

**BIOLOGICAL RESOURCES ASSESSMENT, JURISDICTIONAL DELINEATION, AND
NATIVE PLANT PROTECTION PLAN FOR THE GLACIER POWER PROJECT, IN
UNINCORPORATED YERMO, SAN BERNARDINO COUNTY, CALIFORNIA**

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SECTION 1.0 – INTRODUCTION

Jennings Environmental, LLC (Jennings) was retained by Lilburn Corporation (Lilburn) to conduct a literature review and reconnaissance-level survey for the proposed Glacier Power Solar Project in the unincorporated area of Yermo, California (Project). The survey identified vegetation communities, the potential for the occurrence of special status species, or habitats that could support special status wildlife species, and recorded all plants and animals observed or detected within the Project boundary. This biological resources assessment is designed to address the potential effects of the proposed project on designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) or species designated as sensitive by the California Department of Fish and Wildlife (CDFW) or the California Native Plant Society (CNPS).

Information contained in this document is in accordance with accepted scientific and technical standards that are consistent with the requirements of the United States Fish and Wildlife Service (USFWS) and CDFW. Additionally, the site was surveyed for any drainage features that would meet the definition of the Waters of the US (WOUS), Waters of the State (WOS), or CDFW jurisdiction. Also, the project is located within the desert of San Bernardino County. As such, this report also contains the results of the Native Plant Protection Plan in accordance with San Bernardino County Development Code Section 88.01.060.

1.1 PROJECT LOCATION

The project is generally located in Section 32, Township 10 North, Range 2 East, and is depicted within the *Yermo* U.S. Geological Survey's (USGS) 7.5-minute topographic map. More specifically the project is located within APN 0538-161-29, within the unincorporated area of Yermo, San Bernardino County, California. The Project site is located one mile west of the intersection of Calico Blvd and Mineola Road. The site is surrounded by a mixture of vacant parcels and rural residential parcels. The site also borders the BNSF Railroad to the north (Figures 1 and 2 in Appendix A).

1.2 PROJECT DESCRIPTION

The proposed Project is for the installation of an approximately 100,000-square-foot solar panel facility. Additional improvements include the establishment of on-site access roads and the necessary infrastructure for connecting to the existing power grid.

SECTION 2.0 – METHODOLOGY

2.1 LITERATURE REVIEW

Prior to performing the field survey, existing documentation relevant to the Project site was reviewed. The most recent records of the California Natural Diversity Database (CNDDDB) managed by CDFW (CDFW 2023), the USFWS Critical Habitat Mapper (USFWS 2023), and the California Native Plant Society's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2023) were reviewed for the following quadrangle containing and surrounding the Project site: *Yermo, Mineola,*

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Harvard Hill, and Newberry Springs, USGS 7.5-minute quadrangles. The *Mineola, Harvard Hill, and Newberry Springs* quads were included in this search due to the sites' proximity to their borders. These databases contain records of reported occurrences of federal- or state-listed endangered or threatened species, California Species of Concern (SSC), or otherwise special status species or habitats that may occur within or in the immediate vicinity of the Project site. These sources include:

- California Natural Diversity Database (CNDDDB) managed by CDFW (CDFW 2023)
- USFWS Critical Habitat Mapper (USFWS 2023)
- California Native Plant Society's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2023), issuer of the California Rare Plant Rank (CRPR).
- U.S. Fish and Wildlife (USFWS) threatened and endangered species occurrence GIS overlay;
- USGS National Map;
- Calwater Watershed Maps
- USFWS Designated Critical Habitat Maps
- San Bernardino County Biotic Recourses Overlay
- San Bernardino County Development Code, 88.01.060 Desert Native Plant Protection

2.2 BIOLOGICAL RECONNAISSANCE-LEVEL SURVEY

Jennings biologist, Gene Jennings, conducted the general reconnaissance survey within the Project site to identify the potential for the occurrence of special status species, vegetation communities, or habitats that could support special status wildlife species. The survey was conducted on foot, throughout the Project site between 0712 and 1100 hours on July 30, 2023, and 0700 and 1100 hours on July 31, 2023. Weather conditions during the survey on July 30, 2023, included temperatures ranging from 84.5 to 95.6 degrees Fahrenheit, with no cloud cover, no precipitation, and 7.5 to 10.1 mile-per-hour winds. Weather conditions during the survey on July 31, 2023, included temperatures ranging from 85.6 to 98.5 degrees Fahrenheit, with no cloud cover, no precipitation, and 5.6 to 6.3 mile-per-hour winds. Photographs of the Project site were taken to document existing conditions (Appendix B).

Desert tortoise (Gopherus agassizii) Protocol Surveys

The Project site is located within a region that does contain habitat suitable for the listed species, desert tortoise. Additionally, the site is located within designated critical habitat. As such, protocol surveys were conducted in accordance with the 2018 USFWS Desert Tortoise Survey Protocol as described below.

Small Project Surveys

Smaller project sites are expected to be used by too few tortoises to allow for accurate estimation of take. Operationally, the USFWS considers sites in Upper Virgin River Recovery Unit that are < 67 ha (165 acres) or in the rest of the desert tortoise range < 200 ha (500 acres) to be "small." The action areas of small projects are less likely to include the entire home ranges of desert tortoises; therefore, desert tortoises that regularly use the area may be off site during surveys.

The USFWS protocol described for quantitative surveys should be followed but can be completed at any time of year. The quantitative survey protocol is described below.

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- Use 10-meter-wide belt transects to cover the action area.
- On the datasheet included in this guidance, record all evidence that indicates desert tortoises may be present (e.g., scat, burrows, carcasses, courtship rings, drinking depressions, etc. in addition to live tortoises).
- Use the Field Manual (USFWS 2009) to categorize the condition of sign.
- Record information and measure desert tortoises as described for large project sites.
- Use mirrors or flashlights to inspect burrows.

2.3 JURISDICTIONAL FEATURES

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

2.4 VEGETATION

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

2.5 WILDLIFE

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

2.6 WILDLIFE CORRIDORS AND HABITAT CONSERVATION PLAN

According to the California Essential Habitat Connectivity Project, the Project Site is not mapped within an area for wildlife movement and is not within a habitat conservation plan. However, the site is within a desert linkage as mapped by the Mojave Desert Land Trust (Figure 3 in Appendix A). Although the site is

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within this linkage, the proposed Project will have no impact on the linkage as the site is surrounded by vacant land with minimal rural residential development. Therefore, as shown in Figure 3, wildlife will have access the remainder of the linkage. Additionally, based on the surrounding land uses (BNSF Railroad and Interstate 15) and personal observations from the site visit, wildlife is more likely to use the vacant land to the east or west of the Project site as there are other existing developments within the vicinity of the Project site. Because the proposed Project will not restrict the movement of wildlife within the linkage or transect (cut off) the linkage, the proposed Project will not have an impact on any current wildlife corridors or habitat conservation plans.

SECTION 3.0 – RESULTS

3.1 LITERATURE REVIEW RESULTS

According to the CNDDDB, CNPSEI, and other relevant literature and databases, 21 sensitive species including 3 listed species, have been documented in the *Yermo*, *Mineola*, *Harvard Hill*, and *Newberry Springs* quads. This list of sensitive species and habitats includes any State and/or federally-listed threatened or endangered species, CDFW-designated Species of Special Concern (SSC), and otherwise Special Animals. “Special Animals” is a general term that refers to all of the taxa in the CNDDDB that CDFW is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of “species at risk” or “special status species.” The CDFW considers the taxa on this list to be those of greatest conservation need.

An analysis of the likelihood of the occurrence of all CNDDDB-sensitive species documented in the *Yermo*, *Mineola*, *Harvard Hill*, and *Newberry Springs* quads are provided in Table 2, in Appendix D. This analysis takes into account species range as well as documentation within the vicinity of the project area and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions. According to the databases, USFWS-designated critical habitat occurs within or adjacent to the project site.

3.1.1 SPECIAL STATUS SPECIES

Desert Tortoise (Gopherus agassizii)

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

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

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

Burrowing Owl (*Athene cunicularia*)

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

BUOW spends a great deal of time standing on dirt mounds at the entrance to a burrow or perched on a fence post or other low to the ground perch from which they hunt for prey. BUOW frequently hunt by hovering in place above the ground and dropping on their prey from above. They feed primarily on insects such as grasshoppers, June beetles, and moths, but will also take small rodents, birds, and reptiles. They are active during the day and night but are considered a crepuscular owl; generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31. Up to 11, but typically 7 to 9, eggs are laid in a burrow, abandoned pipe, or other subterranean hollows where incubation is complete in 28-30 days. Young BUOW fledges in 44 days. The BUOW is considered a migratory species in portions of its range, which includes western North America from Canada to Mexico, and east to Texas and Louisiana. BUOW populations in California are considered to be sedentary or locally migratory.

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

Desert Kit Fox (*Vulpes macrotis*)

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The desert kit fox is not federally- or state-listed, but is considered a species of local concern by the County of Los Angeles. It is uncommon to rare permanent resident in arid habitats within southern California (CDFW 2017b). Kit foxes are threatened by a number of human activities, including poaching, pesticide and rodenticide use, and direct poisoning, as well as heavy agricultural and urban development (Eder 2005). Desert kit foxes occur in the desert and other arid habitats, including sagebrush flats, creosote scrub, and annual grassland habitats, and other areas with scattered brush, scrub, and shrubs. They are an important predator of small mammals, preying on black-tailed jackrabbits (*Lepus californicus*), desert cottontails (*Sylvilagus audubonii*), kangaroo rats, ground squirrels, and other rodents, insects, reptiles, birds, and bird eggs. Limited vegetation may be taken. Desert kit foxes excavate burrows in loose-textured sandy or loamy soils for shelter, pupping, and as an escape from extreme heat and cold (Eder 2005, CDFW B). Open, level areas are preferred for burrowing. Man-made structures and infrastructure, including culverts and pipes, also may be used for denning where suitable friable soils are not present (CDFW B).

American Badger (*Taxidea taxus*)

The American badger is a CDFW Species of Special Concern. Badgers are uncommon, permanent residents throughout California, and occur most commonly in open stages of shrub, woodland, and herbaceous habitats. They are tenacious diggers and occur where friable soils support denning and burrowing activities. They are active year-round, and most often nocturnal, although they may be active during the day. They prey upon fossorial rodents, especially California ground squirrels and pocket gophers; rats and mice, some reptiles, insects, eggs, birds, and carrion also may be taken. Breeding typically occurs in the summer and early fall, with pups being born the following March or April in burrows dug in relatively dry, often sandy soil. American badgers are threatened primarily by indiscriminate trapping, agricultural conversion, and the eradication of ground squirrels and other fossorial rodents that comprise the majority of their prey base (CDFW B).

3.1.2 JURISDICTIONAL WATERS

Aerial imagery of the site was examined and compared with the surrounding USGS 7.5-minute topographic quadrangle maps to identify drainage features within the survey area as indicated from topographic changes, blue-line features, or visible drainage patterns. The U.S. Fish and Wildlife Service National Wetland Inventory and Environmental Protection Agency (EPA) Water Program “My Waters” data layers were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site. Similarly, the Soil maps from the U.S. Department of Agriculture (USDA) - Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2023) were reviewed to identify the soil series on-site and to check if they have been identified regionally as hydric soils. Upstream and downstream connectivity of waterways (if present) was reviewed in the field, on aerial imagery, and topographic maps to determine jurisdictional status.

3.1.3 DESIGNATED CRITICAL HABITAT

The site is located within the USFWS-designated Critical Habitat for the federally endangered desert tortoise. As such, protocol surveys were completed to determine the presence or absence of this species within the critical habitat. See section 3.2.3 for the results of the protocol desert tortoise surveys.

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3.1.4 HYDROLOGY AND HYDROLOGIC CONNECTIVITY

Hydrologically, the project site is located within an undefined Hydrologic Sub-Area (HSA 628.50), as identified on the Calwater Watershed maps. This undefined area comprises a 203,212-acre drainage area within the larger Manix Wash-Mojave River Hydrologic Area (Hydrologic Unit Code [HUC10] 1809020814) (CalTrans, 2023). The Manix Wash-Mojave River watershed in the Yermo area is bordered to the north by the Coyote Lake watershed, to the east by the Baxter Wash-Mojave River watershed, to the south by the Troy Lake watershed, and to the west by the Daggett Wash-Mojave River and Wall Street Canyon watersheds. (Figure 4 in Appendix A).

3.1.5 SAN BERNARDINO COUNTY DEVELOPMENT CODE

§ 88.01.060 Desert Native Plant Protection.

This Section provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. The provisions are intended to augment and coordinate with the Desert Native Plants Act (Food and Agricultural Code §§ 80001 *et seq.*) and the efforts of the State Department of Food and Agriculture to implement and enforce the Act. Section § 88.01.060 of the San Bernardino Development Code is described below.

(a) *Definitions.* Terms and phrases used within this Section shall be defined in Division 10 (Definitions) and/or defined by the California Food and Agricultural Code. The California Food and Agricultural Code definition, if one exists, shall prevail over a conflicting definition in this Development Code.

(b) *Applicability.* The provisions of this Section shall apply to desert native plants specified in Subdivision (c) (Regulated Desert Native Plants) that are growing on any of the following lands, unless exempt in compliance with § 88.01.030 (Exempt Activities):

(1) Privately owned or publicly owned land in the Desert Region.

(2) Privately owned or publicly owned land in any parts of the Mountain Region in which desert native plants naturally grow in a transitional habitat.

(c) *Regulated Desert Native Plants.* The following desert native plants or any part of them, except the fruit, shall not be removed except under a Tree or Plant Removal Permit in compliance with § 88.01.050 (Tree or Plant Removal Permits). In all cases the botanical names shall govern the interpretation of this Section.

(1) The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:

(A) *Dalea spinosa* (smoketree).

(B) All species of the genus *Prosopis* (mesquites).

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- (2) All species of the family Agavaceae (century plants, nolinias, yuccas).
- (3) Creosote Rings, ten feet or greater in diameter.
- (4) All Western Joshua trees.
- (5) Any part of any of the following species, whether living or dead:
 - (A) *Olneya tesota* (desert ironwood).
 - (B) All species of the genus *Prosopis* (mesquites).
 - (C) All species of the genus *Cercidium* (palos verdes).
- (d) *Compliance with Desert Native Plants Act.* Removal actions of all plants protected or regulated by the Desert Native Plants Act (Food and Agricultural Code §§ 80001 *et seq.*) shall comply with the provisions of the Act before the issuance of a development permit or approval of a land use application.

3.2 FIELD STUDY RESULTS

3.2.1 HABITAT

The habitat on-site consists of disturbed desert vegetation, Creosote bush - white bursage scrub (*Larrea tridentata* - *Ambrosia dumosa* Shrubland Alliance), and non-native vegetation. The site showed signs of previous development as concrete footings and underground drainage systems were visible on-site. Surrounding land uses include undeveloped parcels and rural residential developments, with the BNSF Railroad to the north.

3.2.2 WILDLIFE

Species observed or otherwise detected on or in the vicinity of the project site during the surveys included; mourning dove (*Zenaida macroura*), and common raven (*Corvus corax*). Table 1 in Appendix D contains a list of all wildlife observed on-site.

3.2.3 SPECIAL STATUS SPECIES

No State and/or federally listed threatened or endangered species or other sensitive species were observed on-site during surveys.

Desert Tortoise

The habitat within the southeast corner of the site is minimally suitable for desert tortoise. However, because the site is within designated critical habitat, protocol surveys were completed for this species. Protocol surveys were conducted using the 2018 USFWS Desert Tortoise Protocol. However, no sign of

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desert tortoise (i.e. burrows, tracks, or pellets) was observed during the survey. Additionally, no desert tortoise individuals or carcasses were observed. As shown on Figure 5 in Appendix A, only the southeast corner of the project site contains minimally suitable habitat. The remainder of the parcel contains rocky compacted soils that are not suitable for burrow construction. Therefore, desert tortoise is considered absent from the Project site.

Findings: Although desert tortoise was absent from the site during the protocol surveys, there is suitable habitat within the southeast corner of the parcel. As such, it is recommended that pre-construction surveys be completed for this species prior to any ground-disturbing activities. These surveys should be conducted by a qualified biologist and at an appropriate time of day/year to observe signs of desert tortoise. Surveys should also be conducted using the current survey protocol from the USFWS.

Burrowing Owl

Based on the August 2023 field survey, the site does contain minimally suitable habitat for this species, within the southeast corner of the parcel. As shown on Figure 5 in Appendix A, only the southeast corner of the project site contains the minimally suitable habitat. However, no burrowing owls were observed during the site visit. No burrows of suitable size and shape were located within the Project site. No portion of the Project site showed any evidence of past or present BUOW activity. No feathers, whitewash, or castings were found, and no suitable burrow surrogate species are present on-site.

Findings: Although burrowing owl was absent from the site during the survey, there is suitable habitat within the southeast corner of the parcel. As such, it is recommended that protocol surveys be completed for this species. The protocol should follow the recommended guidance from CDFW.

Desert Kit Fox

The site is not suitable for this species. This species was not observed during the survey. No burrows or suitable size or shape were observed, and no evidence of this species was observed either (scat, predation remains, tracks, etc.). As such, this species is considered absent from the project site and no further surveys are required.

Findings: No suitable habitat exists on-site; therefore, no focused surveys are required.

American Badger

The site is not suitable for this species. This species was not observed during the survey. No burrows or suitable size or shape were observed, and no evidence of this species was observed either (scat, predation remains, tracks, etc.). As such, this species is considered absent from the project site and no further surveys are required.

Findings: No suitable habitat exists on-site; therefore, no focused surveys are required.

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3.2.4 NESTING BIRDS

The Project site and immediate surrounding area does contain marginal habitat suitable for nesting birds. As such the Project is subject to the following nesting bird regulations. Recommendations for avoidance and minimization are in section 4.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918. This Act implements four international conservation treaties that the U.S. entered into with Canada in 1916, Mexico in 1936, Japan in 1972, and Russia in 1976. It is intended to ensure the sustainability of populations of all protected migratory bird species. The Act has been amended with the signing of each treaty, as well as when any of the treaties were amended, such as with Mexico in 1976 and Canada in 1995. The Act prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service.

California Fish and Game Code

The Project site is also subject to Sections 3503 and 3503.5 of the Fish and Game Code. Section 3503 states, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto". And Section 3503.5 states, "It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto".

3.2.5 JURISDICTIONAL WATERS

Waters of the United States and Waters of the State

The USACE has the authority to permit the discharge of dredged or fill material in Waters of the U.S. (WOUS) under Section 404 CWA. While the Regional Water Quality Board has authority over the discharge of dredged or fill material in Waters of the State under Section 401 CWA as well as the Porter-Cologne Water Quality Control Act. The Project area was surveyed with 100 percent visual coverage and no drainage features were present on site that met the definition for WOUS. As such, the subject parcel does not contain any wetlands, Waters of the U.S., or Waters of the State.

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

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

3.2.6 WETLANDS AND BLUE LINE STREAM

NWI maps did not identify portions within the Project site as a Riverine/Riparian system. Additionally, none of the requirements for wetland designation (hydric vegetation, hydric soils, and/or wetland

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hydrology) were present on site. As such, there are no wetlands currently present on site.

3.2.7 NATIVE PLANT PROTECTION PLAN

The Proposed Project Site does contain Silver cholla (*Cylindropuntia echinocarpa*), which is a protected species under San Bernardino County Development Code § 88.01.060 and the California Desert Native Plant Act. See section 4 for recommendations on required permits for compliance.

SECTION 4.0 – CONCLUSIONS AND RECOMMENDATIONS

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

4.1 JURISDICTIONAL AREAS

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

4.2 SENSITIVE SPECIES

Desert tortoise

Although desert tortoise was absent from the site during the survey, there is suitable habitat within the southeast corner of the parcel. As such, it is recommended that pre-construction surveys be completed for this species prior to any ground-disturbing activities. These surveys should be conducted by a qualified biologist and at an appropriate time of day/year to observe signs of desert tortoise. Surveys should also be conducted using the current survey protocol from the USFWS.

4.3 SAN BERNARDINO COUNTY DEVELOPMENT CODE AND THE CALIFORNIA DESERT NATIVE PLANT ACT

As stated above, the Project is subject to compliance with the San Bernardino County Development Code § 88.01.060 and the California Desert Native Plant Act. Therefore, the following mitigation measure should be put in place:

Any native desert plant protected by the Desert Native Plant Act that, is proposed to be impacted, should be flagged for relocation on-site, to a nursery, or suitable other entity

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(as determined by the County) prior to construction. Any construction that removes any protected plant species would require a permit from the agricultural commissioner.

4.4 BURROWING OWL

Burrowing Owl

Since there is some habitat within the Project site and adjacent area that is suitable for BUOW in general, the following mitigation measure should be implemented:

A Burrowing Owl Protocol Survey shall be conducted by a qualified biologist prior to any ground disturbance activities. Surveys shall be completed following the recommendations and guidelines provided within the Burrowing Owl Survey Instructions of the 2012 BUOW Staff Report provided by the CDFW. Surveys should be conducted during weather that is conducive to observing owls outside their burrows and detecting burrowing owl sign. Surveys will not be accepted if they are conducted during rain, high winds (> 12.5 mph), dense fog, or temperatures over 90 °F. Surveys should be conducted between morning civil twilight and 10:00 AM and two hours before sunset until evening civil twilight. Count and map all burrowing owl sightings, occupied burrows, and burrows with owl sign. Record the location of all owls including numbers of pairs and juveniles and any behavior such as courtship and mating. Map the extent of all suitable habitat. It should be noted that owl sign may not be detectable if surveys are conducted within 5 days following rain. This survey is in addition to the required 30-day pre-construction survey.

30-Day Pre-Construction Survey

After protocol surveys have been completed and before any construction starts, a 30-day pre-construction survey should be conducted. Surveys shall be completed following the recommendations and guidelines provided within the 2012 BUOW Staff Report provided by the CDFW.

4.5 NESTING BIRDS

Nesting Birds

Since there is some of the habitat within the Project site and adjacent area that is marginally suitable for nesting birds in general, the following mitigation measure should be implemented.

Nesting bird nesting season generally extends from February 1 through September 15 in southern California and specifically, March 15 through August 31 for migratory passerine birds. To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist will conduct pre-construction Nesting Bird Surveys (NBS) prior to Project-related disturbance to nestable vegetation to identify any active nests. If no active nests are found, no further action will be required. If an active nest is found, the biologist will set appropriate no-work buffers around the nest which will be based upon the nesting species, its sensitivity to disturbance, nesting stage, and expected types, intensity, and duration of the disturbance. The nests and buffer zones

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shall be field-checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

4.6 CERTIFICATION

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

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

Sincerely,



Gene Jennings
Principal/Regulatory Specialist

Appendices:

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

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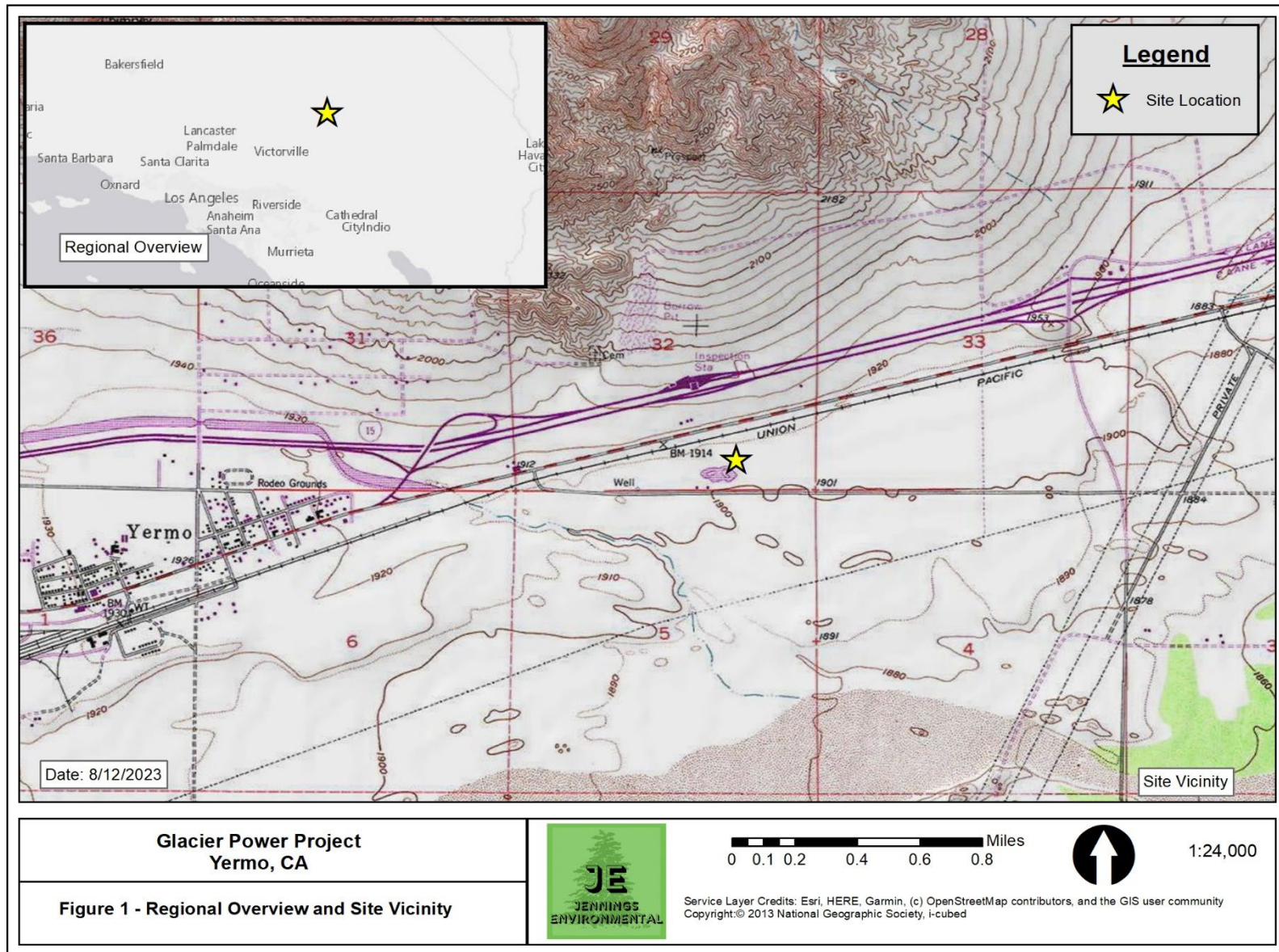
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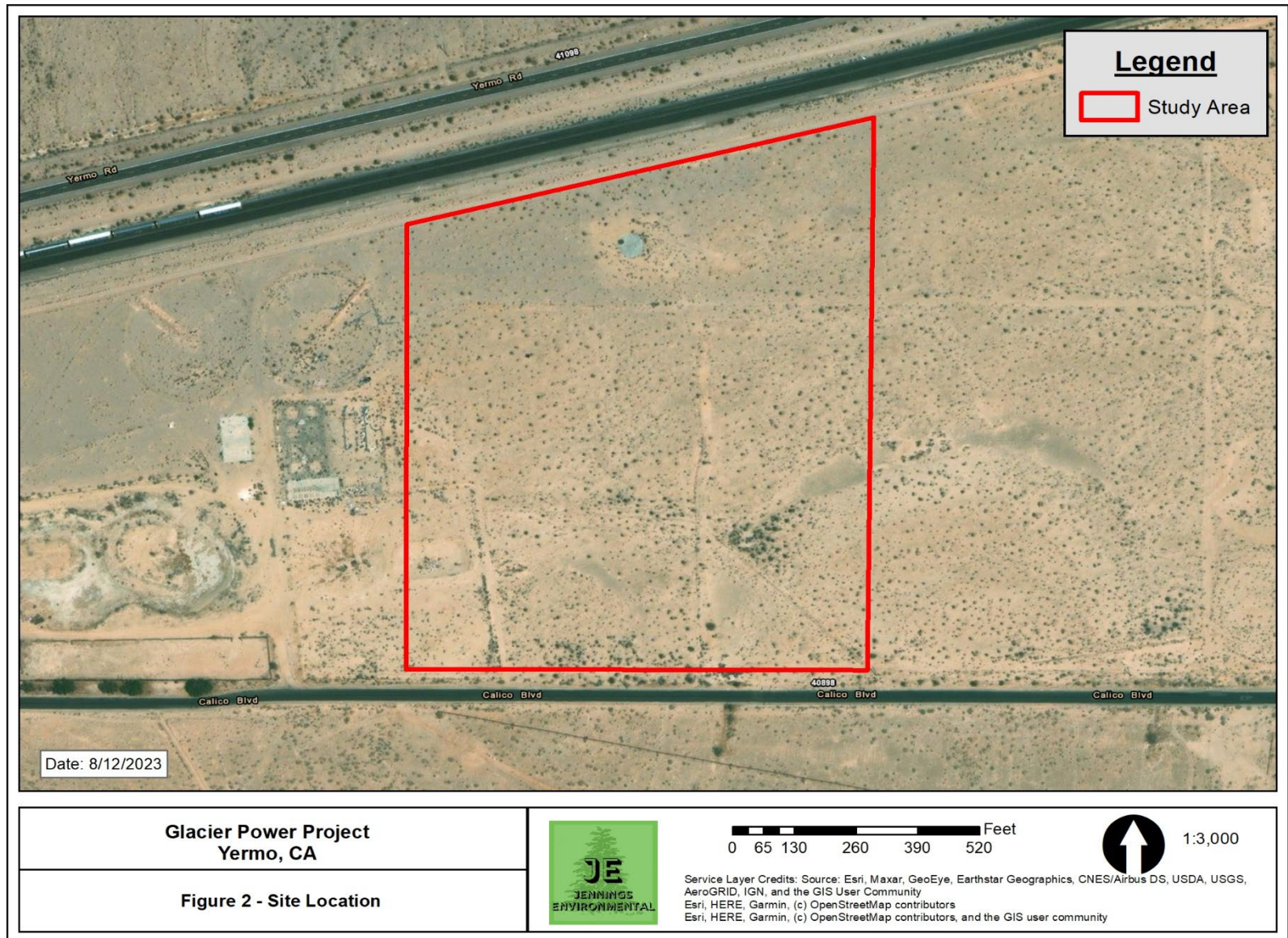
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Appendix A – Figures

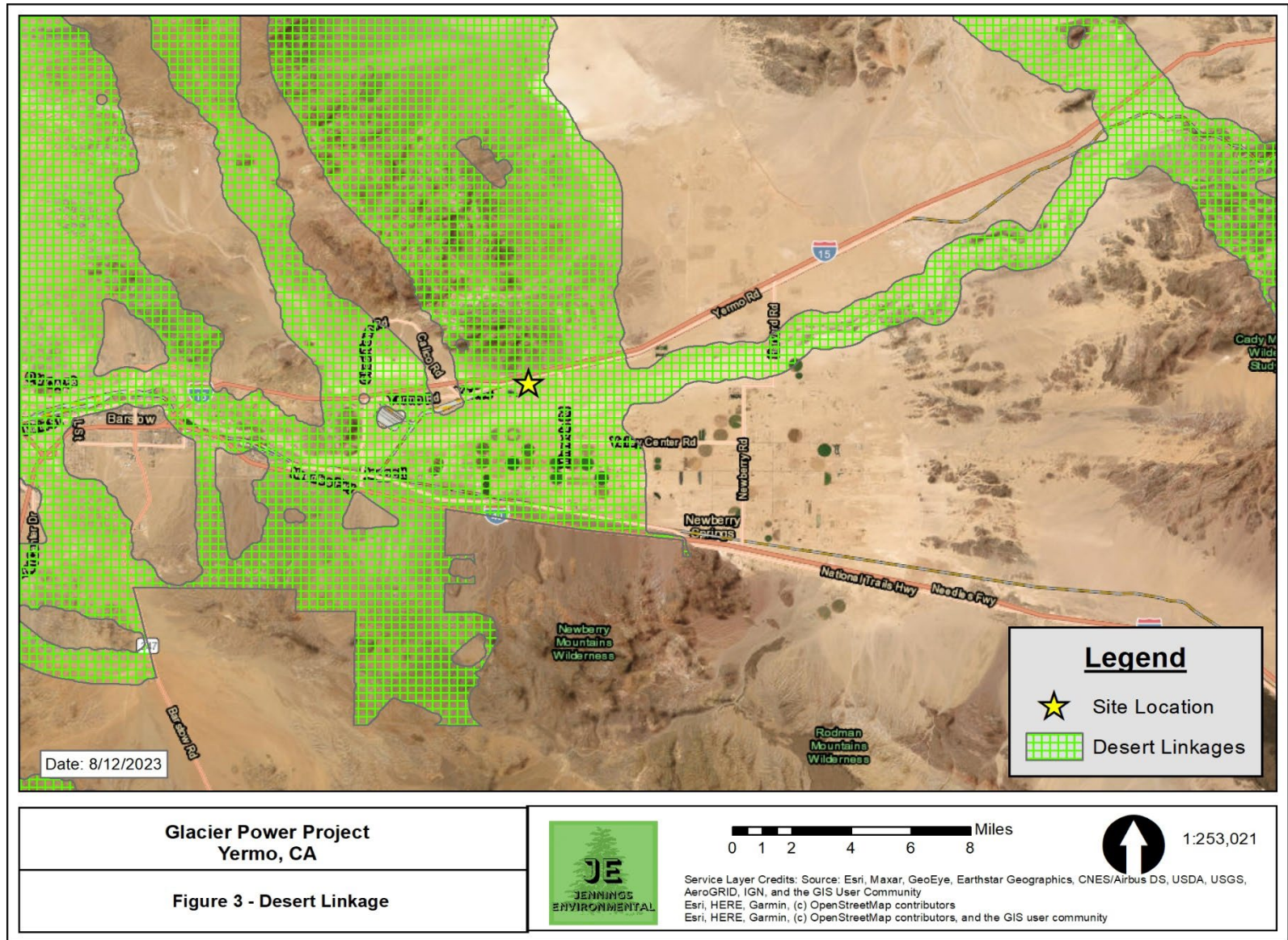
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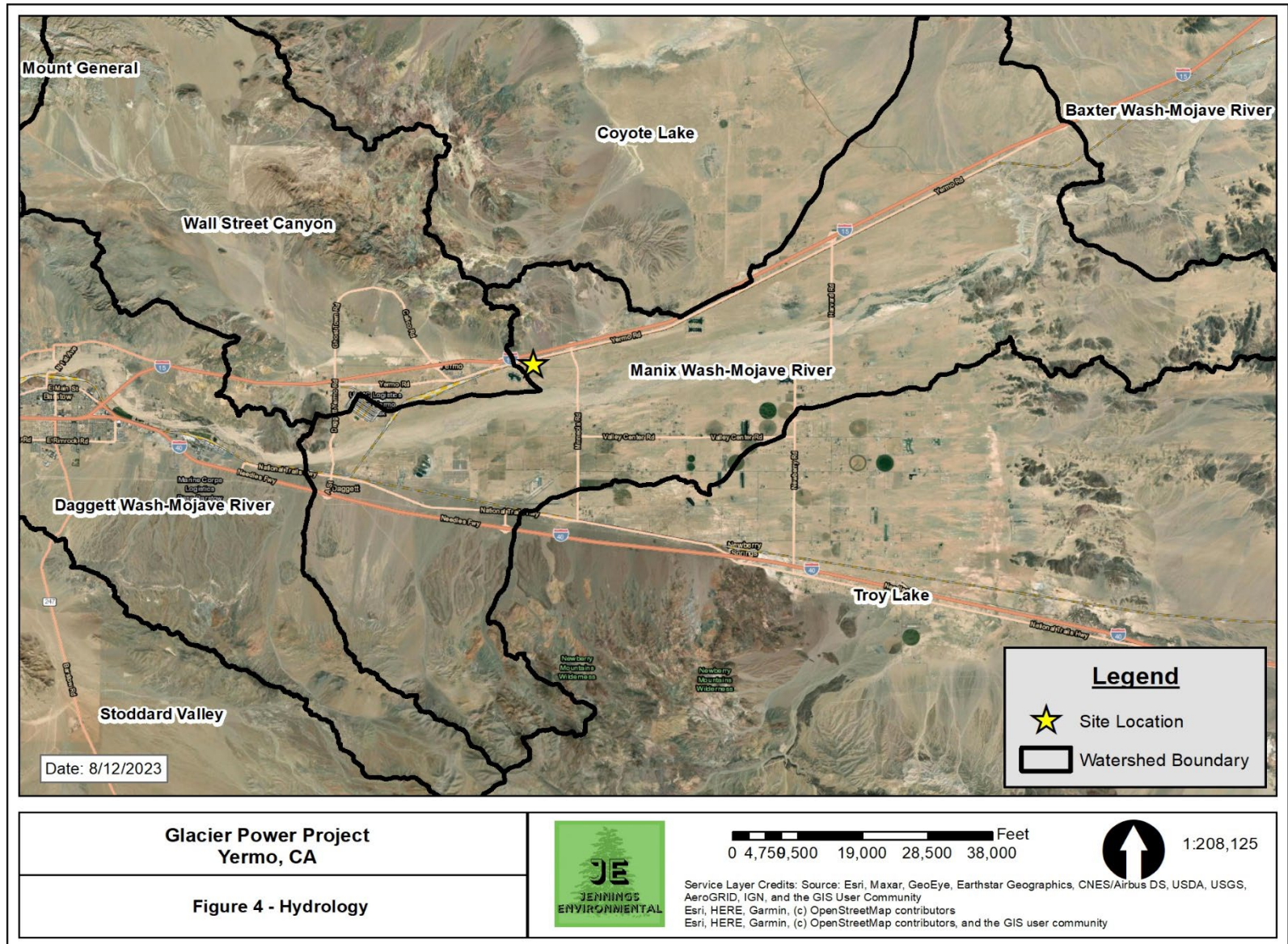
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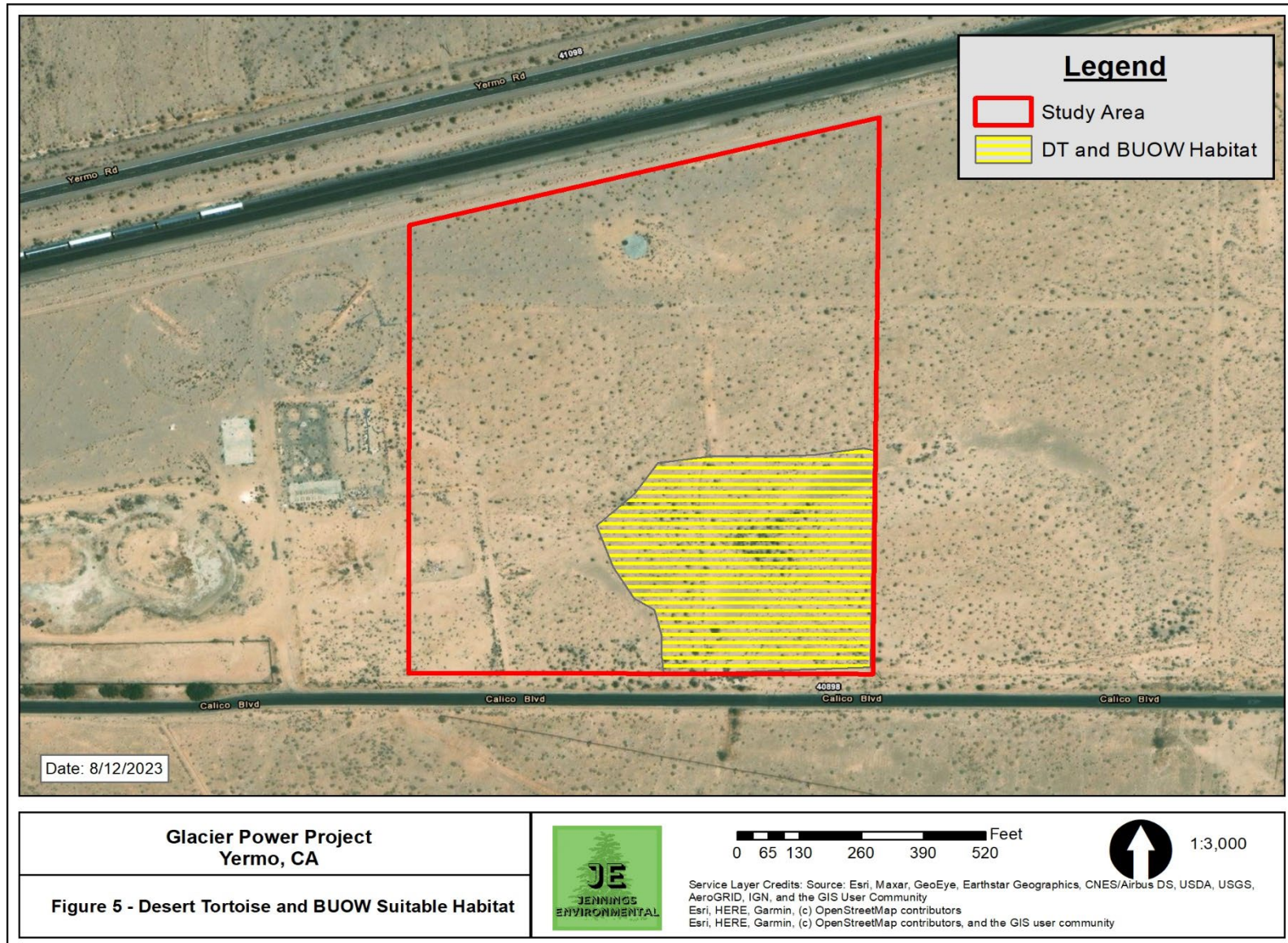
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Appendix B – Photos

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Photo 1 –
Southeast corner
of Project Site,
facing northwest.



Photo 2 –
Southwest corner
of Project Site,
facing Northeast.

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Photo 3 –
Northwest corner
of Project Site,
facing southeast.



Photo 4 –
Northeast corner
of Project Site,
facing Southwest.

Appendix C – Regulatory Framework

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1.1 FEDERAL JURISDICTION

1.1.1 United States Army Corps of Engineers

Activities within inland streams, wetlands, and riparian areas in California are regulated by agencies at the federal, state, and regional levels. At the federal level, the U.S. Army Corps of Engineers (USACE) Regulatory Program regulates activities within wetlands and waters of the US pursuant to Section 404 of the Federal Clean Water Act (CWA).

At the state level, the California Department of Fish and Wildlife (CDFW) regulates activities within the bed, bank, and associated habitat of a stream under the Fish and Game Code §§ 1600–1616. The California State Water Resources Board (SWRB) delegates authority at the regional level to Regional Water Quality Control Boards (RWQCB) that are responsible for regulating discharge into waters of the US under Section 401 of the federal CWA and waters of the State under the California Porter-Cologne Water Quality Act.

The CWA was implemented to maintain and restore the chemical, physical, and biological integrity of the Waters of the United States (33 Code of Federal Regulations [CFR] Part 328 Section 328.3). “Waters of the US” are defined as follows:

§ 328.3 Definitions.

For the purpose of this regulation these terms are defined as follows:

(a) *Waters of the United States* means:

(1) Waters which are:

- (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (ii) The territorial seas; or
- (iii) Interstate waters, including interstate wetlands;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section:

- (i) That are relatively permanent, standing or continuously flowing bodies of water; or
- (ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section;

(4) Wetlands adjacent to the following waters:

- (i) Waters identified in paragraph (a)(1) of this section; or

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- (ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3)(i) of this section and with a continuous surface connection to those waters; or
 - (iii) Waters identified in paragraph (a)(2) or (3) of this section when the wetlands either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section;
- (5) Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of this section:
 - (i) That are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3)(i) of this section; or
 - (ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section.
- (b) The following are not “waters of the United States” even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:
 - (1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;
 - (2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area’s status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;
 - (3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
 - (4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;
 - (5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
 - (6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
 - (7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is

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abandoned and the resulting body of water meets the definition of waters of the United States; and

(8) Swales and erosional features (*e.g.*, gullies, small washes) characterized by low volume, infrequent, or short duration flow.

(c) In this section, the following definitions apply:

(1) *Wetlands* means those 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.

(2) *Adjacent* means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes, and the like are “adjacent wetlands.”

(3) *High tide line* means the line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

(4) *Ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(5) *Tidal waters* means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

(6) *Significantly affect* means a material influence on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section. To determine whether waters, either alone or in combination

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with similarly situated waters in the region, have a material influence on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section, the functions identified in paragraph (c)(6)(i) of this section will be assessed and the factors identified in paragraph (c)(6)(ii) of this section will be considered:

(i) Functions to be assessed:

- (A) Contribution of flow;
- (B) Trapping, transformation, filtering, and transport of materials (including nutrients, sediment, and other pollutants);
- (C) Retention and attenuation of floodwaters and runoff;
- (D) Modulation of temperature in waters identified in paragraph (a)(1) of this section; or
- (E) Provision of habitat and food resources for aquatic species located in waters identified in paragraph (a)(1) of this section;

(ii) Factors to be considered:

- (A) The distance from a water identified in paragraph (a)(1) of this section;
- (B) Hydrologic factors, such as the frequency, duration, magnitude, timing, and rate of hydrologic connections, including shallow subsurface flow;
- (C) The size, density, or number of waters that have been determined to be similarly situated;
- (D) Landscape position and geomorphology; and
- (E) Climatological variables such as temperature, rainfall, and snowpack.

1.2 STATE JURISDICTION

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

1.2.1 Regional Water Quality Control Board

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

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

1.2.2 California Department of Fish and Wildlife

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

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

In a CDFW guidance of stream processes and forms in dryland watersheds (Vyverberg 2010), streams are identified as having one or more channels that may all be active or receive water only during some high flow event. Subordinate features, such as low flow channels, active channels, banks associated with secondary channels, floodplains, and stream-associated vegetation, may occur within the bounds of a single, larger channel. The water course is defined

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by the topography or elevations of land that confine a stream to a definite course when its waters rise to their highest level. A watercourse is defined as a stream with boundaries defined by the maximal extent or expression on the landscape even though flow may otherwise be intermittent or ephemeral.

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

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

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

In A Clarification of the U.S. Fish and Wildlife Service's Wetland Definition (Tiner 1989), the USFWS definition was further clarified "that in order for any area to be classified as wetland by the Service, the area must be periodically saturated or covered by shallow water, whether wetland vegetation and/or hydric soils are present or not; this hydrologic requirement is addressed in the first sentence of the definition." When considering whether an action would result in a net loss of wetlands, CDFW will extend jurisdiction to USFWS-defined wetland conditions where such conditions exist within the riparian vegetation that is associated with a stream or lake and does not depend on whether those features meet the three-parameter USACE methodology of wetland determination. If impacts to wetlands under the jurisdiction of CDFW are unavoidable, a mitigation plan will be implemented in coordination with CDFW to support the CDFW policy of "no net loss" of wetland habitat.

Appendix D – Tables

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Table 1. Species Observed On-Site

Common Name	Scientific Name
<u>Plants</u>	
Creosote bush	<i>Larrea tridentata</i>
Asian mustard	<i>Brassica tournefortii</i>
White bursage	<i>Ambrosia dumosa</i>
Schismus grass	<i>Schismus spp.</i>
Oleander	<i>Nerium oleander</i>
Nevada ephedra	<i>Ephedra nevadensis</i>
Tamarisk	<i>Tamarix spp.</i>
Silver cholla	<i>Cylindropuntia echinocarpa</i>
<u>Birds</u>	
Mourning dove	<i>Zenaida macroura</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
Common raven	<i>Corvus corax</i>
<u>Reptiles</u>	
Sidewinder	<i>Crotalus cerastes</i>
Desert iguana	<i>Dipsosaurus dorsalis</i>

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Table 2 – CNDDDB Potential to Occur for the *Yermo*, *Mineola*, *Harvard Hill*, and *Newberry Springs* Quadrangles

<u>Scientific Name</u>	<u>Common Name</u>	<u>Federal/State Status</u>	<u>Other Status</u>	<u>Habitat</u>	<u>Potential to Occur</u>
Agelaius tricolor	tricolored blackbird	None, Threatened	G1G2, S2, CDFW-SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Aquila chrysaetos	golden eagle	None, None	G5, S3, CDFW-FP	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Athene cunicularia	burrowing owl	None, None	G4, S2, CDFW-SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Marginally suitable habitat for this species does occur on site. Protocol surveys are recommended.

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Castela emoryi	Emory's crucifixion-thorn	None, None	G3G4, S2S3, 2B.2	Mojavean desert scrub, Sonoran desert scrub, playas. Gravelly soils, sometimes in alkali playas or washes. 85-1100 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Corynorhinus townsendii	Townsend's big-eared bat	None, None	G4, S2, CDFW-SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Diplacus mohavensis	Mojave monkeyflower	None, None	G2, S2, 1B.2	Joshua tree woodland, Mojavean desert scrub. Dry sandy or rocky washes along the Mojave River. 660-1270 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Emys marmorata	western pond turtle	None, None	G3G4, S3, CDFW-SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

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Erethizon dorsatum	North American porcupine	None, None	G5, S3	Forested habitats in the Sierra Nevada, Cascade, and Coast ranges, with scattered observations from forested areas in the Transverse Ranges. Wide variety of coniferous and mixed woodland habitat.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Falco mexicanus	prairie falcon	None, None	G5, S4, CDFW-WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Gopherus agassizii	desert tortoise	Threatened, Threatened	G3, S2S3	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	Marginally suitable habitat for this species does occur on site. 30-day pre-construction surveys are recommended.
Icteria virens	yellow-breasted chat	None, None	G5, S4, CDFW-SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

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Menodora spinescens var. mohavensis	Mojave menodora	None, None	G4T2, S2, 1B.2	Mojavean desert scrub. Rocky hillsides, canyons. Andesite gravel. 700-1405 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Mentzelia puberula	Darlington's blazing star	None, None	G5, S2, 2B.2	Mojave Desert scrub, Sonoran desert scrub. Sandy crevices in cliffs or on rocky slopes. 70-1280 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Mentzelia tridentata	creamy blazing star	None, None	G3, S3, 1B.3	Mojavean desert scrub. 545-1100 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Ovis canadensis nelsoni	desert bighorn sheep	None, None	G4T4, S3, CDFW-FP	Widely distributed from the White Mtns in Mono Co. to the Chocolate Mts in Imperial Co. Open, rocky, steep areas with available water and herbaceous forage.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Pediomelum castoreum	Beaver Dam breadroot	None, None	G3, S2, 1B.2	Joshua tree woodland, Mojavean desert scrub. Sandy soils; washes and roadcuts. 605-1485 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Phacelia parishii	Parish's phacelia	None, None	G2G3, S1, 1B.1	Mojavean desert scrub, playas. Alkaline flats and slopes or on clay soils. 540- 875 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

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Pyrocephalus rubinus	vermillion flycatcher	None, None	G5, S2S3, CDFW-SSC	During nesting, inhabits desert riparian adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas. Nest in cottonwood, willow, mesquite, and other large desert riparian trees.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Siphateles bicolor mohavensis	Mohave tui chub	Endangered, Endangered	G4T1, S1, CDFW-FP	Endemic to the Mojave River basin, adapted to alkaline, mineralized waters. Needs deep pools, ponds, or slough-like areas. Needs vegetation for spawning.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Toxostoma lecontei	Le Conte's thrasher	None, None	G4, S3, CDFW-SSC	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Wislizenia refracta ssp. refracta	jackass-clover	None, None	G5T5?, S1, 2B.2	Playas, desert dunes, Mojavean desert scrub, Sonoran desert scrub. Sandy washes, roadsides, alkaline flats. 380-1160 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

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Coding and Terms

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

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

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

Global Rankings (Species or Natural Community Level):

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

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

State Ranking:

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

California Rare Plant Rankings (CNPS List):

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

Threat Ranks:

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