CEMEX – ALVIC & ALUMINA QUARRY
REVISED RECLAMATION PLAN

SAN BERNARDINO COUNTY, CALIFORNIA

Habitat and Jurisdictional Assessment

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June 2020

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SAN BERNARDINO COUNTY, CALIFORNIA

Habitat and Jurisdictional 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

June 2020

Executive Summary

CEMEX's Alvic Quarry (project site or site) is located in the northeast corner of the CEMEX Black Mountain Quarry and Plant in a remote area northeast of the City of Victorville and the Town of Apple Valley. A habitat and jurisdictional assessment was conducted by ELMT biologists Thomas J. McGill, Ph.D., Travis J. McGill, and Jacob H. Lloyd Davies on March 11, 2020 to characterize and confirm existing site conditions and assess the probability of occurrence for special-status plant and wildlife species that could pose a constraint to implementation of the proposed project.

Areas surrounding the site primarily consist of vacant, undeveloped land. The project site is situated at the eastern end of the Black Mountain range in between Black Mountain and Sidewinder Mountain, with Fairview Mountains located to the southwest. The project site is relatively undeveloped except those areas that have been subject to existing mining activities. The areas on the perimeter of the site are relatively undeveloped/undisturbed, while the middle portion of the project site supports existing mining area, and dirt access roads. During the field investigation one (1) plant community was observed within the boundary of the project site: creosote bush scrub. In addition, one (1) land cover type that would be classified as disturbed was observed on-site.

No special-status plant species were observed on-site during the field investigation, which was conducted during the blooming period for some of the special-status plant species. Further, based on habitat requirements for the identified special-status species and known distributions, it was determined that the undeveloped portions of the project site that support the Mojavean desert scrub plant community do not have the potential to support any of the special-status species documented as occurring within the vicinity of the project site are presumed absent. The project site is located at the maximum elevational rage from most of the special-status species. As a result, no impacts to special-status species are expected to occur.

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 proposed project site has a moderate potential to provide suitable habitat for loggerhead shrike (*Lanius ludocivianus*), and low potential to provide suitable habitat for Cooper's hawk (*Accipiter cooperii*), golden eagle (*Aquila chysaetos*), burrowing owl, and prairie falcon (*Falco mexicanus*). 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 since the project site.

Although not a state or federally protected species, Joshua trees and Mojave yuccas are regulated pursuant to Section 88.01.060 of the San Bernardino County Development Code and Section 80073 of the California Desert Native Plant Act. Therefore, impacts to these species should be avoided in all instances. In the event that avoidance is not feasible, the project applicant will be required to obtain a Tree or Plant Removal Permit from the County of San Bernardino prior to removal of any regulated tree or plant.

A review of the National Wetland Inventory and United States Hydrography Dataset and field investigation found approximately three (3) to four (4) riverine resources immediately adjacent to 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 investigations. Based on the proposed mining expansion boundary, none of the mapped riverine resources will be impacted from project implementation. Therefore, regulatory approvals will not be required for project implementation. If the proposed project footprint is revised and/or mining activities encroach into the adjacent riverine features, further review will be required to define project impacts and acquire regulatory approvals from the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and California Department of Fish and Wildlife (CDFW), if necessary.

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EXHIBITS

APPENDIX

Section 1 Introduction

This report contains the findings of ELMT Consulting (ELMT) habitat and jurisdictional assessment for CEMEX's Alvic Quarry Revised Reclamation Plan Project (Project) located near the Town of Apple Valley in unincorporated San Bernardino County, California. ELMT biologists Thomas J. McGill, Ph.D., Travis J. McGill, and Jacob H. Lloyd Davies conducted a field survey and evaluated the condition of the habitat within the existing Alvic Quarry and surrounding area (survey area) on March 11, 2020.

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 in-depth assessment of the suitability of the on-site habitat to support desert tortoise (*Gopherus agassizii*) and burrowing owl (*Athene cunicularia*) as well as several other 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.

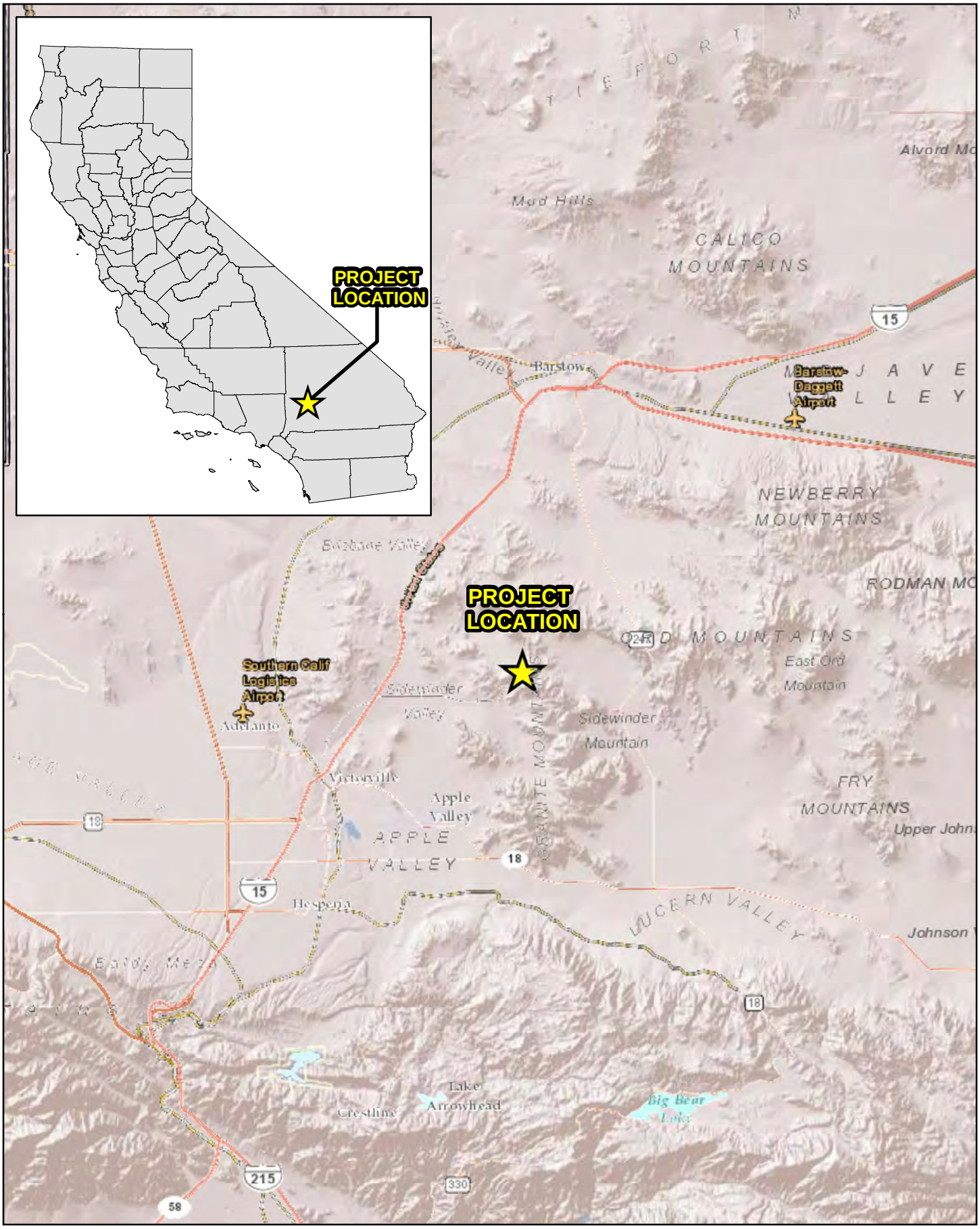
1.1 PROJECT LOCATION

The Project site is generally located east of Interstate 15, south of Interstate 40, north of State Route 18, and west of State Route 247 north of the Town of Apple Valley in unincorporated San Bernardino County, California (Exhibit 1, *Regional Vicinity*). The Project site is depicted on the Stoddard Well quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Sections 3 and 4 of Township 6 North, Range 2 West (Exhibit 2, *Site Vicinity*). Specifically, the Project site is located within the boundaries of the existing CEMEX Black Mountain Quarry, at the eastern terminus of Black Mountain Road at the existing Alvic Quarry (Exhibit 3, *Project Site*).

1.2 PROJECT DESCRIPTION

The project proposes to expand mining operations and update reclamation at the existing Alvic Quarry. The Alvic Quarry is located on patented (private) lands owned by CEMEX. The existing quarry and access road consist of approximately 22 disturbed acres. The proposed revision will include an additional approximately 141 acres for a total plan area of approximately 163 acres to be disturbed and reclaimed.

[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.



ALVIC QUARRY REVISED RECLAMATION PLAN
HABITAT AND JURISDICTIONAL ASSESSMENT

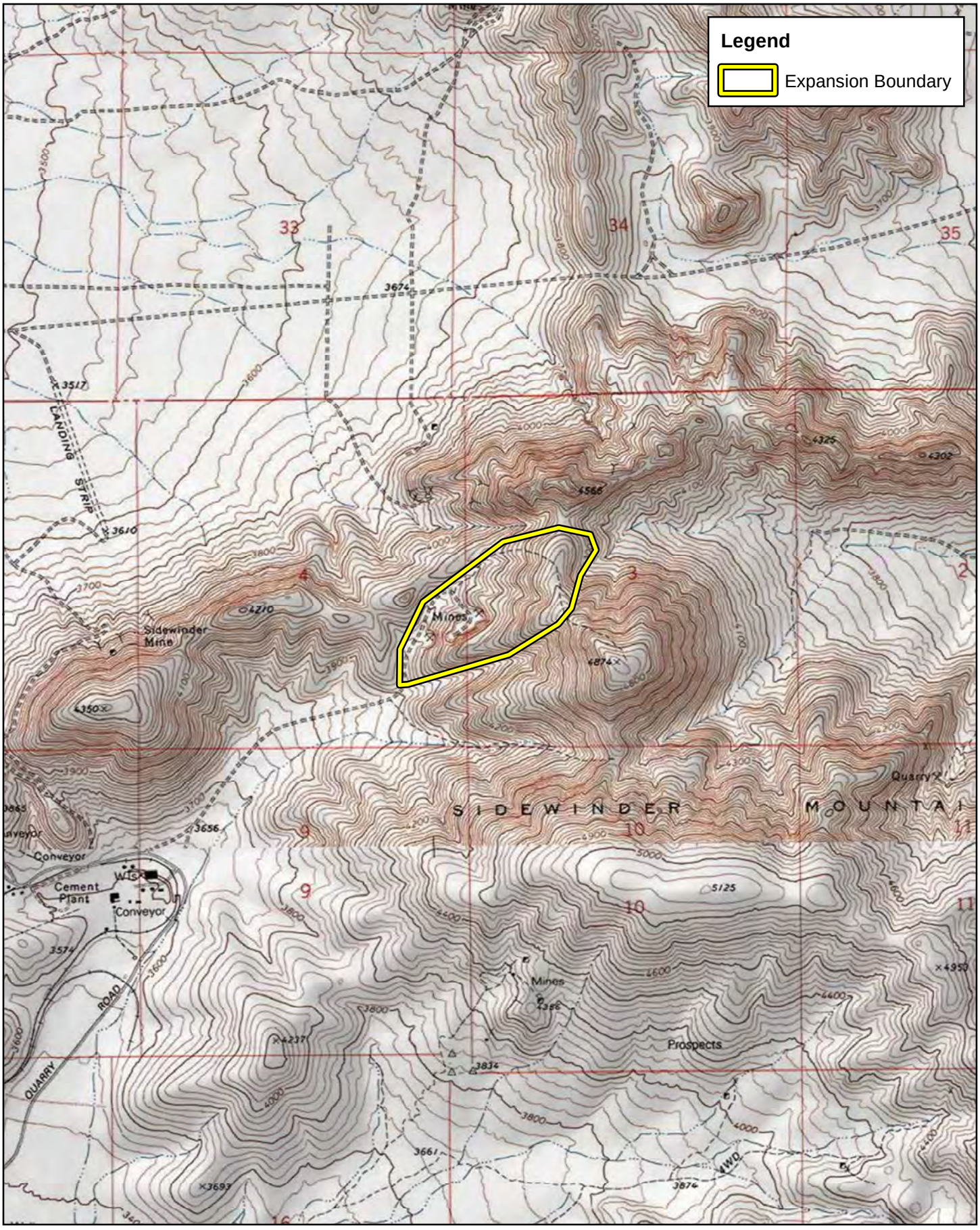
Regional Vicinity

ELMT CONSULTING

0 2.5 5 10 Miles

Source: ESRI World Shaded Relief Ma, World Transportaiton, San Bernardino County

Exhibit 1



ALVIC QUARRY REVISED RECLAMATION PLAN
HABITAT AND JURISDICTIONAL ASSESSMENT

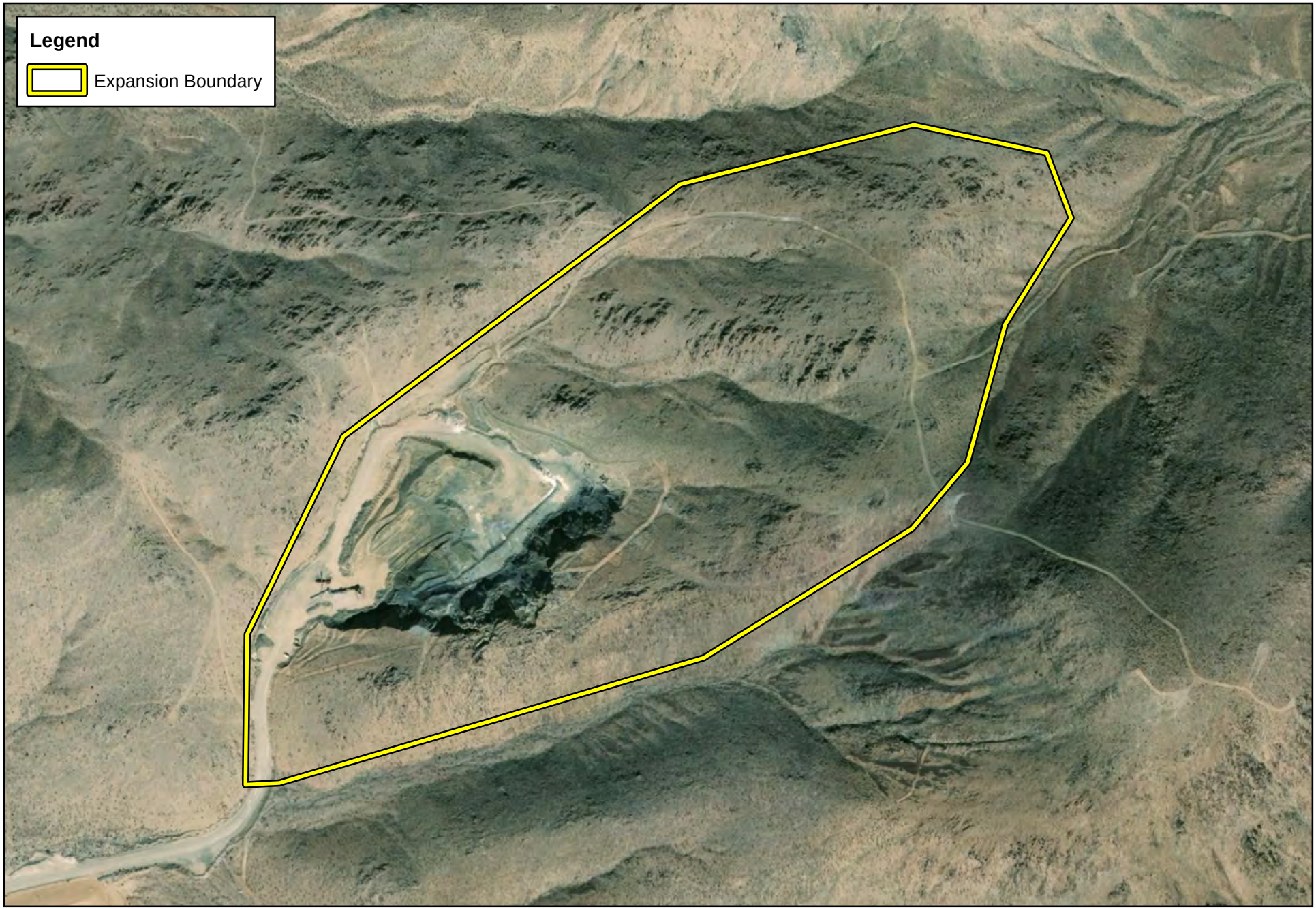
Site Vicinity

ELMT CONSULTING

0 0.25 0.5 1 Miles

Source: USA Topographic Maps, San Bernardino County

Exhibit 2



ELMT CONSULTING

0 250 500 1,000 Feet

Source: ESRI Aerial, World Transportation, San Bernardino County

ALVIC QUARRY REVISED RECLAMATION PLAN
HABITAT AND JURISDICTIONAL 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 investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the Project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the Project site were determined through a query of the CDFW QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site were reviewed to understand existing site conditions and note the extent of any disturbances that have occurred on the Project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Google Earth Pro historic aerial imagery (1994-2018);
- San Bernardino County General Plan;
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey[2];
- 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] A soil series is defined as a group of soils with similar profiles developed from similar parent materials under comparable climatic and vegetation conditions. These profiles include major horizons with similar thickness, arrangement, and other important characteristics, which may promote favorable conditions for certain biological resources.

2.2 FIELD INVESTIGATION

ELMT biologists Thomas J. McGill, Ph.D., Travis J. McGill, and Jacob H. Lloyd Davies evaluated the extent and conditions of the plant communities found within the boundaries of the survey area on March 11, 2020. Plant communities identified on aerial photographs during the literature review were verified in the field by walking meandering transects through the on-site plant communities and along boundaries between plant communities. 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. Special attention was given to special-status habitats and/or undeveloped areas, which have higher potentials to support special-status plant and wildlife species.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

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 Mojave River Area. 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 PLANT COMMUNITIES

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), CDFW (2010) and Holland (1986), 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.

2.5 PLANTS

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).

2.6 WILDLIFE

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).

2.7 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 National Wetland Inventory (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 from nearby weather stations indicated 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). Temperatures during the site visit were in the mid-70s (° F).

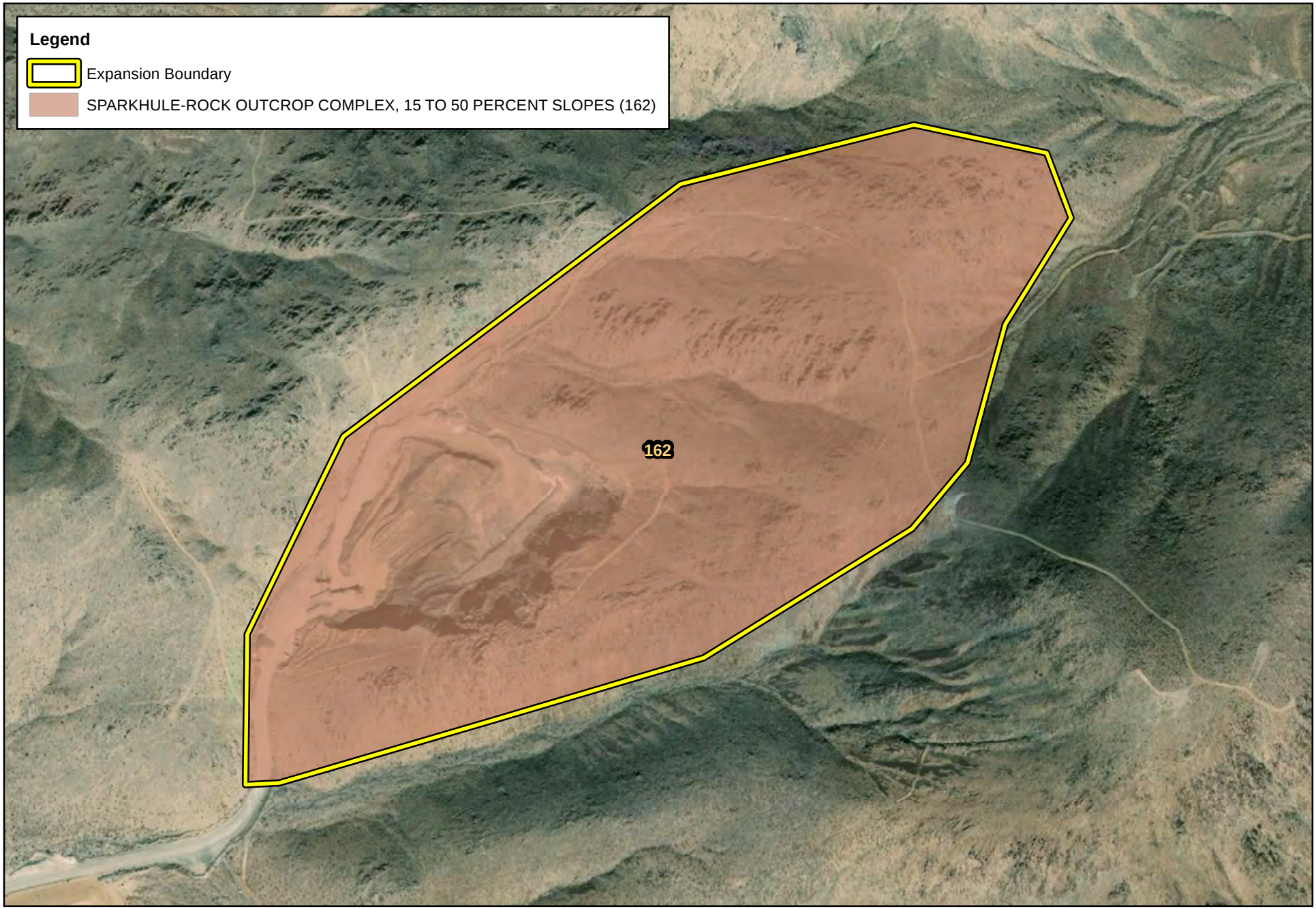
3.2 TOPOGRAPHY AND SOILS

On-site surface elevation ranges from approximately 3,898 to 4,340 feet above mean sea level. Topography on-site generally consists of rolling hills and several steep sided hilltops and ridgelines located across the survey area, all descending roughly east to west or north to south. There are several portions of the project site that are actively being mined or have previously been mined resulting in steep cliff faces.

According to the NRCS Custom Soil Resource Report, the survey area is underlain by the following soil units: Sparkhule-rock outcrop complex (15 to 50 percent slopes) (Exhibit 4, *Soils*). Soils within the existing mining area have been mechanically disturbed and compacted from mining activities, while soils adjacent to the existing mine area, within the survey area are relatively undisturbed.

3.3 SURROUNDING LAND USES

The project site is located in the northeast corner of the CEMEX Black Mountain Quarry and Plant in a remote area northeast of the Town of Victorville in unincorporated San Bernardino County. Areas surrounding the site consist of vacant, undeveloped land with existing mining infrastructure to the west. The project site is situated at the eastern end of the range in between Black Mountain and Sidewinder Mountain, with Fairview Mountains located to the southwest. The Apple Valley Airport is located approximately 6.2 miles to the southwest and Interstate 15 is located approximately 7.3 miles to the west. No structures or industrial areas other than those supporting the operations of the CEMEX Black Mountain Quarry and Plant are located within 4 miles of the site.



ELMT CONSULTING

0 250 500 1,000 Feet

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

ALVIC QUARRY REVISED RECLAMATION PLAN
HABITAT AND JURISDICTIONAL ASSESSMENT

Soils

Exhibit 4

Section 4 Discussion

4.1 SITE CONDITIONS

The project site is relatively undeveloped except those areas that have been subject to existing mining activities. The areas on the perimeter of the project site are undeveloped/undisturbed, while the middle portion of the project site supports mining pits, and dirt access roads.

4.2 VEGETATION

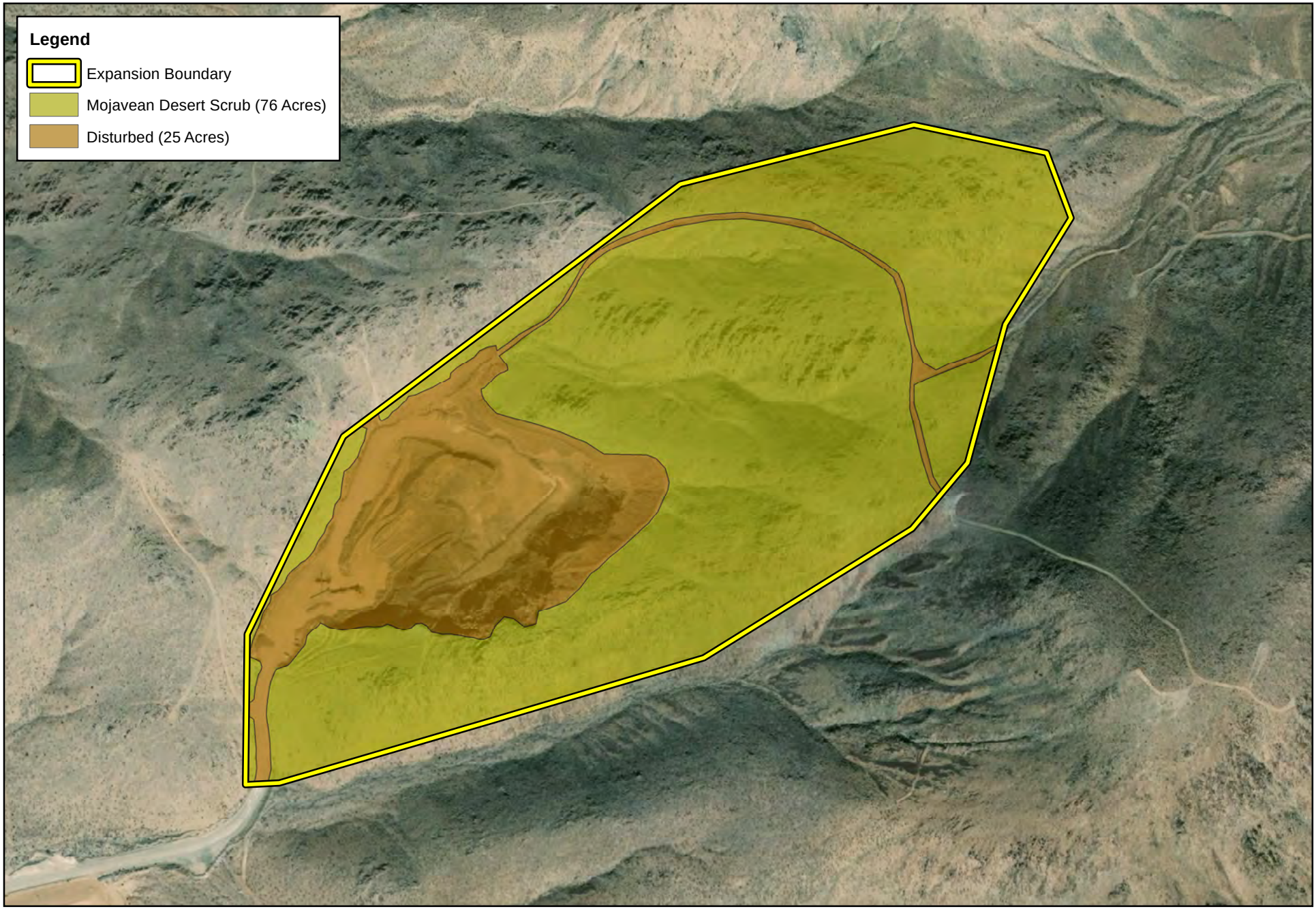
During the field investigation one (1) plant community was observed within the boundary of the project site: Mojavean desert scrub (Exhibit 5, *Vegetation*). In addition, one (1) land cover type that would be classified as disturbed was observed on-site. This area is not a vegetation classification, but rather a land cover type. The vegetation community and land cover type are described in further detail below.

4.2.1 Mojavean Desert Scrub (76 acres)

The Mojavean desert scrub plant community occurs throughout the undeveloped/undisturbed portions of the project site and is the dominant plant community within the surrounding landscape. This plant community is found on the outer perimeter of the project site boundaries, outside of the areas that have been subject to existing mining activities, on the steep slopes of rolling hills. Common plant species found within this plant community include fiddleneck (*Amsinckia tesselata*), desert dudleya (*Dudleya saxosa*), sagebrush combseed (*Pectocarya linearis*), curvenut combseed (*Pectocarya recurvata*), red-stemmed filaree (*Erodium cicutarum*), wingnut cryptantha (*Cryptantha pterocarya*), creosote (*Larrea tridentata*), Mojave yucca (*Yucca schidigera*), desert trumpet (*Eriogonum inflatum*), pencil cholla (*Cylindropuntia ramosissima*), burrobush (*Ambrosia dumosa*), hedgehog cactus (*Echinocereus* sp.), beavertail cactus (*Opuntia basilaris*), barrel cactus (*Echinocactus* sp.), common phacelia (*Phacelia distans*), desert wishbone (*Mirabilis laevis*), matchweed (*Gutierrezia californica*), cheesebush (*Ambrosia salsola*), and brittlebush (*Encelia farinosa*).

4.2.2 Disturbed (25 acres)

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, and stockpile areas. Plant species occurring within these disturbed areas include red brome (*Bromus madritensis* ssp. *rubens*), short-podded mustard (*Hirschfeldia incana*), and Mediterranean grass (*Schismus barbatus*).



ELMT CONSULTING

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

ALVIC QUARRY REVISED RECLAMATION PLAN
HABITAT AND JURISDICTIONAL ASSESSMENT

Vegetation

Exhibit 5

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 undisturbed portions of the project site provide suitable foraging and nesting habitat for a variety of reptilian species adapted to conditions within the Mojave Desert. The only reptilian species observed during the field investigations was common side-blotched lizard (*Uta stansburiana elegans*). Common reptilian species that have the potential to occur on-site include great basin whiptail (Aspidoscelis tigris tigris), desert horned lizard (*Phrynosoma platyrhinos calidiarum*), northern Mohave rattlesnake (*Crotalus scutulatus scutulatus*), and Great Basin gopher snake (*Pituophis catenifer deserticola*). It should be noted that no desert tortoise or signs were observed during the field investigation.

4.3.4 Birds

The undisturbed portions of the project site provide suitable foraging and nesting habitat for a variety of resident and migrant bird species adapted to conditions within the Mojave Desert. Avian species detected during the survey included common raven (*Corvus corax*), black-throated sparrow (*Amphispiza bilineata*), canyon wren (*Catherpes mexicanus*), and Costa's hummingbird (*Calypte costae*). Common avian species expected to occur on-site include house finch (*Haemorhous mexicanus*), cactus wren (*Campylorhynchus brunneicapillus*), rock wren (*Salpinctes obsoletus*), Say's phoebe (*Sayornis saya*), white-crowned sparrow (*Zonotrichia leucophrys*), Gambel's quail (*Callipepla gambelii*), and mourning dove (*Zenaida macroura*).

4.3.5 Mammals

The undisturbed portions of the project site provide suitable foraging and denning habitat for a variety of mammalian species adapted to conditions within the Mojave Desert. Most mammal species are nocturnal and are difficult to observe during a diurnal field visit. The only mammalian species observed during the

field investigation was white-tailed antelope ground squirrel (*Ammospermophilus leucurus*). Common mammalian species that have potential to occur on-site include desert woodrat (*Neotoma lepida*), kangaroo rat (*Dipodomys* sp.), desert cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*), and coyote (*Canis latrans*). No bat species are expected to occur due to a lack of suitable roosting habitat (i.e., trees, crevices, abandoned structures) within and surrounding the project site.

4.4 NESTING BIRDS

No active nests or birds displaying nesting behavior were observed during the field survey. The Mojavean desert scrub plant community provides suitable foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that have adapted to conditions in the Mojave Desert. A pre-construction nesting bird clearance survey shall be conducted within three (3) days prior to ground disturbance to ensure no nesting birds will be impacted from proejct implementaiton.

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 to the west, the open and natural habitats on and surrounding the project site allow for local wildlife to move from the project site into the undeveloped areas surrounding the project site in search of food, shelter, or nesting habitat. As designated by the San Bernardino County General Plan Open Space Element, major open space areas documented in the vicinity of the project site include the Mojave River located approximately 13 miles west of the project site, and designated wilderness areas and Aeras of Critical Environmental Concern located approximately 17 miles northeast of the project site are.

The project site is separated from these identified regional wildlife corridors and linkages by existing development and roadways, and undeveloped land; however, there are no riparian corridors or creeks connecting the project site to these areas. 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.

Although not approved, it should be noted that the project site is situated within a proposed Desert Tortoise Linkage area as identified in the Desert Renewable Energy Conservation Plan (DRECP). However, the steep terrain does not provide suitable habitat for desert tortoise, and no suitable burrows were observed.

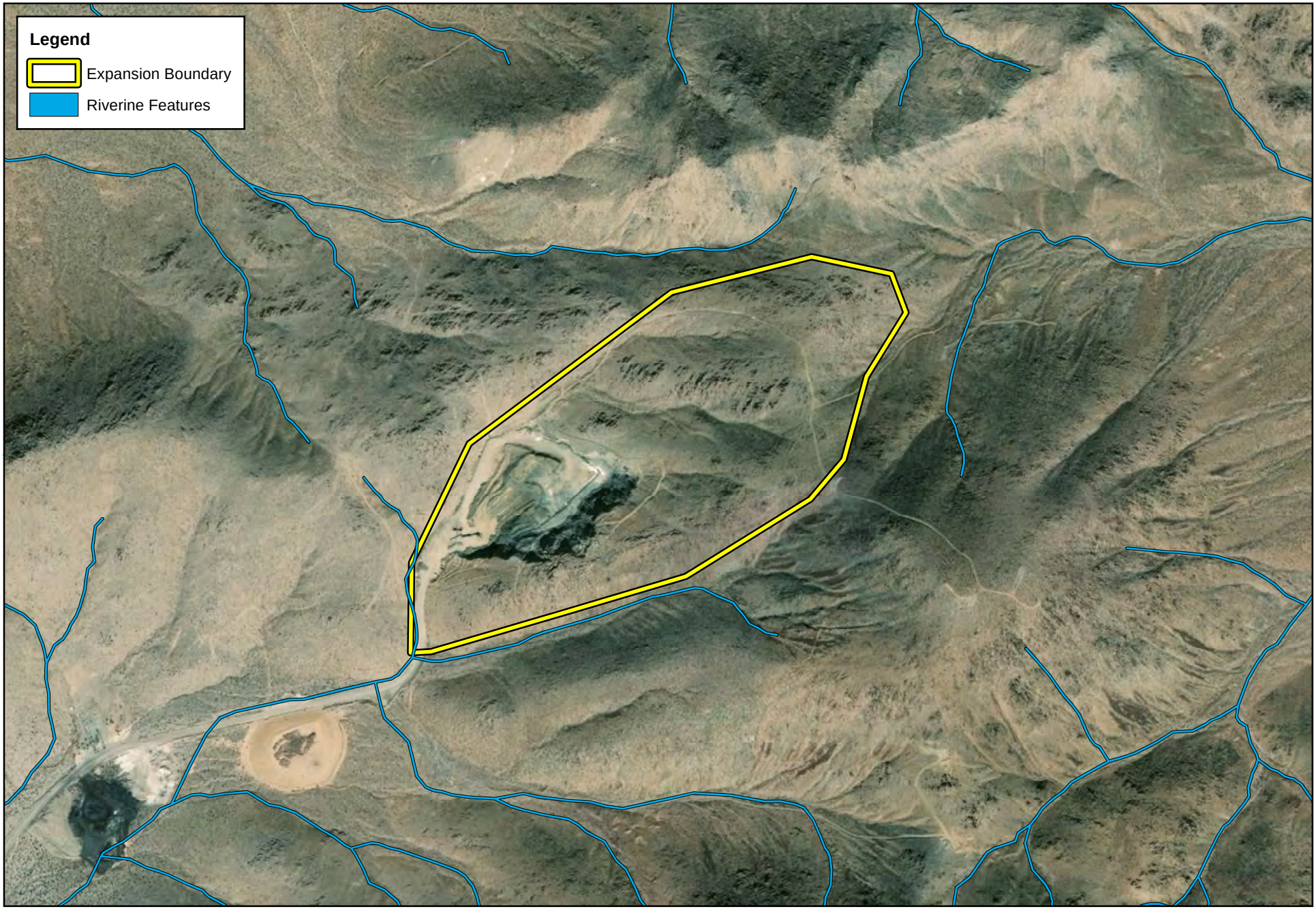
4.6 STATE AND FEDERAL JURISDICTIONAL AREAS

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 project site was also evaluated for the presence of jurisdictional waters of the United States, waters of the State, and/or jurisdictional streambed. Prior to the field visit, aerial photographs of the site were viewed and compared with the surrounding USGS 7.5-minute topographic quadrangle maps to identify drainage features within the survey area as indicated from topographic changes, blue-line features, or visible drainage patterns. The Environmental Protection Agency (EPA) Water Program "My Waters" data layer was also reviewed to determine whether any hydrologic features had been documented within the vicinity of the site. Similarly, the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) soil maps for San Bernardino County were used to identify the soil series in the area and to check these soils to determine whether they are regionally identified as hydric soils. The biologists carefully assessed the site for depressions, inundation, presence of hydrophytic vegetation, staining, cracked soil, ponding, and indicators of active surface flow and corresponding physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris. Suspected jurisdictional areas were checked for the presence of definable channels, soils, and hydrology.

The USFWS National Wetland Inventory 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, approximately three (3) to four (4) riverine resources were identified immediately adjacent to the project site (Exhibit 6, *Jurisdictional Areas*). 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 investigations.

Based on the proposed mining expansion boundary, none of the mapped riverine resources will be impacted from project implementation. Therefore, regulatory approvals will not be required for project implementation. If the proposed project footprint is revised and/or mining activities encroach into the adjacent riverine features, further review will be required to define project impacts and acquire regulatory approvals from the Corps, Regional Board, and/or CDFW, if necessary.



ELMT CONSULTING

0 250 500 1,000
Feet

Source: ESRI Aerial, USFWS National Wetlands Inventory, San Bernardino County

ALVIC QUARRY REVISED RECLAMATION PLAN
HABITAT AND JURISDICTIONAL ASSESSMENT

Jurisdictional Areas

Exhibit 6

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 Turtle Valley, Stoddard Well, Apple Valley North, and Fairview Valley 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 five (5) special-status plant species and fifteen (15) special-status wildlife species as having the potential to occur within the Turtle Valley, Stoddard Well, Apple Valley North, and Fairview Valley quadrangles. No special-status plant communities were identified within these 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 B-1: Potentially Occurring Special-Status Biological Resources* in Appendix B. Refer to Table B-1 for a determination regarding the potential occurrence of special-status plant and wildlife species within the project site.

4.7.1 Special-Status Plants

According to the CNDDB and CNPS, five (5) special-status plant species have been recorded in the Turtle Valley, Stoddard Well, Apple Valley North, and Fairview Valley quadrangles (refer to Appendix B). No special-status plant species were observed on-site during the field investigation, which was conducted during the blooming period for some of the special-status plant species. Based on habitat requirements for the identified special-status species, and known distributions, it was determined that the undeveloped portions of the project site that support the Mojavean desert scrub plant community do not have the potential to support any of the special-status species documented as occurring within the vicinity of the project site are presumed absent. The project site is located at the maximum elevational rage from most of the special-status species. As a result, no impacts to special-status species are expected to occur.

4.7.2 Special-Status Wildlife

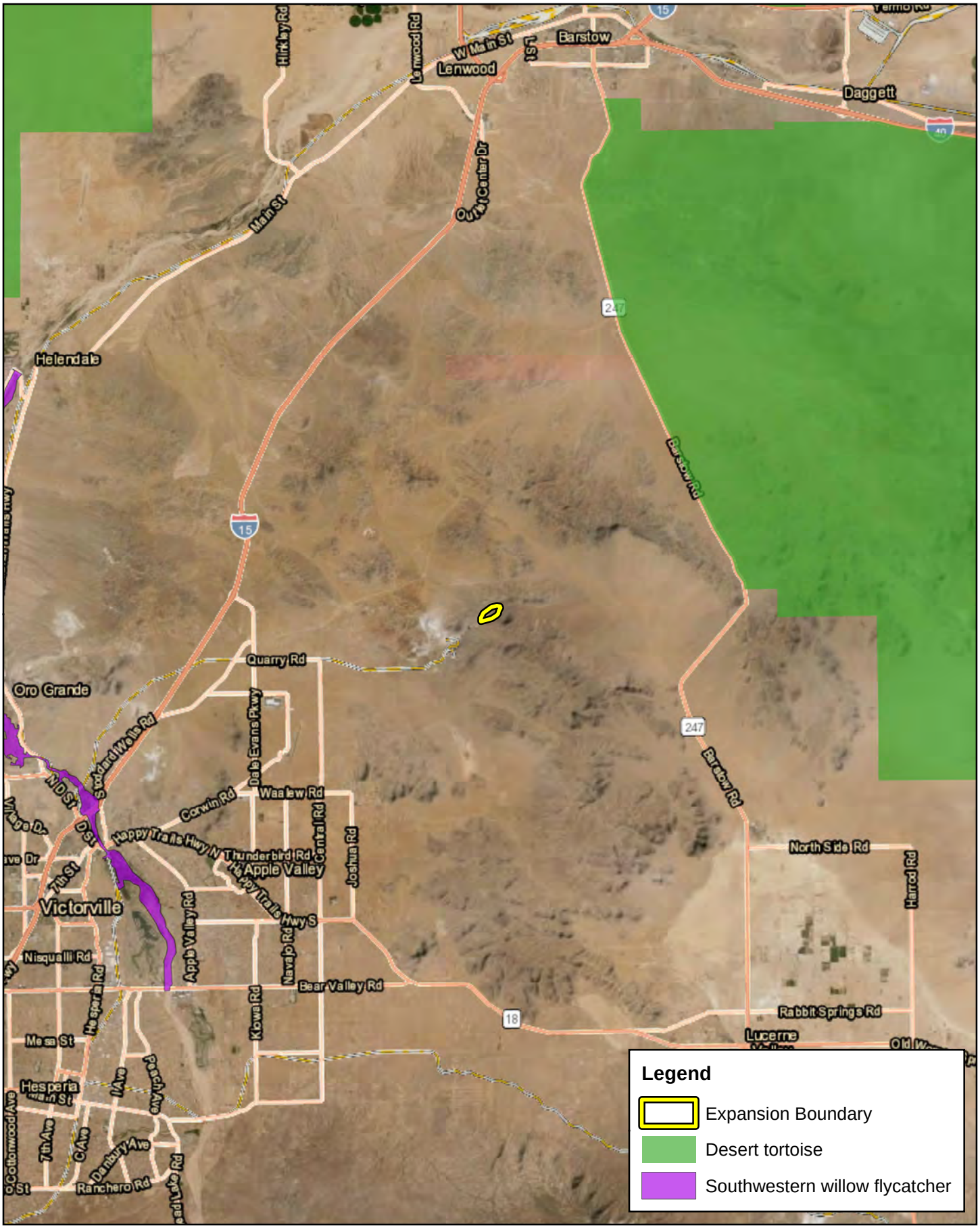
According to the CNDDB, fifteen (15) special-status wildlife species have been reported in the Turtle Valley, Stoddard Well, Apple Valley North, and Fairview Valley quadrangles (refer to Appendix B). No special-status wildlife species were observed on-site during the habitat assessment. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed project site has a moderate potential to provide suitable habitat for loggerhead shrike (*Lanius ludocivianus*), and low potential to provide suitable habitat for Cooper's hawk (*Accipiter cooperii*), golden eagle (*Aquila chysaetos*), burrowing owl, and prairie falcon (*Falco mexicanus*). 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 since the project site.

In order to ensure impacts to the aforementioned species do not occur from implementation of the project, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. With implementation of a pre-construction nesting bird clearance survey, impacts to these special-status species will be less than significant and no mitigation will be required.

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. Further, the closest Critical Habitat designation is located approximately 7.1 miles east of the project site for Mojave desert tortoise and 13 miles southwest of the project site for southwestern willow flycatcher (*Empidonax traillii extimus*) (Exhibit 7, *Critical Habitat*). Therefore, no impacts to federally designated Critical Habitat will occur from implementation of the proposed project.



ALVIC QUARRY REVISED RECLAMATION PLAN
HABITAT AND JURISDICTIONAL ASSESSMENT

Critical Habitat

ELMT CONSULTING

0 1.25 2.5 5 Miles

Source: USA Topographic Maps, USFWS Critical Habitat, San Bernardino County

Exhibit 7

Section 5 Conclusion and Recommendations

The project site is located in the northeast corner of the CEMEX Black Mountain Quarry and Plant in a remote area northeast of the City of Victorville and the Town of Apple Valley. Areas surrounding the site primarily consist of vacant, undeveloped land. The project site is situated at the eastern end of the Black Mountain range in between Black Mountain and Sidewinder Mountain, with Fairview Mountains located to the southwest. The project site is relatively undeveloped except those areas that have been subject to existing mining activities. The areas on the perimeter of the site are relatively undeveloped/undisturbed, while the middle portion of the project site supports existing mining area, and dirt access roads. During the field investigation one (1) plant community was observed within the boundary of the project site: creosote bush scrub. In addition, one (1) land cover type that would be classified as disturbed was observed on-site.

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 some of the special-status plant species. Further, based on habitat requirements for the identified special-status species and known distributions, it was determined that the undeveloped portions of the project site that support the Mojavean desert scrub plant community do not have the potential to support any of the special-status species documented as occurring within the vicinity of the project site are presumed absent. The project site is located at the maximum elevational rage from most of the special-status species. As a result, no impacts to special-status species are expected to occur.

Special-Status Wildlife Species

No special-status wildlife species were observed on-site during the field investigation. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed project site has a moderate potential to provide suitable habitat for loggerhead shrike; and low potential to provide suitable habitat for Cooper's hawk, golden eagle, burrowing owl, and prairie falcon. 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 since the project site.

In order to ensure impacts to the aforementioned species do not occur from implementation of the project, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. With implementation of a pre-construction nesting bird clearance survey, impacts to these special-status species will be less than significant and no mitigation will be required.

In order to ensure compliance with the Migratory Bird Treaty Act (MBTA) and Fish and Game Code, it is recommended that construction activities and/or the removal of any trees, shrubs, or any other potential nesting habitat should be conducted outside the avian nesting season. Nesting birds are protected pursuant to the MBTA and California Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the California Fish and Game Code 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 three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to

active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a 300-foot buffer around the active nest. For listed and raptor species, this buffer should be expanded to 500 feet. A biological monitor should be present to delineate the boundaries of the buffer area and monitor the active nest to ensure that nesting behavior is not adversely affected by construction activities. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Riparian Habitat and Sensitive Natural Communities

Approximately three (3) to four (4) riverine resources were identified immediately adjacent to 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 investigations.

Based on the proposed mining expansion boundary, none of the mapped riverine resources will be impacted from project implementation. Therefore, regulatory approvals will not be required for project implementation. If the proposed project footprint is revised and/or mining activities encroach into the adjacent riverine features, further review will be required to define project impacts and acquire regulatory approvals from the Corps, Regional Board, and/or CDFW, if necessary.

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

Wildlife Corridors

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. 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.

Although not a state or federally protected species, Joshua trees and Mojave yuccas are regulated pursuant to Section 88.01.060 of the San Bernardino County Development Code and Section 80073 of the California Desert Native Plant Act. Therefore, impacts to these species should be avoided in all instances. In the event that avoidance is not feasible, the project applicant will be required to obtain a Tree or Plant Removal Permit from the County of San Bernardino prior to removal of any regulated tree or plant.

Section 6 References

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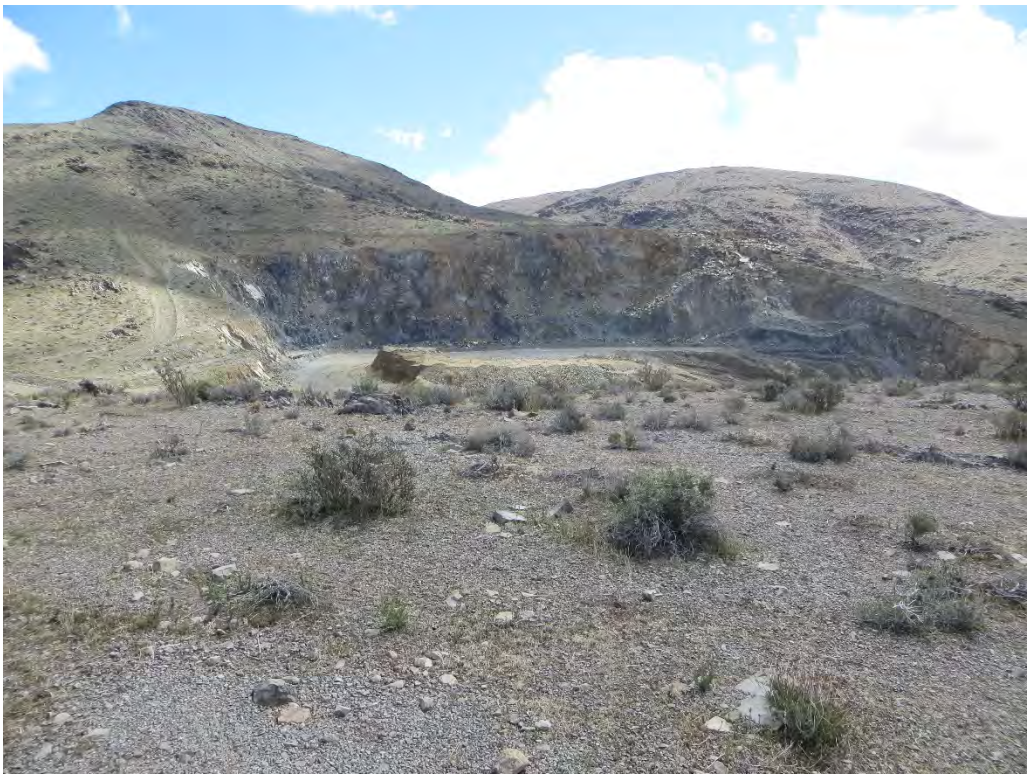
Appendix A Site Photographs

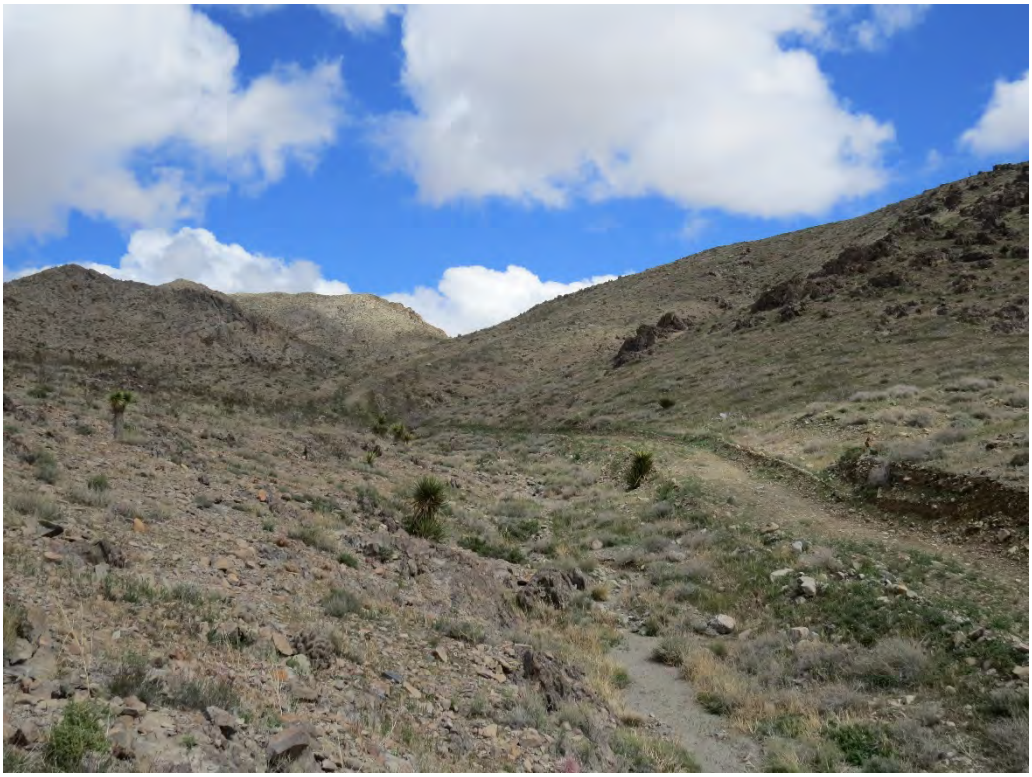
Photograph 1: Looking at the southwest corner of the site where the existing dirt access road enters the project site.

Photograph 2: From the northern boundary of the site near the southwest corner looking west.

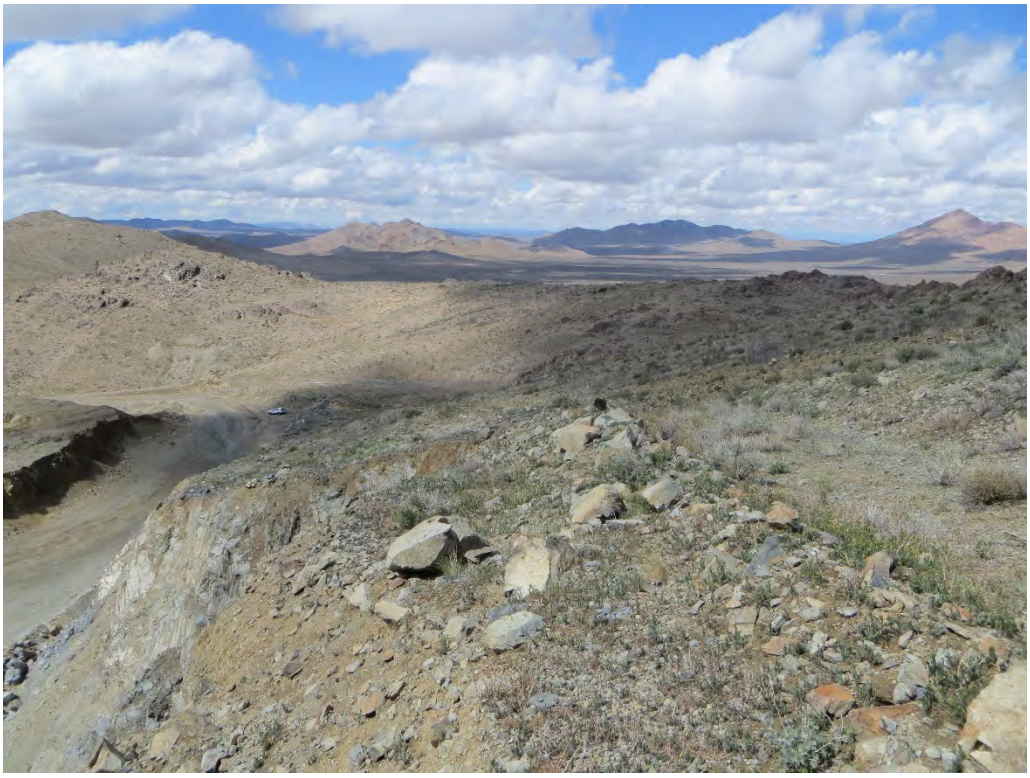
Photograph 3: From the northern boundary of the site near the southwest corner looking east along the northern boundary of the site.



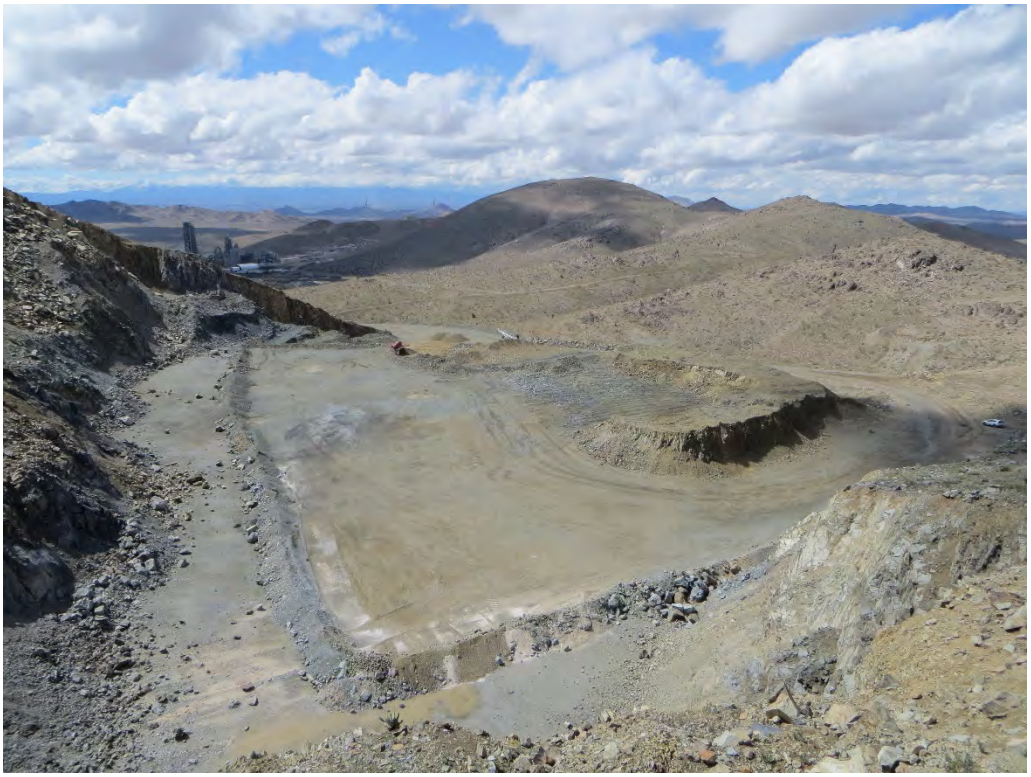
Photograph 4: From the northern boundary of the project site looking south towards existing mining area.



Photograph 5: View of the steep rolling hills on the northeastern portion of the project site.



Photograph 6: From the eastern boundary of the existing mining pit looking north.



Photograph 7: From the eastern portion of the project site looking west over the existing mine area.

Photograph 8: From the eastern portion of the project site looking south towards the southern portion of the site.

Photograph 9: From the southern portion of the site looking northeast at the undeveloped hillsides.

Photograph 10: From the southern boundary of the project site near the southwest corner looking west.

Appendix B Potentially Occurring Special-Status Biological Resources

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

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
SPECIAL-STATUS WILDLIFE SPECIES				
Accipiter cooperii Cooper's hawk	Fed: None CA: **WL**	Occurs along patches and groves of wooded areas within live oak, riparian deciduous, or other forest habitats near water. Forages in broken woodland habitat edges and nests in deciduous trees and second-growth conifer stands and riparian areas near streams and open water.	No	**Low:** Although there is marginal foraging habitat on-site, there is no suitable nesting habitat on or within the vicinity of the survey area.
Antrozous pallidus pallid bat	Fed: None CA: SSC	Occurs locally throughout low elevations of California in a wide variety of habitats including grasslands, shrublands, woodlands, and forests. The species is most common in open, dry habitat with rocky areas for roosting. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging.	No	**Presumed Absent:** There is no suitable roosting habitat within or adjacent to the survey area.
Aquila chrysaetos golden eagle	Fed: None CA: **FP, WL**	Occurs in rolling foothill, sage-juniper flats, desert, and mountainous habitats. Requires open terrain for hunting including grasslands, deserts, savannahs, and early successional stages of forest and shrub habitats. Nests on cliffs and escarpments in rugged canyons and in large trees in open areas. Prefers rolling foothills, mountain terrain, cliffs, rock outcrops, and wide arid plateaus deeply cut by streams and canyons.	No	**Low:** Although there is marginal foraging habitat on-site, there is no suitable nesting habitat on or within the vicinity of the survey area.
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	**Low:** The Mojavean desert scrub plant community has the potential to provide suitable line of site opportunities. No owls, suitable burrows, and/or sign were observed within or adjacent to the project site during the surveys.
Bombus crotchii Crotch bumble bee	Fed: None CA: **CE**	Colonial species that lives almost exclusively from coastal California east towards the Sierra-Cascade Crest and can be found uncommonly in western Nevada and south through Baja California. Inhabits grassland and scrub habitats in hotter and drier climates than most other bumblebee species and is only capable of tolerating a narrow range of climatic conditions. Feeds on a variety of annual and perennial plant species, classifying it as a dietary generalist. This species usually nests underground, often in abandoned rodent dens.	No	**Presumed Absent:** There is no suitable roosting habitat within or adjacent to the survey area.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
Buteo swainsoni Swainson's hawk	Fed: None CA: **THR**	Breeds in stands with few trees in Joshua tree woodlands, juniper-sage flats, riparian areas, oak savannahs. Forages in adjacent grasslands or suitable grain/alfalfa fields, and livestock pastures. Primary nest trees are Joshua trees and Fremont cottonwoods. Tends to avoid areas exposed to human disturbances.	No	**Presumed Absent:** There is no suitable habitat within or immediately adjacent to the project site.
Chaetodipus fallax pallidus pallid San Diego pocket mouse	Fed: None CA: SSC	Commonly occurs in sandy herbaceous areas with a substrate consisting of rocks or course gravel. Prefers chaparral but also occurs in desert wash, desert scrub, succulent scrub, annual grassland, and pinyon juniper woodland.	No	**Presumed Absent:** There is no suitable habitat within or immediately adjacent to the project site.
Dipodomys merriami parvus San Bernardino kangaroo rat	Fed: **END** CA: **CE**; SSC	Primarily found in Riversidian alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidian upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidian alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.	No	**Presumed Absent:** There is no suitable habitat within or immediately adjacent to the project site.
Falco mexicanus prairie falcon	Fed: None CA: **WL**	Distributed from annual grasslands to alpine meadows, but primarily associated with grasslands, savannahs, rangeland, agricultural fields, and desert scrub areas. Requires open terrains for foraging and nests on cliffs, escarpments, and rock outcrops.	No	**Low:** Although there is marginal foraging habitat on-site, there is no suitable nesting habitat on or within the vicinity of the survey area.
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	**Presumed Absent:** No suitable burrows or habitat were observed during the survey. The terrain within the project site is largely unsuitable for burrowing.
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	**Moderate:** There is suitable foraging and nesting habitat within and adjacent to the survey area. Joshua tree and Mojave yucca lines provide preferred perching sites.
Onychomys torridus ramona southern grasshopper mouse	Fed: None CA: SSC	Inhabits alkali desert scrub and other desert scrub habitats, and to a lesser extent succulent shrubs, desert washes, desert riparian, coastal scrub, mixed chaparral, and sagebrush habitats. Generally rare in valley foothill and montane riparian habitats. Prefers low to moderate shrub cover and requires friable soils.	No	**Presumed Absent:** There is no suitable habitat within or immediately adjacent to the project site.
Siphateles bicolor mohavensis Mohave 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 within or immediately adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
Toxostoma bendirei Bendire's thrasher	Fed: None CA: **FP; WL**	Occurs in flat desert areas with dense perennial shrubs and scattered stands of Joshua trees, yuccas, cholla in desert succulent shrub and Joshua tree habitats. Typically found on higher elevation bajadas and valleys. Typically prefer sites with firmly packed dirt rather than sandy soils, desert pavement, and rocky soils.	No	**Presumed Absent:** There is no suitable habitat within or immediately adjacent to the project site.
Toxostoma lecontei Le Conte's thrasher	Fed: None CA: SSC	Occurs primarily in desert washes and flats with scattered shrubs and large areas of open, sandy terrain in desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus. Rarely found on rocky soils, hillsides, riparian, or on agricultural lands.	No	**Presumed Absent:** There is no suitable habitat within or immediately adjacent to the project site.
SPECIAL-STATUS PLANT SPECIES				
Androsace elongata ssp. acuta California androsace	Fed: None CA: None CNPS: 4.2	Occurs in a variety of habitats including chaparral, cismontane woodland, coastal sage scrub, meadows, and seeps. Elevation is 490 to 3,940 feet above msl. Blooms March to June.	No	**Presumed Absent:** There is no suitable habitat within or immediately adjacent to the project site.
Cymopterus deserticola desert cymopterus	Fed: None CA: None CNPS: 1B.2	Occurs on sandy soils in Joshua tree woodland and Mojavean desert scrub habitats. Elevation is 2,070 to 4,925 feet above msl. Blooms March to May.	No	**Presumed Absent:** There is no suitable habitat within or immediately adjacent to the project site.
Diplacus mohavensis Mojave monkeyflower	Fed: None CA: None CNPS: 1B.2	Occurs on granitic soils on gravelly banks of desert washes, in sandy openings between creosote bushes and along rocky slopes above washes, areas that are not subject to regular water flows. Found at elevations ranging from 1,969 to 3,937 feet. Blooming period is from April to June.	No	**Presumed Absent:** There is no suitable habitat within or immediately adjacent to the project site.
Eriophyllum mohavense Barstow woolly sunflower	Fed: None CA: None CNPS: 1B.2	Occurs on sandy, silty soils or margins of playas within desert chenopod scrub, Mojavean desert scrub, creosote bush scrub habitats. Elevation is 1,640 to 3,150 feet above msl. Blooms April to May.	No	**Presumed Absent:** There is no suitable habitat within or immediately adjacent to the project site.
Pediomelum castoreum Beaver Dam breadroot	Fed: None CA: None CNPS: 1B.2	Occurs on sandy soils in washes and road cuts in Joshua tree woodland and Mojavean desert scrub habitats. Elevation is 2,000 to 5,000 feet above msl. Blooms April to May.	No	**Presumed Absent:** There is no suitable habitat within or immediately adjacent to the project site.

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 C 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.