BAXTER QUARRY

SAN BERNARDINO COUNTY, CALIFORNIA

Biological Resources Assessment

Prepared For:

CalPortland
19409 National Trails Highway
Oro Grande, California 92368

Prepared By:

ELMT Consulting, Inc.
2201 N. Grand Avenue #10098
Santa Ana, California 92711
Contact: *Travis J. McGill*

February 2022

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Biological Resources Assessment

The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.

Travis J. McGill
Director/Biologist

Thomas J. McGill, Ph.D.
Managing Director

February 2022

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Section 1 Introduction

This report contains the findings of ELMT Consulting's (ELMT) habitat and jurisdictional assessment for CalPortland's Baxter Quarry Project (Project) located in San Bernardino County, California. ELMT biologists Travis J. McGill and Jacob H. Lloyd Davies conducted an updated field survey and evaluated the condition of the habitat within the project site on December 1, 2021. Previous surveys were conducted on June 4, 8, 11, 2018.

The habitat assessment was conducted to characterize existing site conditions and to assess the probability of occurrence of special-status[1] plant and wildlife species that could pose a constraint to project implementation. This report provides an assessment of the suitability of the onsite habitats to support special-status plant and wildlife species identified by the California Natural Diversity Data Base (CNDDB) and other electronic databases as potentially occurring in the vicinity of the project site.

The site was also evaluated for its potential to support natural drainage features, ponded areas, and/or water bodies that have the potential to fall under the regulatory authority of the of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or California Department of Fish and Wildlife (CDFW) pursuant to Sections 401 and 404 of the Federal Clean Water Act (CWA), the California Porter-Cologne Water Quality Control Act, and Section 1600 *et seq.* of the Fish and Game Code.

In summary, the Project site supports a mix of undeveloped and heavy disturbed land. Two plant communities were observed within the boundary of the Project site: creosote bush scrub and desert willow scrub. In addition, one (1) land cover type that would be classified as disturbed was observed onsite. This area is not a vegetation classification, but rather a land cover type.

In addition, no special-status plant species, special-status wildlife species, riparian habitat, or sensitive natural communities were observed onsite during field investigations.

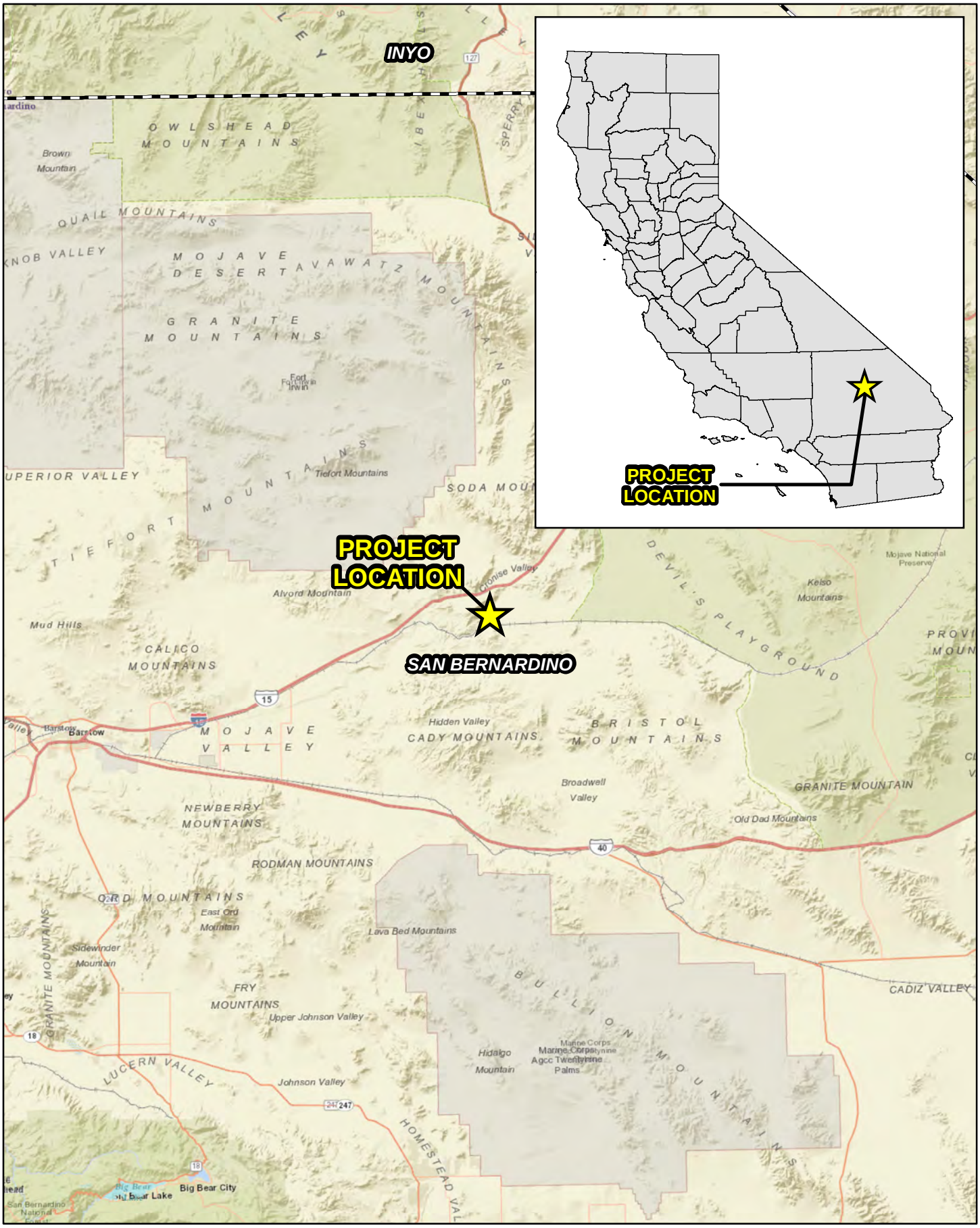
1.1 PROJECT LOCATION

The project site is generally located east of Interstate 15, north of Interstate 40, and south of the Community of Baker in unincorporated San Bernardino County, California (Exhibit 1, *Regional Vicinity*). The project site is depicted on the Cave Mountain quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Section 12 of Township 11 North, Range 6 East (Exhibit 2, *Site Vicinity*). Specifically, the project site is located 3.5 miles south of Interstate 15 off Basin Road (Exhibit 3, *Project Site*).

[1] As used in this report, "special-status" refers to plant and wildlife species that are federally or State listed, proposed, or candidates; plant species that have been designated a California Native Plant Society (CNPS) Rare Plant Rank; and wildlife species that are designated by the California Department of Fish and Wildlife (CDFW) as fully protected, species of special concern, or watch list species.

1.2 PROJECT DESCRIPTION

The project will consist of the continuation of existing mining operations on 49 acres onto an additional 69 acres within an approximately 280-acre site that is directly adjacent south and east of the existing quarry. The reclamation plan amendment area is entirely within privately-owned land (APNs: 054-220-102, 103, 104, 108, 109, 110, 111, 112, 113, 114, 116, 118, 119, 120, 121, 122, 124, 135, 136), surrounded by Bureau of Land Management (BLM) public lands. Currently the proposed 69 acres within the 280-acre project area are mostly undisturbed, consisting primarily of Cave Mountain and adjacent parcels at the base of the mountain.



BAXTER QUARRY EXPANSION
BIOLOGICAL RESOURCES ASSESSMENT

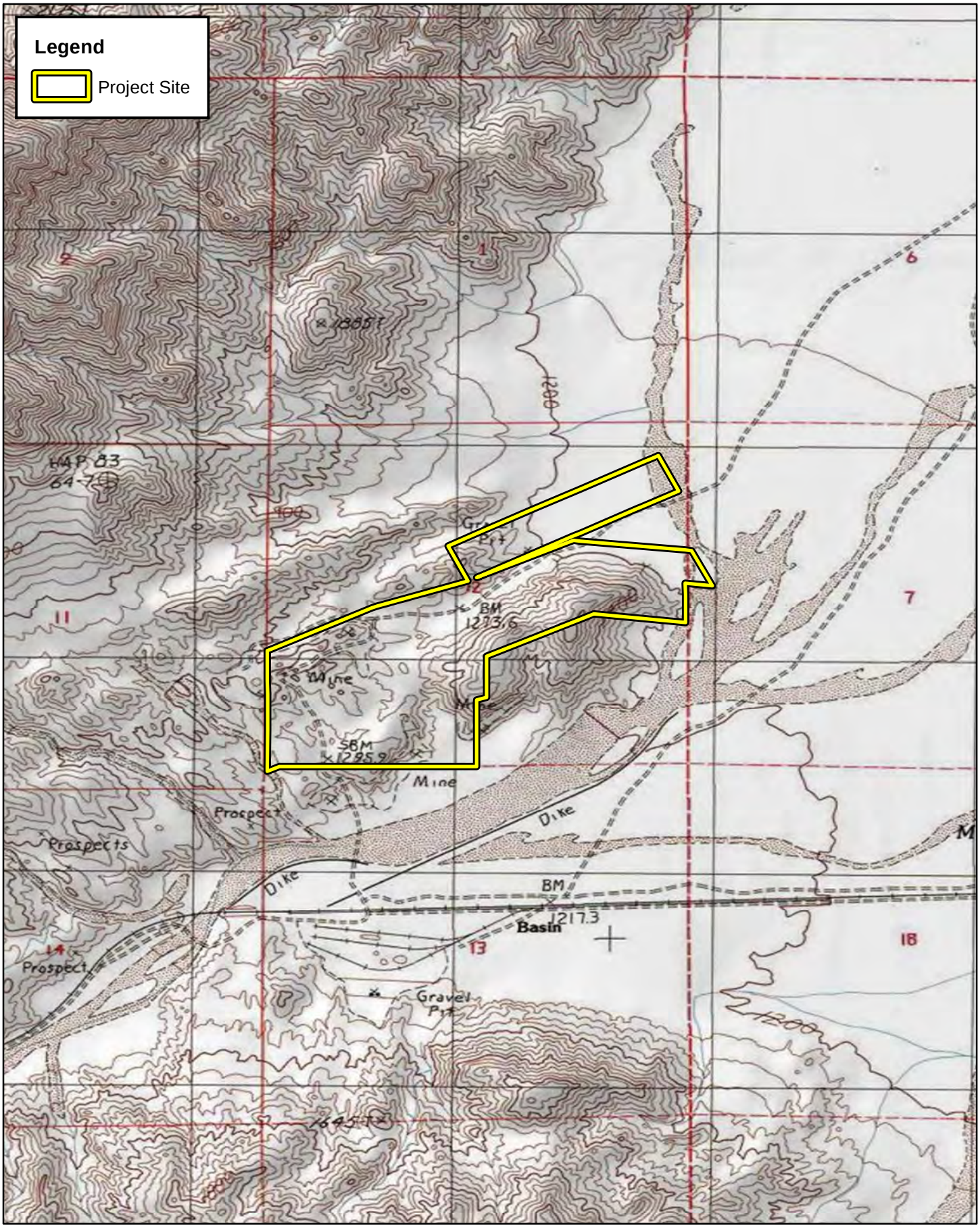
Regional Vicinity

ELMT CONSULTING

0 5 10 20 Miles

Source: World Street Map, San Bernardino County

Exhibit 1



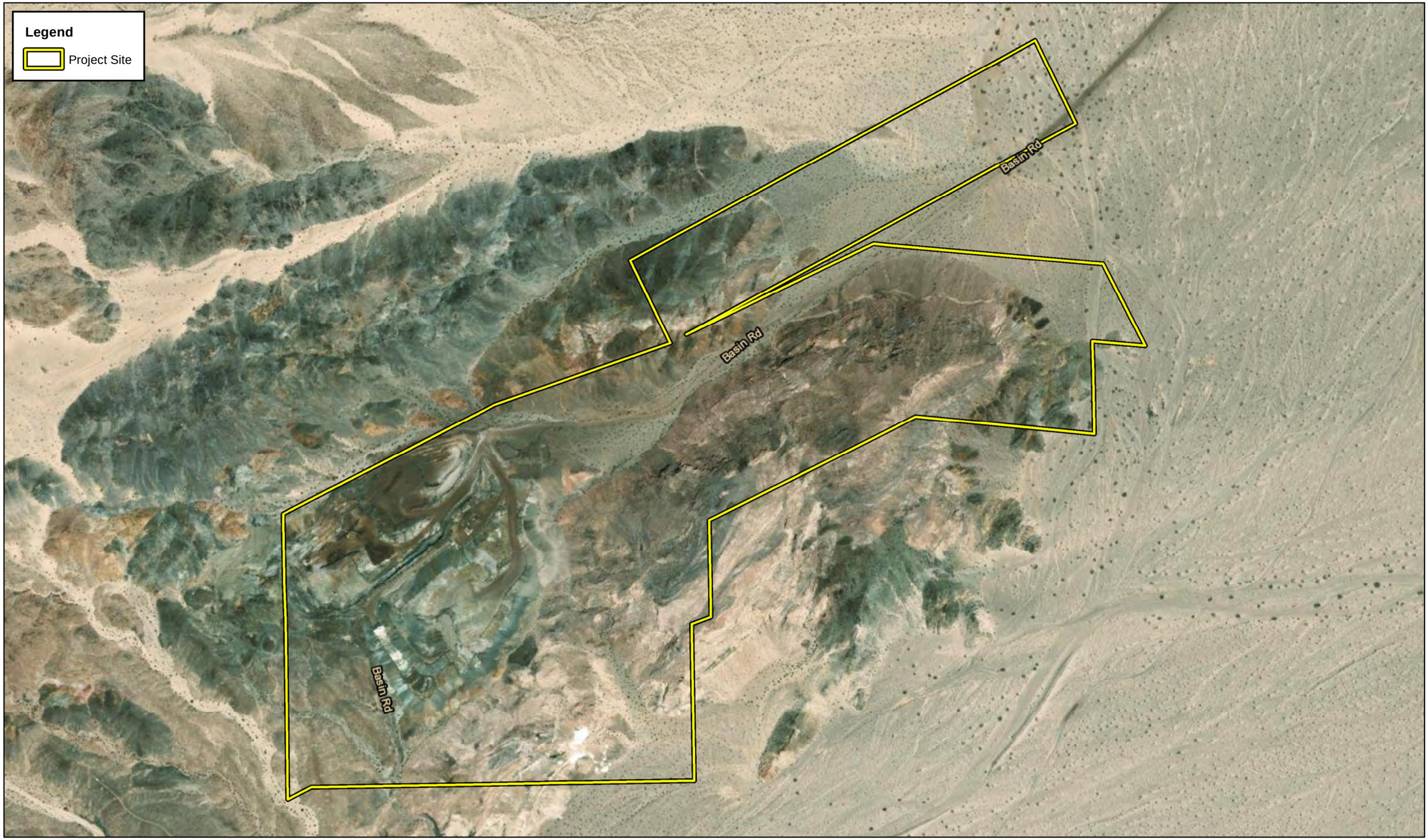
BAXTER QUARRY EXPANSION
BIOLOGICAL RESOURCES ASSESSMENT

Site Vicinity

0 1,000 2,000 4,000 Feet

Source: USA Topographic Map, San Bernardino County

Exhibit 2



ELMT CONSULTING

0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, San Bernardino County

BAXTER QUARRY EXPANSION
BIOLOGICAL RESOURCES ASSESSMENT

Project Site

Exhibit 3

Section 2 Methodology

A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site. In addition to the literature review, a general habitat assessment or field investigation of the project site was conducted. The field investigation was conducted to document existing conditions within the project site and assess the potential for special-status biological resources to occur.

2.1 LITERATURE REVIEW

Prior to conducting the field study, species and habitat information was gathered from the reports related to the specific project and relevant databases for the *Bitter Spring, Cronese Lakes, West of Soda Lake, Dunn, Cave Mountain, Crucero Hill, Hidden Valley West, Hidden Valley East,* and *West of Broadwell Mesa* USGS 7.5-minute quadrangles to identify species and habitats known to occur locally. These quadrangles were queried due to the proximity of the project site to quadrangle boundaries, and regional topography. The literature review sources included:

- U.S. Fish and Wildlife (USFWS) threatened and endangered species occurrence GIS overlay;
- USFWS Designated Critical Habitat Maps;
- California Natural Diversity Database (CNDDB) *Rarefind 5*;
- International Union for Conservation of Naturae (IUCN);
- CNDDB Biogeographic Information and Observation System (BIOS);
- California Native Plant Society Electronic Inventory (CNPSEI) database;
- Calflora Database;
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey;
- USFWS National Wetland Inventory;
- Environmental Protection Agency (EPA) Water Program “My Waters” data layers;
- Google Earth Pro historic aerial imagery (1985-2021);
- San Bernardino County General Plan;
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- USFWS National Wetlands Inventory (NWI).

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the subject property. The CNDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the project site.

2.2 FIELD INVESTIGATION

ELMT biologists Travis J. McGill and Jacob H. Lloyd Davies conducted an updated field survey and evaluated the conditions of the plant communities found within the boundaries of the project site on December 1, 2021. Previous surveys were conducted on June 4, 8, 11, 2018.

Plant communities identified on aerial photographs during the literature review were verified in the field. The plant communities were evaluated for their potential to support special-status plant and wildlife species. In addition, field staff identified any natural corridors and linkages that may support the movement of wildlife through the area.

The plant communities were evaluated for their potential to support special-status plant and wildlife species. Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens (2009) and delineated on an aerial photograph, and then digitized into ArcGIS. The ArcGIS application was used to compute the area of each plant community in acres.

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides were used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are fairly well standardized, scientific names are provided immediately following common names in this report (first reference only). In addition, field staff identified any natural corridors and linkages that may support the movement of wildlife through the area.

2.3 SOIL SERIES ASSESSMENT

On-site and adjoining soils were researched prior to the field survey using the USDA NRCS Soil Survey for San Bernardino County. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes that the project site has undergone.

2.4 JURISDICTIONAL DRAINAGES AND WETLANDS

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the Corps, Regional Board, and/or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS NWI and Environmental Protection Agency (EPA) Water Program “My Waters” data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the Project site.

Section 3 Existing Conditions

3.1 LOCAL CLIMATE

The Mojave Desert is found at elevations of 2,000 to 5,000 feet above mean sea level and is characterized by cool winter temperatures and warm summer temperatures, with its rainfall occurring almost entirely in the winter. Climatological data obtained for the City of Victorville indicates the annual precipitation averages 6.18 inches per year. Almost all of the precipitation in the form of rain occurs in the months between October and April, with hardly any occurring between the months of May and September. The wettest month is February, with a monthly average total precipitation of 1.22 inches. The average minimum and maximum temperatures for the region are 45.7 and 78.9 degrees Fahrenheit (°F) respectively with December and January (monthly average 41° F) being the coldest months and July being the hottest (monthly average 100° F).

3.2 TOPOGRAPHY AND SOILS

On-site surface elevation ranges from approximately 1,175 to 1,600 feet above mean sea level. Topography on-site generally consists of rolling hills and several steep sided hilltops and ridgelines located across the project site. In addition, several portions of the project site are being actively mined or have previously been mined, or used for spoil piles.

A query of the NRCS USDA Web Soil Survey determined that the project site is located in an area that has not been mapped. Soils within the southwestern portion of the site have been heavily disturbed from mining activities.

3.3 SURROUNDING LAND USES AND SITE CONDITIONS

The project site is located off of Interstate 15 between Baker and Newberry Springs in unincorporated San Bernardino County. With the exception of Interstate 15, the project site is located in an area that is undeveloped. Four-wheel drive dirt access roads are found throughout the immediate area.

Section 4 Discussion

4.1 SITE CONDITIONS

The project site supports a mix of undeveloped and heavily disturbed land. The areas on the perimeter of the project site are relatively undeveloped/undisturbed, while the middle portion of the project site supports mining pits, ongoing mining operations, and dirt access roads. Disturbed areas include those areas that have been subject to existing mining activities.

4.2 VEGETATION AND LAND COVER

During the field investigation two (2) plant communities were observed within the boundary of the project site: creosote bush scrub and desert willow scrub (Exhibit 4, *Vegetation*). In addition, one (1) land cover type that would be classified as disturbed was observed onsite. This area is not a vegetation classification, but rather a land cover type. The vegetation community and land cover type are described in further detail below.

4.2.1 Creosote Bush Scrub (Larrea tridentata Shrubland Alliance)

The creosote bush scrub plant community occurs throughout the undeveloped/undisturbed portions of the project site and is the dominant plant community within the surrounding landscape, and overall underlying plant community in the area. This plant community is dominated by creosote (*Larrea tridentata*) corresponds with Sawyer et al.'s (2009) *Larrea tridentata* shrubland alliance. Other plant speices observed include devil's spineflower (*Chorizanthe rigida*), burro weed (*Ambrosia dumosa*), desert dicoria (*Dicoria canascens*), brittlebush (*Encelia farinosa*), turtleback (*Psathyrotes ramosissima*), wire lettuce (*Stephanomeria pauciflora*), desert willow (*Chilopsis linearis*), silver cholla (*Cylindropuntia echinocarpa*), branched pencil cholla (*Cylindropuntia ramosissima*), cottontop (*Echinocactus polycephalus* var. *polycephalus*), frost mat (*Achyronychia cooperi*), California juniper (*Juniperus californica*), desert croton (*Croton californicus*), catclaw (*Senegalia greggii*), (*Hilaria rigida*), Arabian schismus (*Schismus arabicus*), brittle spine flower (*Chorizanthe brevicornu*), and thick-leaved ground cherry (*Phsalis crassifolia*).

4.2.2 Desert Willow Scrub (Chilopsis Woodland Alliance)

The desert willow scrub (Chilopsis Woodland Alliance) is found on the northeast portion of the site in association with the Mojave River floodplain. This plant community is dominated by desert willow (*Chilopsis linearis* ssp. *arcuata*) closely corresponding with Sawyer et al.'s (2009) *Chilopsis linearis* woodland alliance. These areas are outside the planned project footprint. Other plant species found within this plant community include smoke tree (*Psorothamnus spinosus*), and plant species associated with the creosote bush scrub plant community.

4.2.3 Disturbed

Disturbed areas are generally areas that have been subject to a high level of human disturbances from existing mining activities and no longer comprise a native plant community. These areas are unpaved and

are primarily or entirely devoid of vegetation, or support ruderal/weedy plant species and are found throughout the project site. Disturbed areas included existing mining pits, dirt access roads, stockpile areas, and mining facilities.

4.3 WILDLIFE

Plant communities provide foraging habitat, nesting and denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed during the field survey or that are expected to occur within the project site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather condition in which the field survey was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation.

4.3.1 Fish

No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) with frequent sources of water that would provide suitable habitat for fish were observed on or immediately adjacent to the project site. Therefore, no fish are expected to occur and are presumed absent from the project site.

4.3.2 Amphibians

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on or immediately adjacent to the project site. Therefore, no amphibians are expected to occur on the project site and are presumed absent.

4.3.3 Reptiles

The only reptile species observed within the Project area was the desert iguana *(Dipsoarus dorsalis*). Other common reptile species expected to occur within the Project area include desert glossy snake (*Arizona elegans eburnata*), Mohave shovel-nosed snake (*Chionactis occipitalis*), side-blotched lizard (*Uta stansburiana elegans*), western zebra-tailed lizard (*Callisaurus draconoides rhodostictus*), Great Basin gopher snake (*Pituophis catenifer deserticola*), desert horned lizard (*Phrynosoma platyrhinos calidiarum*), Great Basin collard lizard (*Crotaphytus bicinctores*), and northern Mohave rattlesnake (*Crotalus scutulatus scutulatus*).

4.3.4 Birds

The project site provides suitable foraging and cover habitat for a variety of resident and migrant bird species adapted to conditions within the Mojave Desert. Avian species detected during the survey included red-tailed hawk (*Buteo jamaicensis*), ash-throated flycatcher (*Myiarchus cinerascens*), and common raven (*Corvus corax*).

4.3.5 Mammals

The project site provides suitable habitat for a variety of mammalian species adapted to conditions within the Mojave Desert. Most naturally occurring mammal species are nocturnal and are difficult to observe during a diurnal field visit. Mammalian species observed on-site during the field investigation include

black-tailed jackrabbit (*Lepus californicus*) and white-tailed antelope squirrel (*Ammospermophilus leucurus*). Mammalian species expected to occur include desert woodrat (*Neotoma lepida*), Audubon's cottontail (*Sylvilagus audubonii*), desert kangaroo rat (*Dipodomys* sp.), and desert cottontail (*Sylvilagus audubonii*).

It should be noted that the cliffs and steep terrain that surrounds the project site provide rock outcrops/cervices that have a low potential to support suitable roosting habitat for bats. Common bat species that roost in cliffs and rocky outcrops that have the potential to occur include western canyon bat (*Parastrellus hesperus*), California myotis (*Myotis californicus*), big brown bat (*Eptesicus fuscus*), Mexican free-tailed bat (*Tadarida brasiliensis*). Most of these steep cliff faces and rocky terrain will be avoided during project activities.

4.4 NESTING BIRDS

No active nests or birds displaying nesting behavior were observed during the field survey, which was conducted during breeding season. The project site and surrounding area provides foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area.

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within ten (10) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction.

4.5 WILDLIFE CORRIDORS AND LINKAGES

Habitat linkages provide links between larger undeveloped habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

According to the San Bernardino County General Plan, the project site has not been identified as occurring within a Wildlife Corridor or Linkage. Although partially constrained by existing mining facilities, the open and natural habitats within the undeveloped portions of the project site, and surrounding the project site have the potential to allow for wildlife to move from the project site into the undeveloped areas surrounding the project site in search of food, shelter, or nesting habitat.

The undeveloped land in the immediate vicinity of the project site provides local wildlife movement opportunities for wildlife species moving through the immediate area. The project site does not function as a major wildlife movement corridor or linkage. As such, implementation of the proposed project is not

expected to have a significant impact to wildlife movement opportunities or prevent local wildlife movement through the area since there is ample habitat adjacent to the project site to support wildlife movement opportunities.

4.6 STATE AND FEDERAL JURISDICTIONAL AREAS

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge and/or fill materials into "waters of the United States" pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act and the CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the California Fish and Game Code.

The USFWS NWI and the USGS National Hydrography Dataset were reviewed to determine if any blueline streams or riverine resources have been documented within or immediate surrounding the project site. Based on this review and field investigation, four (4) riverine resources were identified within the boundaries of the project site. These features are ephemeral features that follow topography within the canyon bottoms of the rolling hills. Surface flows within with these features are only provided by direct precipitation from storm events. No surface water was observed during the field investigation.

The Mojave River floodplain and six (6) unnamed drainage features were observed within the boundaries of the project site during the field investigation (Exhibit 5, *Jurisdictional Areas*). The Mojave River floodplain is located on the northeastern boundaries of the project site outside of the proposed limits of disturbance. The Mojave River floodplain is characterized by dynamic braided channel and is generally unvegetated or vegetated with a mix of creosote bush scrub and desert willow scrub. Mining activities are expected to avoid the Mojave River floodplain.

Two of the ephemeral drainage features extend west to east on the northern boundary of the project site and generally follow Basin Road. These features have been subject to routine grading activities associated with maintenance of Basin Road. The other four ephemeral drainage features are found on the southwest portion of the project site. These features generally flow in a north to south direction. These ephemeral drainage features are unvegetated or vegetated with the creosote bush scrub plant species. The six unnamed drainage features all flow into the Mojave River Floodplain.

The Mojave River is considered a Traditional Navigable Water and is considered a Water of the United States. As a result, the Mojave River floodplain and six unnamed drainage features will likely fall under the regulatory authority of the Corps, Regional Board, and CDFW.

The Project is expected to result in impacts to 1.15 acres and 1,115 linear feet of jurisdictional waters. Prior to impacts to the jurisdictional resources, the operator shall obtain any applicable permits from the Corps, Regional Board, and CDFW.

4.7 SPECIAL-STATUS BIOLOGICAL RESOURCES

The CNDDB Rarefind 5, CNDDB Quickview Tool in BIOS and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the *Bitter Spring, Cronese Lakes, West of Soda Lake, Dunn, Cave Mountain, Crucero Hill, Hidden Valley West, Hidden Valley East,* and *West of Broadwell Mesa* USGS 7.5-minute quadrangles. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified nine (9) special-status plant species, twenty-two (22) special-status wildlife species, and two (2) special-status plant communities as having the potential to occur within the *Bitter Spring, Cronese Lakes, West of Soda Lake, Dunn, Cave Mountain, Crucero Hill, Hidden Valley West, Hidden Valley East,* and *West of Broadwell Mesa* quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project boundaries based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity are presented in *Table C-1: Potentially Occurring Special-Status Biological Resources*, provide in Appendix C. Refer to Table C-1 for a determination regarding the potential occurrence of special-status plant and wildlife species within the project site, and Exhibit 6, *CNDDB Observations*.

4.7.1 Special-Status Plants

According to the CNDDB and CNPS, nine (9) special-status plant species have been recorded in the *Bitter Spring, Cronese Lakes, West of Soda Lake, Dunn, Cave Mountain, Crucero Hill, Hidden Valley West, Hidden Valley East,* and *West of Broadwell Mesa* quadrangles (refer to Appendix C). No special-status plant species were observed on-site during the field investigation, which was conducted during the blooming period for most of the special-status plant species known to occur in the vicinity of the site.

4.7.2 Special-Status Wildlife

According to the CNDDB, twenty-two (22) special-status wildlife species have been reported in the *Bitter Spring, Cronese Lakes, West of Soda Lake, Dunn, Cave Mountain, Crucero Hill, Hidden Valley West, Hidden Valley East,* and *West of Broadwell Mesa* quadrangles (refer to Appendix C). Based on habitat requirements for the identified special-status species, and known distributions, it was determined that the undeveloped/undisturbed plant communities found onsite have the potential to support the following special-status wildlife species:

- pallid bat (*Antrozous pallidus*), a California Species of Special Concern – moderate potential to occur
- golden eagle (*Aquila chrysaetos*), a California fully protected and watch list species – moderate potential to occur
- spotted bat (*Euderma maculatum*), a California Species of Special Concern – moderate potential to occur

- prairie falcon (*Falco mexicanus*), a California watch list species – moderate potential to occur
- Mojave desert tortoise (*Gopherus agassizii*), and federally and State Threatened speceis – moderate potential to occur
- loggerhead shrike (*Lanius ludovicianus*), a California Species of Special Concern – high potential to occur
- fringed myotis (*Myotis thysanodes*), no formal status – low potential to occur
- desert bighorn sheep (*Ovis canadensis nelsoni*), California fully protected species – moderate potential to occur
- American badger (*Taxidea taxus*), a California Species of Special Concern – low potential to occur

Based on regional significance and listing status, the potential occurrence of burrowing owl, Mojave desert tortoise, and Mohave ground squirrel are described in further detail below.

Burrowing Owl

The burrowing owl is designated by the CDFW as a California species of special concern. It is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with well-drained, level to gently-sloping areas characterized by sparse vegetation and bare ground. They are dependent upon the presence of burrowing mammals (such as ground squirrels) for roosting and nesting habitat. The presence or absence of colonial mammal burrows is often a major factor that limits the presence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drainpipes, stand-pipes, and dry culverts. Small mammals may also burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. This species requires open vegetation allowing line-of-sight observation of the surrounding habitat to forage as well as watch for predators. The burrowing owl nesting season generally extends from mid-March to the end of August.

Burrowing owls are not documented within project site, are not documented within a 5-mile radius, and are not documented in the *Cave Mountain* USGS quadrangle or the eight quadrangles that surround it. The assessment survey was structured to detect burrowing owl. The survey consisted of walking transects spaced to provide 100% visual coverage of the project site, including survey buffer transects around the Project site. The result of the survey was that no evidence of burrowing owl was found within the project boundaries.

Mojave Desert Tortoise

The Mojave population of the desert tortoise was listed as Threatened on April 2, 1990 and a recovery plan was published in June 1994 (revised May 2011) to describe a strategy for recovering the Mojave population of the desert tortoise including the identification of five recovery units, recommendations for a system of Desert Wildlife Management Areas (DWMAs) within the recovery units, and development and implementation of specific recovery actions, especially within DWMAs. The establishment of recovery units and DWMAs was intended to facilitate an ecosystem approach to land management and desert tortoise recovery. Based on the 2018 Revised Recovery Plan, the survey area is located within the Western Mojave Recovery Unit, but is not located within any designated DWMAs. Additionally, the survey area is not

located within designated Critical Habitat for the desert tortoise and no desert tortoise have been recorded on the project site.

The Mojave population of the desert tortoise inhabits areas north and west of the Colorado River in the Mojave Desert of California, Nevada, Arizona, and southwestern Utah, and in the Sonoran Desert in California. Throughout the majority of the Mojave Desert, desert tortoises occur most commonly on gentle sloping soils characterized by an even mix of sand and gravel and sparsely vegetated low-growing vegetation where there is abundant inter-shrub space. Typical habitat for the Mojave desert tortoise has been characterized as creosote bush scrub below 5,500 feet in elevation with a high diversity of perennial and ephemeral plants. The dominant shrub commonly associated with desert tortoise habitat is creosote bush; however, other shrubs including burrobush, Mojave yucca (*Yucca schidigera*), cheesebush, and Mojave prickly-pear (*Opuntia mojavensis*) also provide suitable habitat. The desert tortoise spends 95 percent of its life underground and will opportunistically utilize burrows of various lengths, deep caves, rock and caliche crevices, or overhangs for cover. Therefore, a moderately friable soil is required to allow for burrow construction and ensure that burrows do not collapse.

The survey consisted of walking transects spaced approximately 10 meters apart to provide 100% visual coverage of the project site, as well as 200-, 400- and 600-meter transects when and where possible surrounding the east, north and west of the project site. The result of the survey was that no evidence of desert tortoise was found within the project boundaries.

Mohave Ground Squirrel

The Mohave ground squirrel is endemic to the western Mojave Desert, California. It occupies portions of Inyo, Kern, Los Angeles, and San Bernardino counties in the western Mojave Desert. In general, the species ranges from near Palmdale on the southwest to Lucerne Valley on the southeast, Olancha on the northwest and the Avawatz Mountains on the northeast (Gustafson 1993). The historical range of suitable habitat for this species as decreased by 10 to 16% due to urbanization and range-wide declines in trapping success over the last few decades suggesting that their populations are declining. This species was listed as threatened under the California Endangered Species Act in 1985.

The Mohave ground squirrel is a medium-sized ground squirrel that measures 8.3 to 9.1 inches (in; 21 to 23 centimeters; cm) in total length, 2.2 to 2.8 in (5.7 to 7.2 cm) in tail length, and 1.3 to 1.5 in (3.2 to 3.8 cm) in hind foot length (Hall 1981). The Mohave ground squirrel occupies all major desert scrub habitats in the western Mojave Desert. It has been observed in the following habitats described by Holland (1986) as:

- Mojave creosote scrub, dominated by creosote bush and burrobush,
- Desert saltbush scrub, dominated by various species of saltbush (*Atriplex*),
- Desert sink scrub, which is similar in composition to saltbush scrub, but is sparser and grows on poorly drained soils with high alkalinity,
- Desert greasewood scrub, with very sparse vegetation generally located on valley bottoms and dry lake beds,
- Shadscale scrub, which is dominated by *Atriplex confertifolia* and/or *A. spinescens*, and
- Joshua tree woodland, which includes Joshua trees widely scattered over a variety of shrub species (Gutafson 1993).

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

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

There are no documented occurrences of MGS within a 3-mile radius of the project site; the closest recorded occurrence is approximately 16.5 miles northwest of the project site within the jurisdiction of Fort Irwin. MGS are thought to be extirpated east of the Interstate 15, south of Barstow and west of Highway 247. The project site occurs outside the established current range for this species and no further discussion or investigation is warranted.

4.7.3 Special-Status Plant Communities

According to the CNDDB, two (2) special-status plant community has been reported in the *Bitter Spring, Cronese Lakes, West of Soda Lake, Dunn, Cave Mountain, Crucero Hill, Hidden Valley West, Hidden Valley East,* and *West of Broadwell Mesa* quadrangles: Crucifixion Thorn Woodland, and Mojave Riparian Forest. Based on the results of the field investigation, no special-status plant communities were observed on-site.

4.8 CRITICAL HABITAT

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within federally designated Critical Habitat. The closest Critical Habitat designation is located 2.5 miles northeast of the site for desert tortoise (Exhibit 7, *Critical Habitat*). Therefore, the loss or adverse modification of Critical Habitat from site development will not occur and consultation with the USFWS will not be required for implementation of the proposed project.

4.9 PROTECTION OF DESERT NATIVE PLANT SPECIES

The California Desert Native Plants Act (CDNPA) protects California desert native plants from unlawful harvesting on both public and privately owned lands within Imperial, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego Counties. The following native plants, or any part thereof, may not be harvested except under a permit issued by the commissioner or the sheriff of the county in which the native plants are growing: all species of the Agavaceae (century plants, nolinas, and yuccas); all species of the family Cactaceae; all species of the family Fouquieriaceae (ocotillo, candlewood); all species of the genus *Prosopis* (mesquites); all species of the genus *Cercidium* (palo verdes); catclaw acacia (*Acacia greggii*); desert holly (*Atriplex hymenelytra*); smoke tree (*Dalea spinosa*); and desert ironwood (*Olneya tesota*), both dead and alive (provision 80073). This provision excludes any plant that is declared to be a rare, endangered, or threatened species by federal or State law or regulations, including, but not limited to, the California State Fish and Game Code.

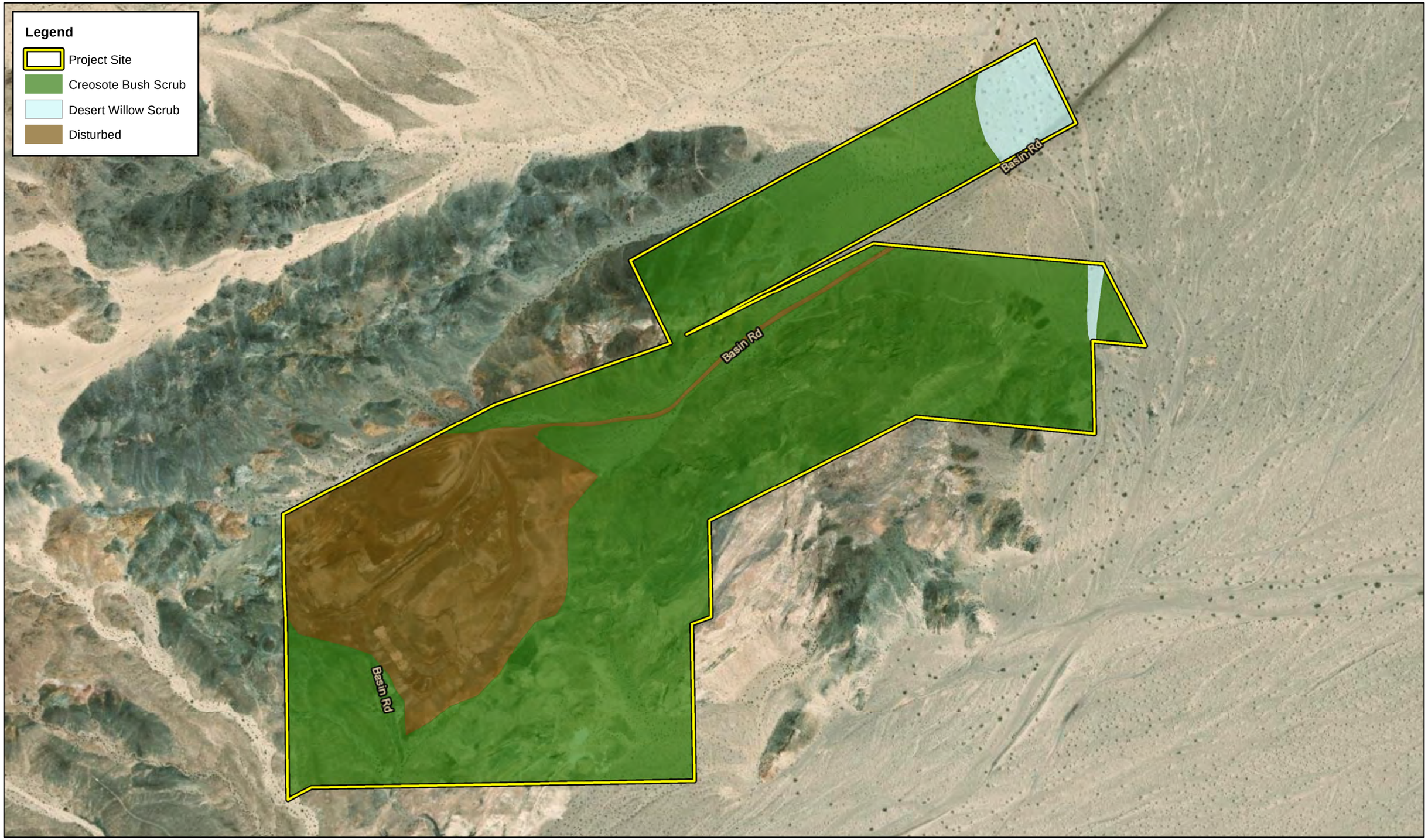
In addition, Section 88.01.060 of the County of San Bernardino Development Code provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. The provisions are intended to coincide with the Desert Native Plants Act (Food and Agricultural Code Section 8001 et seq.) and the State Department of Food and Agriculture to implement and enforce the Act.

Pursuant to Section 88.01.060 of the Development Code, 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:

1) The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:
    (A) *Dalea spinosa* (smoke tree)
    (B) All species of the genus *Prosopis* (mesquites)
2) All species of the family *Agavaceae* (century plants, nolinas, yuccas)
3) Creosote Rings, 10 feet or greater in diameter
4) All Joshua trees (*Yucca brevifolia*)
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 *Parkinsonia* (palos verdes)

Based on the results of the field investigation, multiple species covered by the CDNPA and the County of San Bernardino Development Code were observed within project boundaries during the field investigation. Impacts to these species should be avoided in all instances. In the event that avoidance is not feasible, the project applicant will need an inventory of covered species within each Alternative Subarea completed and a Tree or Plant Removal Permit will need to be obtained from the County of San Bernardino prior to removal of any regulated tree or plant.

It should be noted that no Joshua Trees were observed onsite.



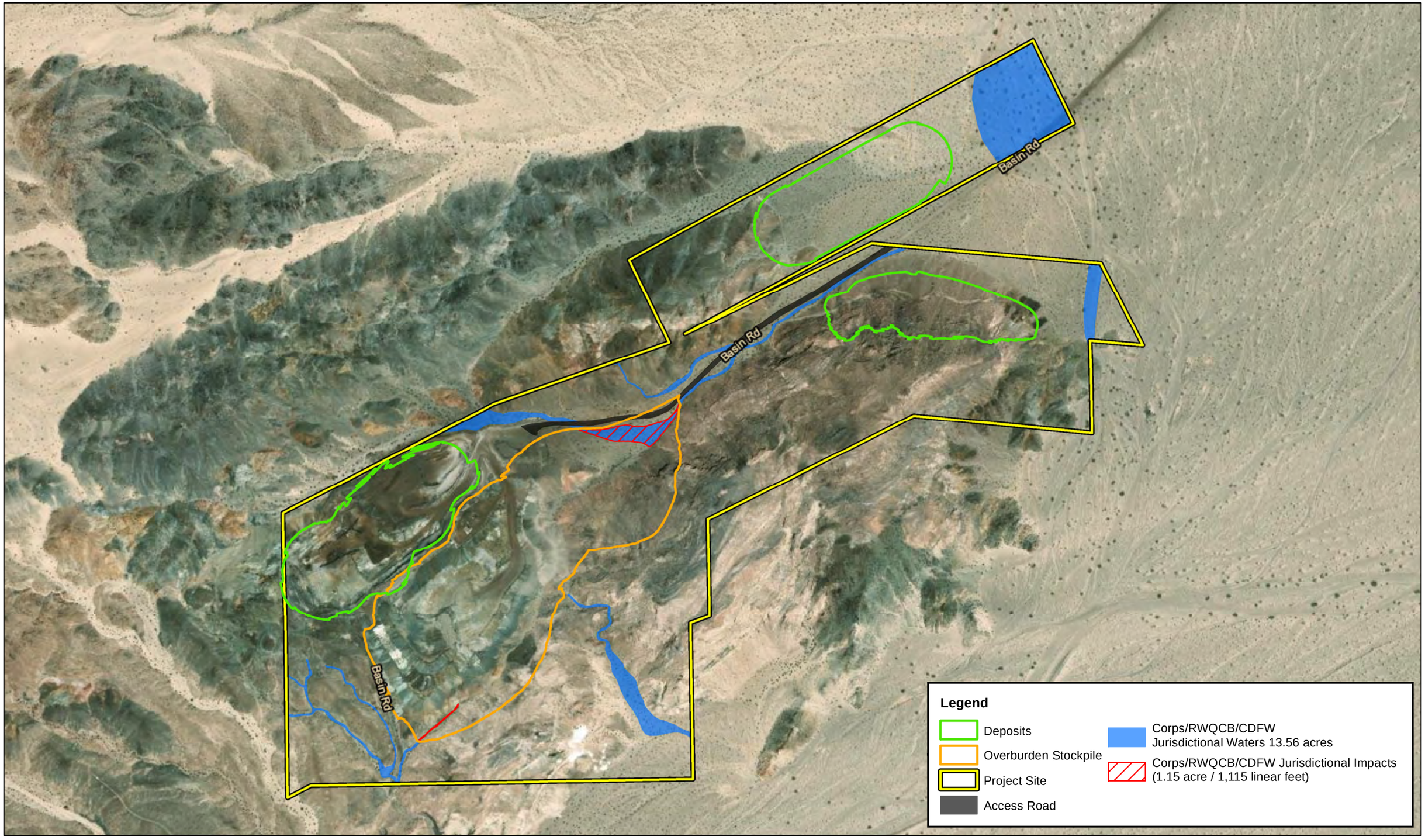
0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, Soil Survey Geographic Database, San Bernardino County

BAXTER QUARRY EXPANSION
BIOLOGICAL RESOURCES ASSESSMENT

Vegetation

Exhibit 4



ELMT CONSULTING

0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, San Bernardino County

BAXTER QUARRY
BIOLOGICAL RESOURCES ASSESSMENT

Jurisdictional Areas and Impacts

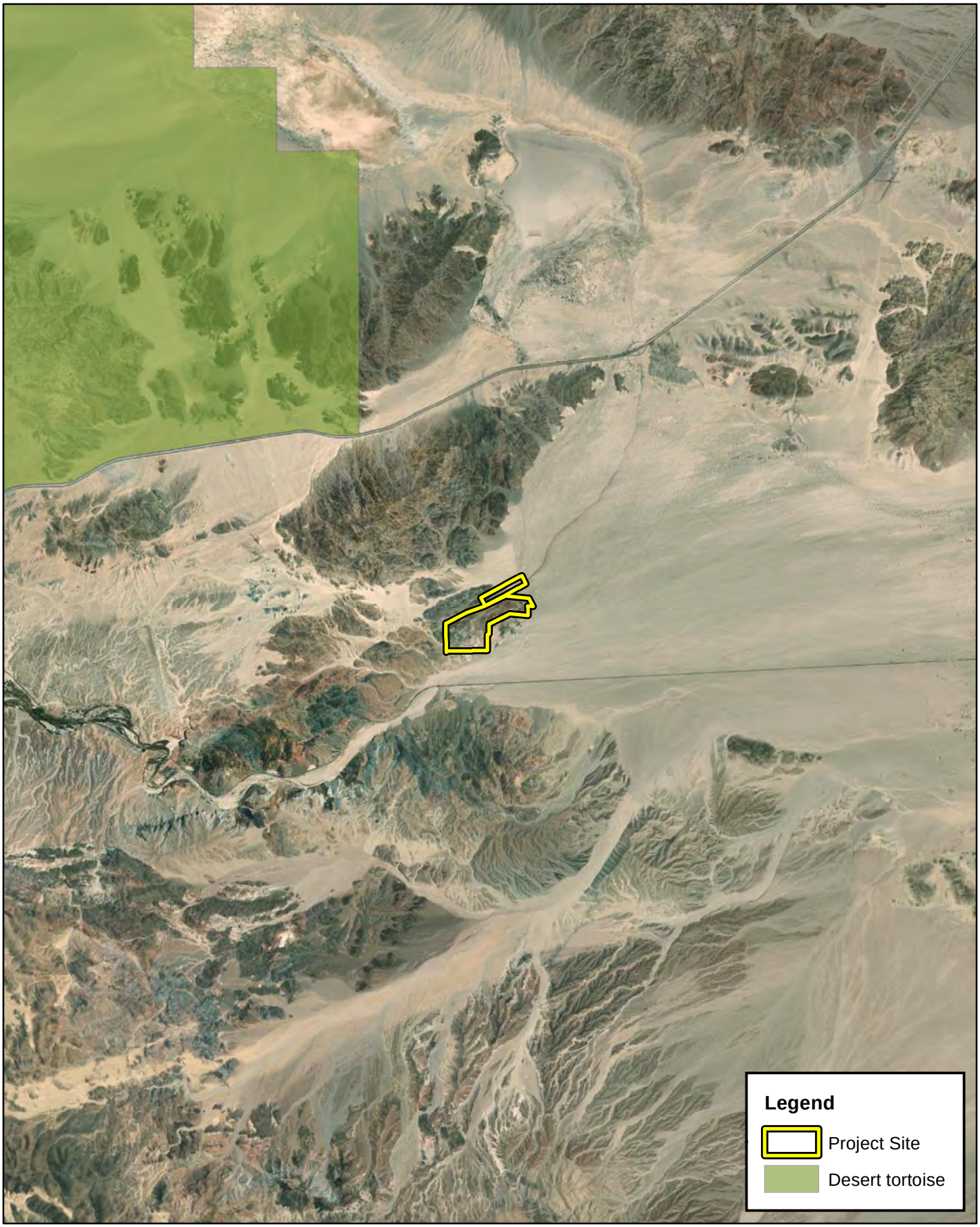
Exhibit 5

Source: ESRI Aerial Imagery, CDFW CNDDB, San Bernardino County

BAXTER QUARRY EXPANSION
BIOLOGICAL RESOURCES ASSESSMENT

CNDDB Observations

Exhibit 6



BAXTER QUARRY EXPANSION
BIOLOGICAL RESOURCES ASSESSMENT

Critical Habitat

ELMT CONSULTING

0 1 2 4 Miles

Source: ESRI Aerial Imagery, USFWS Critical Habitat, San Bernardino County

Exhibit 7

Section 5 Conclusion and Recommendations

The project site supports a mix of undeveloped and heavily disturbed land. Two plant communities were observed within the boundary of the project site: creosote bush scrub and desert willow scrub. In addition, one (1) land cover type that would be classified as disturbed was observed onsite. This area is not a vegetation classification, but rather a land cover type.

Special-Status Plant Species

No special-status plant species were observed on-site during the field investigation, which was conducted during the blooming period for all of the special-status plant species. Based on habitat requirements for the identified special-status species, and known distributions, it was determined that the creosote bush scrub plant community found onsite has a low potential to support small-flowered androstephium, Emory's crucifixion-thorn, Utah vine milkweed (*Funastrum utahenses*, CNPS 4.2), winged cryptantha, and white-margined beartongue. It was further determined that the project site does not have the potential to support any of the other special-status plant communities documented as occurring within the vicinity of the site and are presumed absent.

Utah vine milkweed and winged cryptantha are CNPS Rare Plant Rank 4 species, which is a watch list of plants of limited distribution and are fairly common in the Mojave Desert. Small-flowered androstephium and Emory's crucifixion thorn are CNPS Rare Plant Rank 2B species, which are plants that are considered rare, threatened, or endangered in California, but more common elsewhere. White-marginated beartongue is a CNPS Rare Plant Rank 1B species, which are plants that are considered rare, threatened, or endangered in California and elsewhere.

These species are not regulated under the federal or state Endangered Species Acts. In an effort to increase coverage for unlisted but regionally sensitive plants under the California Environmental Quality Act (CEQA), the CNPS began publishing sensitivity rankings for special-status plant species. These species, therefore, do not rise to the level of a species of concern under CEQA. Potential project impacts to the aforementioned species, if found, would therefore be less than significant, and no mitigation is required.

None of the aforementioned special-status plant species are not federally or State listed as endangered or threatened, and no focused surveys are expected to be required.

Special-Status Wildlife Species

No special-status wildlife species were observed on-site during the habitat assessment. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site has a high potential to support loggerhead shrike; a moderate potential to support pallid bat, golden eagle, spotted bat, prairie falcon, desert tortoise, and desert bighorn sheep; and a low potential to support fringed myotis and American badger. Further it was determined that the Project site does not provide suitable habitat for any of the other special-status wildlife species known to occur in the area.

Most of these steep cliff faces and rocky terrain that provide suitable habitat for pallid bat, spotted bat, fringed myotis will be avoided during Project activities. To prevent impacts to potential roosting habitat on the within the steep terrain onsite, disturbance or removal of large boulders should be avoided.

In order to ensure impacts to the loggerhead shrike, golden eagle, prairie falcon do not occur from implementation of the project, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. Further, to ensure desert tortoise remain absent from the project stie a pre-construction desert tortoise clearance survey is recommended to be conducted prior to project activities.

Pre-Construction Nesting Bird Clearance Survey

All construction activities shall comply with the federal Migratory Bird Treaty Act of 1918 (MBTA) and California Fish and Game Code Sections 3503, 3511 and 3513. The MBTA governs the taking and killing of migratory birds, their eggs, parts, and nests and prohibits the take of any migratory bird, their eggs, parts, and nests. Compliance with the MBTA shall be accomplished by completing the following:

Construction activities involving vegetation removal shall be conducted between September 1 and January 31. If construction occurs inside the peak nesting season (between February 1 and August 31), a pre-construction survey by a qualified Biologist shall be conducted within ten days prior to construction activities to identify any active nesting locations. If the Biologist does not find any active nests, the construction work shall be allowed to proceed. The biologist conducting the clearance survey shall document a negative survey with a report indicating that no impacts to active avian nests shall occur.

If the Biologist finds an active nest within the pre-construction survey area and determines that the nest may be impacted, the Biologist shall delineate an appropriate buffer zone around the nest. The size of the buffer shall be determined by the Biologist and shall be based on the nesting species, its sensitivity to disturbance, expected types of disturbance, and location in relation to the construction activities. These buffers are typically 300 feet from the nests of non-listed species and 500 feet from the nests of raptors and listed species. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by a Biological Monitor shall take place within the buffer zone until the nest is vacated. The Biologist shall serve as a Construction Monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the pre-construction survey and any subsequent monitoring shall be provided to the Property Owner/Developer and the City. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds.

Pre-Construction Desert Tortoise Clearance Survey

Although desert tortoise are absent from the Project site, out of an abundance of caution, it is recommended that pre-construction desert tortoise clearance surveys be conducted prior to ground disturbing activities to ensure no desert tortoise occur within the limits of disturbance. A pre-construction clearance survey be conducted thirty (30) days prior to ground disturbing areas in undeveloped areas to confirm the absence of desert tortoise within the boundaries of the survey area.

Although not anticipated, if desert tortoise are found onsite during the pre-construction clearance survey, coordination will need to occur with the USFWS and CDFW to determine if avoidance and minimization measures can be implemented to avoid any direct or indirect impacts to desert tortoise, or if "Take" permits will need to be obtained prepared and approved by the USFWS and CDFW.

Riparian Habitat and Special-Status Natural Communities

The Mojave River floodplain and six (6) unnamed drainage features were observed within the boundaries of the project site during the field investigation. The Mojave River is considered a Traditional Navigable Water and is considered a Water of the U.S. As a result, the Mojave River floodplain and six unnamed drainage features will likely fall under the regulatory authority of the Corps, Regional Board, and CDFW. If any impacts occur to the onsite drainage features, impacts to the jurisdictional resources will need to be defined and regulatory approvals from the Corps, Regional Board, and CDFW will need to be obtained.

Further, no sensitive natural communities will be impacted from project implementation.

Wildlife Corridors

The site was not identified as occurring within or adjacent to a recognized wildlife corridor. Since conditions on the site, after project implementation, will allow wildlife movement across portions of the site and within adjoining large blocks of habitat, wildlife movement will not be significantly affected by the project, and no mitigation is warranted. Due to the lack of any identified impacts to wildlife movement, migratory corridors or linkages or native wildlife nurseries, no mitigation is required.

Local, Regional, and State Plans

The project site is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan. Therefore, impacts to any local, regional, or state habitat conservation plans are not expected to occur from development of the proposed project, and mitigation is not required.

Section 6 References

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Appendix A Site Plan

CALPORTLAND COMPANY
BAXTER QUARRY
MINE NOTES

Mine: Baxter Quarry (90M-02)

CA MINE ID #: 91-36-0023

Mineral: Iron Ore

Mine Operator: CalPortland Company
2025 E. Financial Way
Glendora, CA 91714
(626) 691-1966
dhaggard@calportland.com

Land Owner: CalPortland Company
2025 E. Financial Way
Glendora, CA 91714
(626) 691-1966

Applicant: Same as Operator

Owner of Mineral Rights: Same as Owner

Representative: Desirea Haggard
CalPortland Company
2025 E. Financial Way
Glendora, CA 91714
(626) 691-1966
dhaggard@calportland.com

Civil Engineer: Same as Operator

Map Preparer: CalPortland Company & Lilburn Corporation

Geologists: CalPortland - Ed Harrison
John S. McKeown, E.G. Senior Geologist
Terracon Consultants
1355 E. Cooley Drive
Colton, CA 92324
(909) 824-7311

Date of Map: August 2021

Utilities
Water: Off-site water purveyor and/or private well
Sewage disposal: Portable toilets
Electric: Not proposed
Gas: Not proposed
Telephone: Mobile phones

Land Use Category / Zoning (Countywide Policy Plan November 2020):

Project Site:
Land Use Categories (LUC) - Resource/Land Management (RLM)
Zoning - Resource Conservation (RC)

Surrounding Uses (LUC / Zoning):
RLM / RC

Legal Description:

APNs: 542-201-02 to 10; 14, 15, 16, 18, 35 & 36
Reclamation Plan Boundary Area: 262.7 acres
Area to be Impacted and Reclaimed: 117.9 acres

Portions of Sections 12; Township 11 North, Range 6 East and small portion of Section 7, T11N, R7E, SBBM, County of San Bernardino, State of California.

Signage/Public Safety:
There is a simple identification sign along Basin Road. Access on Basin Road is restricted to employees and authorized personnel. The entrance is gated with appropriate warning signs that notify the public that the mining area has restricted access and that the roads are not open to the public. During non-operating hours, gates are closed and locked. Other potential access roads are blocked or closed at the project boundary and have signs informing the public that the roads are closed to public access.

Quarry areas have warning signs, roads not used will be blocked or closed, and safety berms six feet high and 12 feet wide will be constructed along the quarry rims where there is potential access.

Parking:
There will be no assigned parking areas within the mine site.

Plant and Tree Protection:
Per the Desert Native plants Act and County Code 88.01.060, preconstruction surveys will determine the number and viability of each plant to survive removal and transplanting to an area ready for reclamation for any rare plants. Note that there are no protected CESA listed candidate species western Joshua trees (*Yucca brevifolia*) onsite nor is the project site within the range of this species per the species petition and notification.

PROFESSIONAL CERTIFICATIONS

Slope Stability Investigation (Terracon Consultants) (Appendix C)

We have completed the Slope Stability Investigation services for the above referenced project. This study was performed in general accordance with Terracon Proposal No. PCB215002 dated January 26, 2021. This report presents the findings of the data review, geologic mapping, field testing, and structural evaluation, and provides recommendations concerning suitable slope angles and heights for reclamation consistent with Surface Mining and Reclamation Act (SMARA) requirements.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

John S. McKeown, C.E.G. 2396
Senior Geologist

Jay J. Martin, C.E.G.1529
Principal Geologist

Subject Matter Expert: Brian J. Williams, P.E., P.G.

SURVEYOR'S STATEMENT

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYORS' ACT, AT THE REQUEST OF CALIFORNIA PORTLAND CEMENT COMPANY 2021.

DATE 10/28/2021

RICHARD S. FURLONG, P.L.S. 8422

RECORD OF SURVEY WAS SUBMITTED FOR REVIEW TO THE COUNTY OF SAN BERNARDINO ON 5/28/2021

No.	Date	By	Revision Description
1			
2			
3			
4			

Prepared by: LILBURN CORPORATION
1905 Business Center Drive · San Bernardino, CA 92408
909.890.1818 · Fax 909.890.1819

PROJECT SITE

Scale: 1 inch = 400 feet
Map Prepared By: Lilburn Corporation (TAG)
Topography: Cooper Aerial, Feb. 2015
Projection: CA SPCS, Zone 5, NAD83 US Feet
Aerial: 2020-05-23

LEGEND
- Revised Reclamation Plan Boundary (262.7 ac.)
- Proposed Quarry Limits
- Approved Reclamation Plan Boundary (130.0 ac.)
- Proposed Overburden Stockpile Limits
- Proposed Mining Contours
- Roads to Remain
- Existing Topography
- Parcel Lines

MINE PLAN
Baxter Quarry - Amended Reclamation Plan
RECLAMATION PLAN No. 90M-02
CA Mine ID # 91-36-0023
SAN BERNARDINO COUNTY, CALIFORNIA

CALPORTLAND
2025 E. FINANCIAL WAY
GLENDORA, CA 91741

SHEET INDEX

#	Title
1	Cover
2	Mine Plan
3	Reclamation Plan
4	Cross Sections and Details

Scale: 1"=400'
Date: 08/2021
DGN: Sht2of4 Baxter Mine Plan 2021b

Sheet 2 of 4

Appendix B Site Photographs

Photograph 1: View of the existing mining area.

Photograph 2: Looking at the steep hillside on the southern portion of the site.

Photograph 3: View of the southwest corner of the site.

Photograph 4: Looking east along the drainage that extends along Basin Road.

Photograph 5: Looking east along the drainage that extends along Basin Road.

Photograph 6: Looking east at the drainage that extends along basin road.

Photograph 7: View of the Mojave River floodplain on the western boundary of the site.

Photograph 8: Looking at the drainage that borders the southern boundary of the existing quarry on the southwest portion of the site.

Photograph 9: View of the drainage that extends form the southern portion of the quarry.

Photograph 10: View of the drainage feature on the southwest boundary of the site.

Appendix C Potentially Occurring Special-Status Biological Resources

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
SPECIAL-STATUS WILDLIFE SPECIES				
Antrozous pallidus pallid bat	Fed: None CA: SSC	Locally common species of low elevation in California. Occurs in grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting.	No	**Moderate** Suitable foraging and roosting habitat is present within the undisturbed areas on the steep cliffs.
Aquila chrysaetos golden eagle	Fed: None CA: FP; WL	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	No	**Moderate** Suitable foraging and nesting habitat is present within the undisturbed areas on the steep cliffs.
Artemisiospiza belli belli Bell's sparrow	Fed: None CA: WL	Generally prefers semi-open habitats with evenly spaced shrubs 1 – 2 meters in height. Dry chaparral dominated by chamise and/or California sagebrush, coastal sage scrub. Less common in tall, dense, old chaparral.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Athene cunicularia burrowing owl	Fed: None CA: SSC	Prefers habitat with short, sparse vegetation with few shrubs and well-drained soils in grassland, shrub steppe, and desert habitats. Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Botaurus lentiginosus American bittern	Fed: None CA: None	Often breed in shallow wetlands dominated by tall emergent vegetation, including cattail marshes, wet meadows, bogs, and shrubby marshes and occasionally hayfields.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Emys marmorata western pond turtle	Fed: None CA: SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
Euderma maculatum spotted bat	Fed: None CA: SSC	Occurs in a range of habitats from arid desert and grasslands through mixed conifer forests. This species forages near open water. Known roosting habitat for this species consists of rock crevices, which naturally limit their distribution. Although more widespread in the deserts of Southern California, the range of the spotted bat includes parts of the coastal slope of the Transverse and Peninsular mountain ranges from Ventura County to San Diego County. Roosting occurs in small cracks in cliffs and stony outcrops.	No	**Moderate** Suitable foraging and roosting habitat is present within the undisturbed areas on the steep cliffs.
Falco mexicanus prairie falcon	Fed: None CA: WL	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	No	**Moderate** Suitable foraging and roosting habitat is present within the undisturbed areas on the steep cliffs.
Gopherus agassizii Mojave desert tortoise	Fed: **THR** CA: **THR**	Occurs in desert scrub, desert wash, and Joshua tree habitats with friable, sandy, well-drained soils for nest and burrow construction. Highest densities occur in creosote bush scrub with extensive annual wildflower blooms and succulents with little to no non-native plant species.	No	**Moderate** No desert tortoise were observed onsite, but were observed adjacent to the project site in the flat areas associated with the Mojave River Floodplain. This species is not expected to occur within the limits of disturbance.
Junco hyemalis caniceps gray-headed junco	Fed: None CA: WL	Upper montane coniferous forest Summer resident of Clark Mountain (eastern San Bernardino County) and Grapevine Mountains (Inyo County). Inhabits white fir association at 7300 ft (Clark Mountain); also, from densepinyons above 6700 ft (Grapevine Mountains).	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Lanius ludovicianus loggerhead shrike	Fed: None CA: SSC	Prefers open habitats with bare ground, scattered shrubs, and areas with low or sparse herbaceous cover including open-canopied valley foothill hardwood, riparian, pinyon-juniper, desert riparian, creosote bush scrub, and Joshua tree woodland. Requires suitable perches including trees, posts, fences, utility lines, or other perches.	No	**High** Suitable foraging and nesting habitat are present throughout the undisturbed portions of the project site.
Myotis thysanodes fringed myotis	Fed: None CA: None	In a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood & hardwood-conifer. Uses caves, mines, buildings or crevices for maternity colonies and roosts.	No	**Low** Minimal foraging and roosting habitat is present within the undisturbed areas on the steep cliffs.
Ovis canadensis nelsoni desert bighorn sheep	Fed: None CA: FP	Preferred habitat is near mountainous terrain above the desert floor that is visually open, as well as steep and rocky. Most Mojave Desert mountain ranges satisfy these requirements well. Surface water is another element that is considered important to population health.	No	**Moderate** Suitable foraging habitat is present onsite.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
Piranga rubra summer tanager	Fed: None CA: SSC	Breed in gaps and edges of open deciduous or pine-oak forests across the southern and mid-Atlantic U.S. Uncommon (formerly common) summer resident and breeder in desert riparian habitat along lower Colorado River. Breeds in mature, desert riparian habitat dominated by cottonwoods and willows.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Pyrocephalus rubinus vermilion flycatcher	Fed: None CA: SSC	Occurs in a variety of open habitats including open woodland, clearings, desert scrub, savannah, agricultural land, golf courses, and recreational parks. The species tends to stay near water, often occurring in riparian vegetation characterized by cottonwoods (*Populus fremontii*), mesquite (*Prosopis* ssp.), willows (*Salix* ssp.), and sycamores (*Platanus* ssp.).	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Rana draytonii California red-legged frog	Fed: **THR** CA: SSC	Inhabits quiet pools of streams, marshes, and occasionally ponds. Occurs along the coast ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Siphateles bicolor mohavensis Mojave tui chub	Fed: **END** CA: **END**; FP	Historically occurred throughout the Mojave River drainage. Only surviving natural populations occurs in Soda Spring at the Desert Studies Center near the town of Baker, Lark Seep on the China Lake Naval Weapons Center, Camp Cady, and at the Lewis Center for Educational Research in Apple Valley.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Sphyrapicus ruber red-breasted sapsucker	Fed: None CA: None	An uncommon to fairly common, yearlong or summer resident in openly wooded, mountainous parts of California. In southern California, an uncommon summer resident locally in the higher mountains. Preferred nesting habitats include montane riparian, aspen, montane hardwood-conifer, mixed conifer, and red fir, especially near meadows, clearings, lakes, and slow-moving streams.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Taxidea taxus American badger	Fed: None CA: SSC	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	**Low** Minimal habitat is present onsite.
Uma scoparia Mojave fringe-toed lizard	Fed: None CA: SSC	Restricted to sparsely vegetated, windblown sand in dunes, flats, riverbanks and washes. It requires fine, loose sand for burrowing and lays its eggs in subsurface burrows. Vegetation is typically scant and often consists of creosote bush scrub or other scrub.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
Vireo bellii pusillus least Bell's vireo	Fed: **END** CA: **END**	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Xerospermophilus mohavensis Mohave ground squirrel	Fed: None CA: **THR**	Restricted to the Mojave Desert in open desert scrub, alkali desert scrub, annual grassland, and Joshua tree woodland. Prefers sandy to gravelly soils and tends to avoid rocky areas. Occurs sympatrically with the white-tailed antelope squirrel.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
SPECIAL-STATUS PLANT SPECIES				
Androstephium breviflorum small-flowered androstephium	Fed: None CA: None CNPS: 2B.2	Occurs in desert dunes and Mojavean desert scrub. Found in elevations ranging from 689 to 2,920 feet. Blooming period ranges from March to April.	No	**Low** Suitable habitat is present within the undisturbed areas.
Astragalus lentiginosus* var. *borreganus Borrego milk-vetch	Fed: None CA: None CNPS: 4.3	Occurs in sandy soils in Mojavean desert scrub and Sonoran desert scrub. Found in elevations ranging from 98 to 2,936 feet. Blooming period ranges from February to May.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Bouteloua eriopoda black grama	Fed: None CA: None CNPS: 4.2	Occurs in sandy soils in Joshua tree woodland and pinyon and juniper woodland. Found in elevations ranging from 2,955 – 6,235 feet. Blooming period ranges from May to August.	No	**Presumed Absent** The project site is outside of the elevational range for this species.
Castela emoryi Emory's crucifixion-thorn	Fed: None CA: None CNPS: 2B.2	Alkali playa, Mojavean desert scrub, Sonoran desert scrub, playas. Gravelly soils, sometimes in alkali playas or washes. 85-1100 m.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Coryphantha alversonii Alverson's foxtail cactus	Fed: None CA: None CNPS: 4.3	Mojavean desert scrub, Sonoran desert scrub. Sandy or rocky habitat; sites from gravelly slopes and dissected alluvial fans. Granite substrate. 75-1525 m.	No	**Low** Suitable habitat is present within the undisturbed areas.
Eriastrum harwoodii Harwood's eriastrum	Fed: None CA: None CNPS: 1B.2	Desert dunes. Sandy soils. 15-1100m.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Funastrum utahenses Utah vine milkweed	Fed: None CA: None CNPS: 4.2	Occurs in sandy soils in Mojavean desert scrub and Sonoran desert scrub. Found in elevations ranging from 330-4,710 feet. Blooming period ranges from April to June.	No	**Low** Suitable habitat is present within the undisturbed areas.
Johnstonella holoptera winged cryptantha	Fed: None CA: None CNPS: 4.3	Occurs in Mojavean desert scrub and Sonoran desert scrub. Found at elevations ranging from 328 to 5,544 feet. Blooming period ranges from March to April.	No	**Low** Suitable habitat is present within the undisturbed areas.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
Penstemon albomarginatus white-margined beartongue	Fed: None CA: None CNPS: 1B.1	Desert wash, Mojavean desert scrub, desert dunes. Deep stabilized desert sand, in washes and along roadsides. 640-1065 m.	No	**Low** Suitable habitat is present within the undisturbed areas.
SPECIAL-STATUS PLANT SPECIES				
Crucifixion Thorn Woodland	CDFW Sensitive Habitat	Plant community dominated by Crucifixion thorn.	No	**Absent**
Mojave Riparian Forest	CDFW Sensitive Habitat	Dense riparian habitats associated with Mojave River.	No	**Absent**

U.S. Fish and Wildlife Service (Fed) - Federal
END – Federal Endangered
THR – Federal Threatened
DL - Delisted

California Department of Fish and Wildlife (CA) - California
END – California Endangered
THR – California Threatened
CTHR – California Candidate Threatened
DL - Delisted
FP – California Fully Protected
SSC – California Species of Special Concern
WL – California Watch List
CE – Candidate Endangered

California Native Plant Society (CNPS) - *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
4 Plants of Limited Distribution – A Watch List

Threat Ranks
0.2- Moderately threatened in California
0.3- Not very threatened in California

Appendix D Regulations

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Regulations

Endangered Species Act of 1973

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits "take" of threatened or endangered species. "Take" under the ESA is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the ESA, the United States Fish and Wildlife Service (USFWS) may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an ESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, possess, or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

State Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines "endangered" and "rare" species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

California Endangered Species Act (CESA)

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as; "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the

absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

Fish and Game Code

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Native Plant Protection Act

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

California Native Plant Society Rare and Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

California Rare Plant Rank

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 More 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 (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Local Regulations

San Bernardino County Development Code

Section 88.01.060 of the County of San Bernardino Development Code 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 coincide with the Desert Native Plants Act (Food and Agricultural Code Section 8001 et seq.) and the State Department of Food and Agriculture to implement and enforce the Act.

Pursuant to Section 88.01.060 of the Development Code, 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:

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

   (A) *Dalea spinosa* (smoke tree)
   (B) All species of the genus *Prosopis* (mesquites)

2) All species of the family *Agavaceae* (century plants, nolinas, yuccas)

3) Creosote Rings, 10 feet or greater in diameter

4) All 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)

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Federal Regulations

Section 404 of the Clean Water Act

Since 1972, the Corps and U.S. Environmental Protection Agency (EPA) have jointly regulated the filling of "waters of the U.S.," including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define "fill material" to include any "material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States." Examples include, but are not limited to, sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States." In order to further define the scope of waters protected under the CWA, the Corps and EPA published the Clean Water Rule on June 29, 2015. Pursuant to the Clean Water Rule, the term "*waters of the United States*" is defined as follows:

(i) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

(ii) All interstate waters, including interstate wetlands[1].

(iii) The territorial seas.

(iv) All impoundments of waters otherwise defined as waters of the United States under the definition.

(v) All tributaries[2] of waters identified in paragraphs (i) through (iii) mentioned above.

(vi) All waters adjacent[3] to a water identified in paragraphs (i) through (v) mentioned above, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

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[1] The term *wetlands* means those areas that are inundated or saturated by surface or groundwater 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.

[2] The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (iv) mentioned above), to a water identified in paragraphs (i) through (iii) mentioned above, that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.

[3] The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (i) through (v) mentioned above, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like.

(vii) All prairie potholes, Carolina bays and Delmarva bays, Pocosins, western vernals pools, Texas coastal prairie wetlands, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (i) through (iii) meantioned above.

(viii) All waters located within the 100-year floodplain of a water identified in paragraphs (i) through (iii) mentioned above and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (i) through (v) mentioned above, where they are determined on a case-specific basis to have a significant nexus to a waters identified in paragraphs (i) through (iii) mentioned above.

The following features are not defined as "waters of the United States" even when they meet the terms of paragraphs (iv) through (viii) mentioned above:

(i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(ii) Prior converted cropland.

(iii) The following ditches:

- (A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
- (B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
- (C) Ditches that do not flow, either directly or through another water, into a water of the United States as identified in paragraphs (i) through (iii) of the previous section.

(iv) The following features:

- (A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
- (B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
- (C) Artificial reflecting pools or swimming pools created in dry land;
- (D) Small ornamental waters created in dry land;
- (E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
- (F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of a tributary, non-wetland swales, and lawfully constructed grassed waterways; and
- (G) Puddles.

(v) Groundwater, including groundwater drained through subsurface drainage systems.

(vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

Section 401 of the Clean Water Act

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

State Regulations

Fish and Game Code

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

(1) substantially obstruct or divert the natural flow of a river, stream, or lake;
(2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
(3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

Porter Cologne Act

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state's authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although "waste" is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.