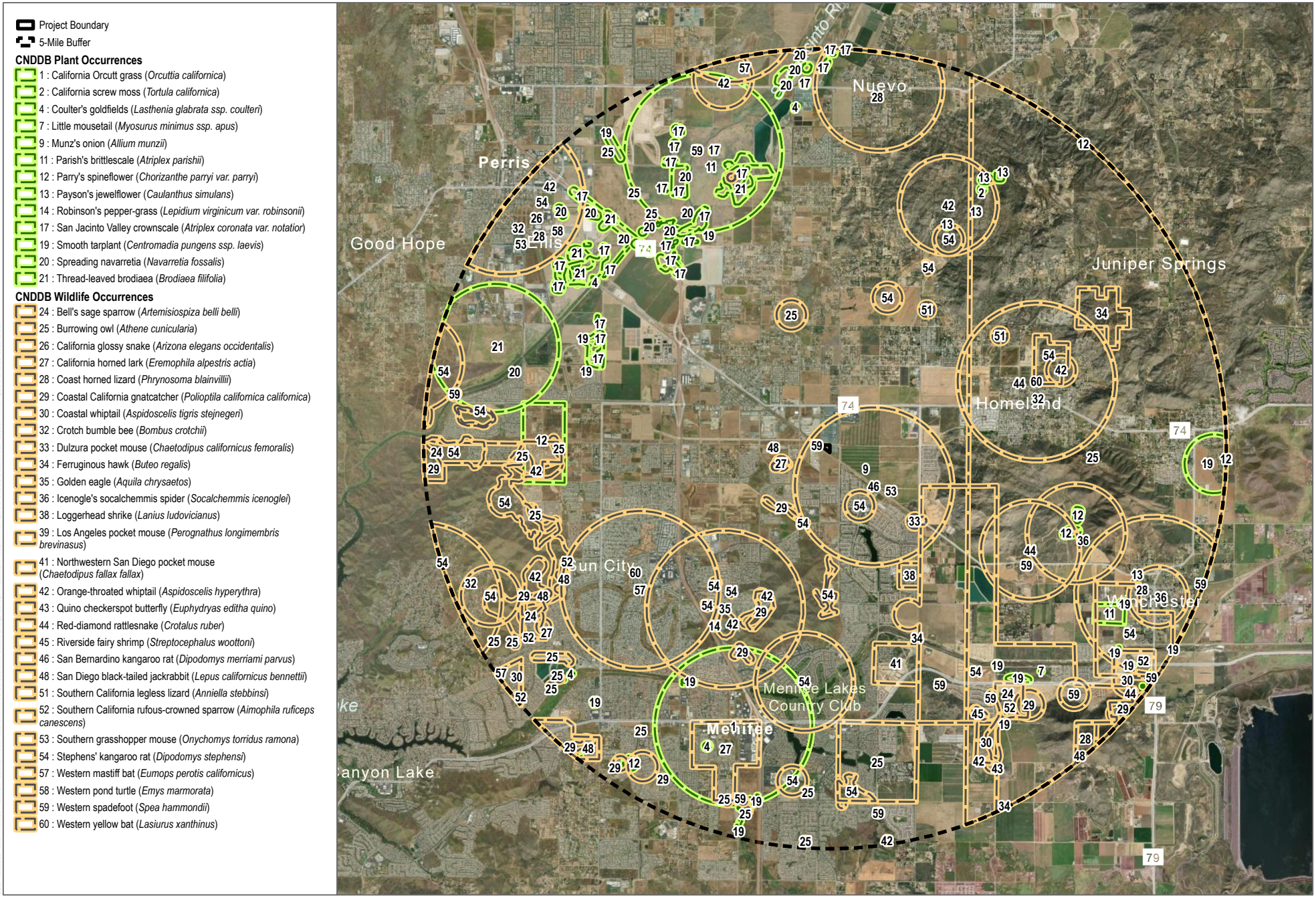
SOURCE: Western Riverside County Regional Conservation Authority 2015; County of Riverside 2015

DUDEK

FIGURE 2

Western Riverside County MSHCP Plan Area

Seaflower Battery Energy Storage Project



SOURCE: CNDDB

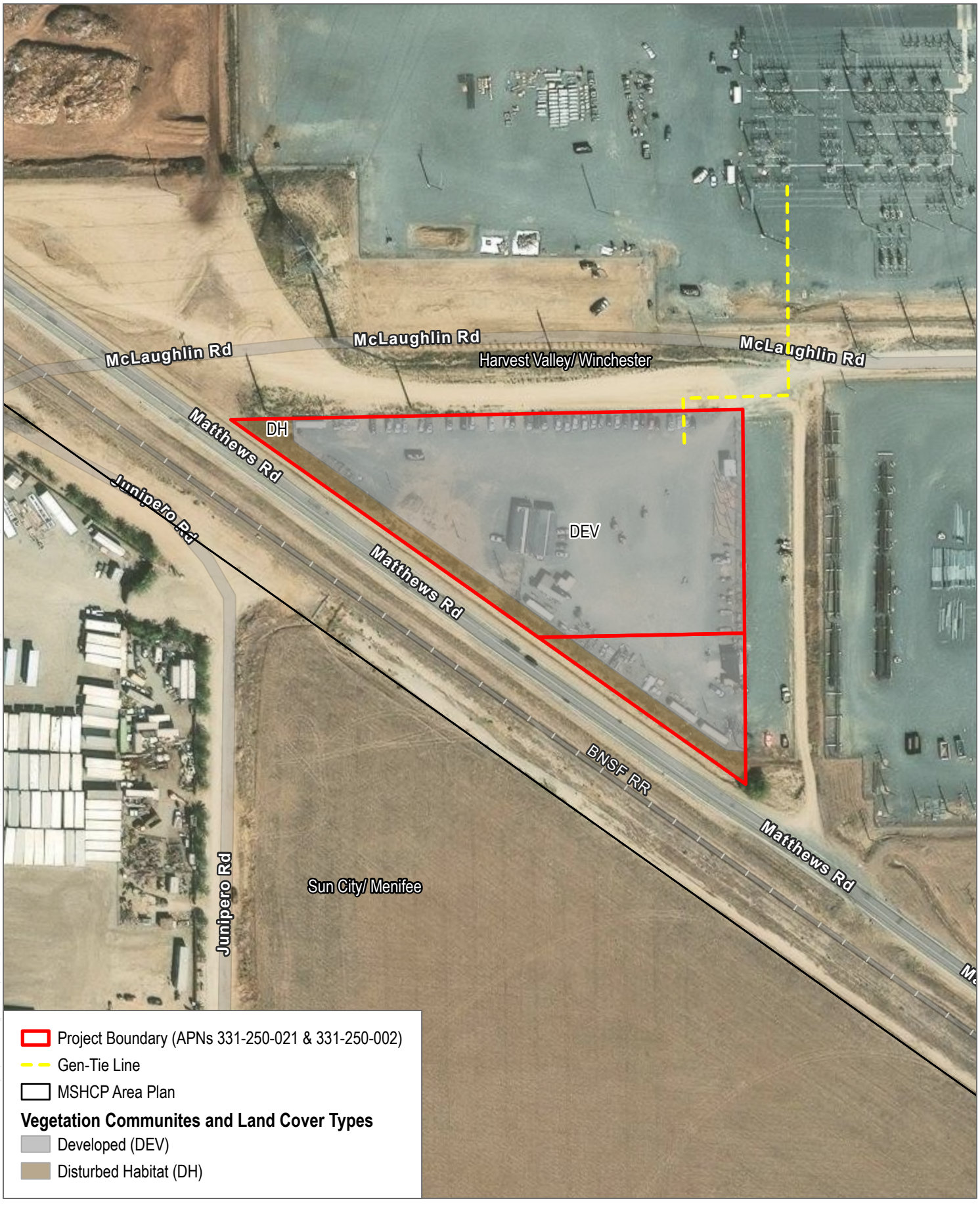
DUDEK

0 4,250 8,500 Feet

FIGURE 3

CNDDB Occurrences

Seaflower Battery Energy Storage Project



SOURCE: MAXAR, 2024; Riverside County

DUDEK

0 80 160 Feet

FIGURE 4

Vegetation Communities and Land Covers

Seaflower Battery Energy Storage System Project

Appendix B
Wildlife Compendium

Birds

Finches

FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus – house finch

Old World Sparrows

PASSERIDAE – OLD WORLD SPARROWS

* *Passer domesticus* – house sparrow

Pigeons and Doves

COLUMBIDAE – PIGEONS AND DOVES

Zenaida macroura – mourning dove

Shorebirds

CHARADRIIDAE – LAPWINGS AND PLOVERS

Charadrius vociferus – killdeer

Reptiles

Lizards

PHRYNOSOMATIDAE – IGUANID LIZARDS

Sceloporus occidentalis – western fence lizard

* Signifies introduced (non-native) species

INTENTIONALLY LEFT BLANK

Appendix C

Special-Status Wildlife Species Potential to Occur

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
Amphibians					
Anaxyrus californicus	arroyo toad	FE/SSC	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	**Not expected to occur.** No suitable vegetation or aquatic resources present.	Covered
Rana draytonii	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	**Not expected to occur.** No suitable vegetation or aquatic resources present.	Covered
Spea hammondii	western spadefoot	FPT/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	**Moderate potential to occur.** CNDDB record on site (Occurrence No.968, 2012). Suitable soil is present on site. Suitable grassland habitat exists adjacent to the project site.	Covered
Reptiles					
Anniella stebbinsi	southern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	**Not expected to occur**. No suitable vegetation present.	None
Arizona elegans occidentalis	California glossy snake	None/SSC	Arid scrub, rocky washes, grasslands, chaparral, open areas with loose soil	**Not expected to occur**. No suitable vegetation present.	None
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	**Not expected to occur.** No suitable vegetation present.	None

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
Coleonyx variegatus abbotti	San Diego banded gecko	None/SSC	Rocky areas within coastal scrub and chaparral	**Not expected to occur**. No suitable vegetation present.	Covered
Crotalus ruber	red diamondback rattlesnake	None/SSC	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	**Not expected to occur**. No suitable vegetation present.	Covered
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	**Not expected to occur**. No suitable vegetation present.	None
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	**Not expected to occur.** No suitable vegetation present.	None
Thamnophis hammondii	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	**Not expected to occur.** No suitable vegetation present.	None
Actinemys pallida	southwestern pond turtle	FPT/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	**Not expected to occur**. No suitable vegetation or aquatic resources present.	None
Birds					
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	**Not expected to nest or forage**. No suitable vegetation present.	Covered
Aquila chrysaetos (nesting and wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	**Not expected to nest or forage.** No suitable vegetation present.	Covered
Asio otus (nesting)	long-eared owl	None/SSC	Nests in riparian habitat, live oak thickets, other dense stands of trees, edges of coniferous forest; forages in nearby open habitats	**Not expected to nest or forage**. No suitable vegetation present.	None

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	SCE/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	**Low potential to occur**. The project site is a gravel lot used for staging trucks/equipment, which results in frequent human disturbance. Combined with the lack of suitable substrate and vegetation, it is unlikely that burrowing owl will occur. However, there is potential for the culvert adjacent to the project site to provide suitable nesting/shelter habitat.	Covered
Buteo swainsoni (nesting)	Swainson's hawk	None/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	**Not expected to nest or forage.** No suitable vegetation present.	Covered
Charadrius nivosus nivosus (nesting)	western snowy plover	FT, BCC/SSC	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds	**Not expected to nest or forage.** No suitable vegetation present.	None
Circus hudsonius (nesting)	northern harrier	BCC/SSC	Nests in open wetlands (marshy meadows, wet lightly grazed pastures, old fields, freshwater and brackish marshes); also in drier habitats (grassland and grain fields); forages in grassland, scrubs, rangelands, emergent wetlands, and other open habitats	**Not expected to nest or forage.** No suitable vegetation present.	None

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
Elanus leucurus (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	**Not expected to nest or forage.** No suitable vegetation present.	Covered
Haliaeetus leucocephalus (nesting and wintering)	bald eagle	FPD/FP, SE	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains	**Not expected to nest or forage**. No suitable vegetation or aquatic resources present.	Covered
Icteria virens (nesting)	yellow-breasted chat	None/SSC	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	**Not expected to nest or forage**. No suitable vegetation present.	Covered
Lanius ludovicianus (nesting)	loggerhead shrike	None/SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches	**Not expected to nest or forage**. No suitable vegetation present.	Covered
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	**Not expected to nest or forage**. No suitable vegetation present.	Covered
Setophaga petechia (nesting)	yellow warbler	None/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	**Not expected to nest or forage**. No suitable vegetation present.	None
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	**Not expected to nest or forage.** No suitable vegetation present.	Covered
Xanthocephalus xanthocephalus (nesting)	yellow-headed blackbird	None/SSC	Nests in marshes with tall emergent vegetation, often along borders of lakes and ponds; forages in emergent wetlands, open areas, croplands, and muddy shores of lacustrine habitat	**Not expected to nest or forage.** No suitable vegetation present.	None
Fishes					
Gila orcuttii	arroyo chub	None/SSC	Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams at depths	**Not expected to occur.** No suitable	Covered

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
			>40 centimeters (16 inches); substrates of sand or mud	aquatic resources present.	
Mammals					
Lasiurus xanthinus	western yellow bat	None/SSC	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	**Moderate potential to occur**. Several semi-permanent structures are located within the project site that could provide suitable roosting habitat. Additionally, *Washingtonia robusta*, which was observed during the reconnaissance survey, could provide roosting habitat.	None
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE/SSC, SCE	Sparse scrub habitat, alluvial scrub/coastal scrub habitats on gravelly and sandy soils near river and stream terraces	**Not expected to occur.** No stream terraces present.	None
Dipodomys stephensi	Stephens' kangaroo rat	FT/ST	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas	**Low potential to occur.** CNDDB occurrence, No suitable vegetation present.	Covered
Eumops perotis californicus	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	**Not expected to occur**. No suitable vegetation present.	None
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	**Not expected to occur.** No suitable vegetation present.	Covered

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	**Moderate potential to occur**. Several semi-permanent structures located within the project site could provide suitable roosting habitat. Additionally, *Washingtonia robusta*, which was observed during the reconnaissance survey, could provide roosting habitat.	None
Onychomys torridus ramona	southern grasshopper mouse	None/SSC	Grassland and sparse coastal scrub	**Not expected to occur**. No suitable vegetation present.	None
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None/SSC	Lower-elevation grassland, alluvial sage scrub, and coastal scrub	**Not expected to occur.** No suitable vegetation present.	Covered
Perognathus longimembris internationalis	Jacumba pocket mouse	None/SSC	Desert scrub and sparse sage scrub in areas with fine sandy soils	**Not expected to occur.** No suitable vegetation present.	None
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	**Not expected to occur**. No suitable vegetation present.	None
Invertebrates					
Bombus crotchii	Crotch bumble bee	None/SCE	Open grassland and scrub communities supporting suitable floral resources.	**Moderate potential to occur**. Host plant, *Heliotropium curassavicum*, was observed on site, and burrows potentially	None

Row Labels	Common Name	Status (Federal/ State)	Habitat	Potential to Occur	Western Riverside MSHCP
				suitable for colony nesting may also be present within the Project site.	
Branchinecta lynchi	vernal pool fairy shrimp	FT/None	Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats	**Not expected to occur.** No suitable vernal pools present.	Covered
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	**Not expected to occur.** No suitable vernal pools present.	None
Euphydryas editha quino	Quino checkerspot butterfly	FE/None	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include *Plantago erecta*, *P. patagonica*, and *Antirrhinum coulterianum*, among others	**Not expected to occur**. No suitable host plants present.	Covered
Streptocephalus woottoni	Riverside fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	**Not expected to occur.** No suitable vernal pools present.	Covered
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	FPT/None	Wind-protected tree groves with nectar sources and nearby water sources	**Not expected to occur.** No suitable host plants present.	None

Notes: MSHCP: Multiple Species Habitat Conservation Program Covered Species

Status Legend

Federal

BCC: USFWS—Birds of Conservation Concern
FE: Federally listed as endangered
FPD: Federally proposed for delisting
FPT: Federally proposed for listing as threatened
FT: Federally listed as threatened

State

FP: CDFW Fully Protected species
SCE: State candidate for listing as endangered
SE: State listed as endangered
SSC: California Species of Special Concern
ST: State listed as threatened

WL: CDFW Watch List species

Appendix D
Plant Compendium

Vascular Species

Eudicots

ASTERACEAE – SUNFLOWER FAMILY

Ambrosia acanthicarpa – flatspine bur ragweed
Erigeron canadensis – *Canadian horseweed*
Helianthus petiolaris – *prairie sunflower*
* *Lactuca serriola* – prickly lettuce
* *Oncosiphon pilulifer* – stinknet
Symphyotrichum chilense – Pacific aster

BORAGINACEAE – BORAGE FAMILY

Heliotropium curassavicum – salt heliotrope

CHENOPODIACEAE – GOOSEFOOT FAMILY

* *Salsola tragus* – prickly Russian thistle

EUPHORBIACEAE – SPURGE FAMILY

Croton setiger – dove weed
Euphorbia albomarginata – whitemargin sandmat

LAMIACEAE – MINT FAMILY

Trichostema lanceolatum – vinegarweed

SALICACEAE – WILLOW FAMILY

Salix gooddingii – Goodding's willow

SOLANACEAE – NIGHTSHADE FAMILY

Datura wrightii – sacred thorn-apple

Monocots

ARECACEAE – PALM FAMILY

* *Washingtonia robusta* – Washington fan palm

POACEAE – GRASS FAMILY

* *Bromus* spp. – field brome
* *Cynodon dactylon* – Bermudagrass

* Signifies introduced (non-native) species

Appendix E

Special-Status Plant Species Potential to Occur

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur	Western Riverside MSHCP
Abronia villosa var. *aurita*	chaparral sand-verbena	None/None/1B.1	Chaparral, Coastal scrub, Desert dunes; Sandy/annual herb/ (Jan) Mar–Sep/245–5,250	**Not expected to occur.** The site is outside of the species' known elevation range.	None
Allium marvinii	Yucaipa onion	None/None/1B.2	Chaparral (clay, openings)/perennial bulbiferous herb/Apr–May/ 2,495–3,495	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Allium munzii	Munz's onion	FE/ST/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland; Clay, Mesic/perennial bulbiferous herb/Mar–May/975–3,510	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Almutaster pauciflorus	alkali marsh aster	None/None/2B.2	Meadows and seeps; Alkaline/perennial herb/June–Oct/785–2,625	**Not expected to occur**. The site is outside of the species' known elevation range.	None
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Alkaline (sometimes), Clay (sometimes), Disturbed areas (often), Loam (sometimes), Sandy (sometimes)/perennial rhizomatous herb/Apr–Oct/65–1,360	**Not expected to occur**. Although disturbed habitat exists on site, the site is a gravel lot used for truck and equipment staging, and is subject to frequent human disturbance, soil compaction, and a lack of suitable microhabitat conditions. The site's gravel substrate and ongoing operational use likely prevents the establishment of native herbaceous vegetation. Furthermore, none were observed during the reconnaissance survey.	Covered
Arctostaphylos rainbowensis	Rainbow manzanita	None/None/1B.1	Chaparral/perennial evergreen shrub/Dec–Mar/675–2,200	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Astragalus pachypus var. *jaegeri*	Jaeger's milk-vetch	None/None/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; Rocky (sometimes), Sandy (sometimes)/perennial shrub/ Dec–June/1,200–3,200	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Atriplex coronata var. *notatior*	San Jacinto Valley crownscale	FE/None/1B.1	Playas, Valley and foothill grassland (mesic), Vernal pools; Alkaline/annual herb/Apr–Aug/455–1,640	**Not expected to occur.** The site is outside of the species' known elevation range.	Covered
Atriplex parishii	Parish's brittlescale	None/None/1B.1	Chenopod scrub, Playas, Vernal pools; Alkaline/annual herb/June–Oct/ 80–6,235	**Not expected to occur**. No suitable habitat is present.	Covered
Atriplex serenana var. *davidsonii*	Davidson's saltscale	None/None/1B.2	Coastal bluff scrub, Coastal scrub; Alkaline/annual herb/Apr–Oct/35–655	**Not expected to occur**. No suitable habitat is present.	Covered
Ayenia compacta	California ayenia	None/None/2B.3	Mojavean desert scrub, Sonoran desert scrub; Rocky/perennial herb/ Mar–Apr/490–3,595	**Not expected to occur**. The site is outside of the species' known elevation range.	None
Berberis nevinii	Nevin's barberry	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; Gravelly (sometimes), Sandy (sometimes)/perennial evergreen shrub/ (Feb) Mar–June/230–2,705	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/1B.1	Chaparral (openings), Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools; Clay (often)/perennial bulbiferous herb/Mar–June/80–3,675	**Not expected to occur**. No suitable habitat is present.	Covered
Brodiaea santarosae	Santa Rosa Basalt brodiaea	None/None/1B.2	Valley and foothill grassland/perennial bulbiferous herb/May–June/ 1,855–3,430	**Not expected to occur.** The site is outside of the species' known elevation range.	None
Calochortus weedii var. *intermedius*	intermediate mariposa-lily	None/None/1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; Rocky/perennial bulbiferous herb/May–July/345–2,805	**Not expected to occur.** The site is outside of the species' known elevation range.	Covered
Centromadia pungens ssp. *laevis*	smooth tarplant	None/None/1B.1	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; Alkaline/annual herb/Apr–Sep/0–2,100	**Not expected to occur**. No suitable habitat is present.	Covered
Chorizanthe parryi var. *parryi*	Parry's spineflower	None/None/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; Openings, Rocky (sometimes), Sandy (sometimes)/annual herb/Apr–June/900–4,005	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur	Western Riverside MSHCP
Chorizanthe polygonoides var. *longispina*	long-spined spineflower	None/None/1B.2	Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools; Clay (often)/annual herb/Apr–July/100–5,020	**Not expected to occur**. No suitable habitat is present.	Covered
Clinopodium chandleri	San Miguel savory	None/None/1B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland; Gabbroic (sometimes), Rocky (sometimes)/perennial shrub/Mar–July/395–3,525	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Cryptantha wigginsii	Wiggins' cryptantha	None/None/1B.2	Coastal scrub; Clay (often)/annual herb/Feb–June/65–900	**Not expected to occur**. No suitable habitat is present.	None
Dodecahema leptoceras	slender-horned spineflower	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub (alluvial fans); Sandy/annual herb/Apr–June/655–2,495	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Dudleya multicaulis	many-stemmed dudleya	None/None/1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; Clay (often)/perennial herb/Apr–July/50–2,590	**Not expected to occur**. No suitable habitat is present.	Covered
Eryngium aristulatum var. *parishii*	San Diego button-celery	FE/SE/1B.1	Coastal scrub, Valley and foothill grassland, Vernal pools; Mesic/annual/perennial herb/Apr–June/65–2,035	**Not expected to occur**. No suitable habitat is present.	Covered
Geothallus tuberosus	Campbell's liverwort	None/None/1B.1	Coastal scrub (mesic), Vernal pools/ephemeral liverwort/N.A./35–1,970	**Not expected to occur**. No suitable habitat is present.	None
Hesperocyparis forbesii	Tecate cypress	None/None/1B.1	Chaparral, Closed-cone coniferous forest; Clay, Gabbroic (sometimes)/perennial evergreen tree/N.A./260–4,920	**Not expected to occur**. The site is outside of the species' known elevation range.	None
Juncus luciensis	Santa Lucia dwarf rush	None/None/1B.2	Chaparral, Great Basin scrub, Lower montane coniferous forest, Meadows and seeps, Vernal pools/annual herb/Apr–July/985–6,695	**Not expected to occur**. The site is outside of the species' known elevation range.	None
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None/None/1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/ Feb–June/5–4,005	**Not expected to occur**. No suitable habitat is present.	None
Lilium parryi	lemon lily	None/None/1B.2	Lower montane coniferous forest, Meadows and seeps, Riparian forest, Upper montane coniferous forest; Mesic/perennial bulbiferous herb/ July–Aug/4,005–9,005	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Limnanthes alba ssp. *parishii*	Parish's meadowfoam	None/SE/1B.2	Lower montane coniferous forest, Meadows and seeps, Vernal pools; Vernally Mesic/annual herb/Apr–June/1,970–6,560	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Monardella hypoleuca ssp. *intermedia*	intermediate monardella	None/None/1B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest (sometimes)/perennial rhizomatous herb/Apr–Sep/1,310–4,100	**Not expected to occur**. The site is outside of the species' known elevation range.	None
Nama stenocarpa	mud nama	None/None/2B.2	Marshes and swamps (lake margins, riverbanks)/annual/perennial herb/Jan–July/15–1,640	**Not expected to occur**. No suitable habitat is present.	None
Navarretia fossalis	spreading navarretia	FT/None/1B.1	Chenopod scrub, Marshes and swamps (shallow freshwater), Playas, Vernal pools/annual herb/Apr–June/100–2,150	**Not expected to occur**. No suitable habitat is present.	Covered
Navarretia prostrata	prostrate vernal pool navarretia	None/None/1B.2	Coastal scrub, Meadows and seeps, Valley and foothill grassland (alkaline), Vernal pools; Mesic/annual herb/Apr–July/10–3,970	**Not expected to occur**. No suitable habitat is present.	Covered
Orcuttia californica	California Orcutt grass	FE/SE/1B.1	Vernal pools/annual herb/Apr–Aug/50–2,165	**Not expected to occur**. No suitable habitat is present.	Covered
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland; Gravelly, Sandy/perennial herb/(July)Aug–Nov(Dec)/0–6,890	**Not expected to occur**. No suitable habitat is present.	None
Scutellaria bolanderi ssp. *austromontana*	southern mountains skullcap	None/None/1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest; Mesic/perennial rhizomatous herb/June–Aug/1,395–6,560	**Not expected to occur**. The site is outside of the species' known elevation range.	None
Sibaropsis hammittii	Hammitt's clay-cress	None/None/1B.2	Chaparral (openings), Valley and foothill grassland; Clay/annual herb/ Mar–Apr/2,360–3,495	**Not expected to occur**. The site is outside of the species' known elevation range.	Covered
Sidalcea neomexicana	salt spring checkerbloom	None/None/2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; Alkaline, Mesic/perennial herb/Mar–June/50–5,020	**Not expected to occur**. No suitable habitat is present.	None
Sphaerocarpos drewiae	bottle liverwort	None/None/1B.1	Chaparral, Coastal scrub; Openings/ephemeral liverwort/N.A./295–1,970	**Not expected to occur**. The site is outside of the species' known elevation range.	None

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur	Western Riverside MSHCP
Symphyotrichum defoliatum	San Bernardino aster	None/None/1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Marshes and swamps, Meadows and seeps, Valley and foothill grassland (vernally mesic); Streambanks/perennial rhizomatous herb/July–Nov/ 5–6,695	**Not expected to occur**. No suitable habitat is present.	None
Tortula californica	California screw moss	None/None/1B.2	Chenopod scrub, Valley and foothill grassland; Sandy/moss/N.A./35–4,790	**Not expected to occur**. No suitable habitat is present.	None
Trichocoronis wrightii var. *wrightii*	Wright's trichocoronis	None/None/2B.1	Marshes and swamps, Meadows and seeps, Riparian forest, Vernal pools; Alkaline/annual herb/May–Sep/15–1,425	**Not expected to occur.** No suitable habitat is present.	Covered

Notes: MSHCP = Multiple Species Habitat Conservation Program Covered Species.
Status Legend
Federal
FE: Federally listed as endangered
FT: Federally listed as threatened
State
SE: State listed as endangered
ST: State listed as threatened
CRPR: California Rare Plant Rank
1B: Plants rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California, but more common elsewhere
Threat Rank
0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
0.2 – Moderately threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)
0.3 – Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

INTENTIONALLY LEFT BLANK

Appendix F
Photo Log



Photo 1. Representative photo of project site (9/4/2024).



Photo 2. Representative photo of project site (9/4/2024).



Photo 3. Culvert outside eastern project boundary (9/4/204).



Photo 4. Drainage ditch overview, west facing. Showing recent vegetation clearing on slope (9/4/2024).



Photo 5. Photo of burrows along southern boundary upland and upper slope bank (9/4/2026).



Photo 6. Drainage ditch overview, east facing (9/4/2026).



Photo 7. Drainage ditch overview, east facing (4/1/2026).



Photo 8. Drainage ditch overview, west facing (4/1/2026).