November 16, 2022

INDUSTRIAL PROPERTY GROUP, INC
Contact: Craig Wilde
10515 20th Street Southeast
Lake Stevens, Washington 98258

SUBJECT: Biological Resources Assessment for Proposed Rancho 38 Project Site Located on the Southwest Corner of the Intersection of Rancho Road and Emerald Road in the City of Adelanto, San Bernardino County, California

Introduction

This report contains the findings of ELMT Consulting's (ELMT) biological resources assessment the Rancho 38 project located within Assessor Parcel Number 3128-291-02 (project, project site) in the City of Adelanto, San Bernardino County, California. The field investigation was conducted by biologists Jacob H. Lloyd Davies and Rachael A. Lyons on October 6, 2022, to document baseline conditions and assess the potential for special-status[1] plant and wildlife species to occur within the project site that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of the project site to support special-status plant and wildlife species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), and other electronic databases as potentially occurring in the general vicinity of the project site.

Project Location

The project site is generally located east of United States Route 395, north of State Route 18, west of Interstate 15, and south of Air Expressway in the city of Adelanto, San Bernardino County, California. The site is depicted on the Adelanto quadrangle of the United States Geological Survey's (USGS) 7.5-minute map series within Section 3 of Township 5 North, Range 5 West. Specifically, the project site is bounded to the north by Rancho Road, to the west by industrial development with undeveloped vacant land and Adelanto Road beyond, to the south by industrial development and undeveloped vacant land with Cassia Street beyond, and to the east by Emerald Road within Assessor's Parcel Number 3128-291-02. Refer to Exhibits 1-3 in Attachment A.

Project Description

The project proposes to construct a warehouse facility with a four-driveway entrance off of existing Rancho Road, which is located along the northern boundary of the project site. Two passenger vehicle parking lots will be located on the north and south sides of the proposed warehouse and will consist of 394 parking stalls, while two trailer and commercial vehicle parking lots will be located on the west and east sides of the warehouse and will consist of 545 stalls. The majority of the project site will support a 623,140 s.f.

1 As used in this report, "special-status" refers to plant and wildlife species that are federally and State listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

(square-foot) warehouse building. This includes 10,00 s.f. of office space and a potential second floor. The project also proposes approximately 379 s.f. of landscaping around the perimeter of the project site.

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 to document existing conditions and assess the potential for special-status biological resources to occur within the project site.

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's 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 within 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 (1985-2021);
- 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 Endangered Species Profiles.

The literature review provided a baseline from which to inventory the biological resources potentially occurring within the project site. 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.

Field Investigation

Following the literature review, biologists Jacob H. Lloyd Davies and Rachael A. Lyons inventoried and evaluated the condition of the habitat within a 200-foot buffer around the project site, where applicable, on

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.

October 6, 2022. Plant communities and land cover types identified on aerial photographs during the literature review were verified by walking meandering transects throughout the project site. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that may support the movement of wildlife through the area. These areas identified on aerial photography were then walked during the field investigation.

Soil Series Assessment

On-site and adjoining soils were researched prior to the field investigation using the USDA NRCS Soil Survey for San Bernardino County, California. 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.

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), delineated on an aerial photograph, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community and/or land cover type in acres.

Plants

Common plant species observed during the field investigation 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

Wildlife species detected during the field investigation by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides 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 well standardized, scientific names are provided immediately following common names in this report (first reference only).

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 United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), 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.

Existing Site Conditions

The proposed project site is located in an area that supports a variety of land uses in the City of Adelanto. The land surrounding the site is comprised of undeveloped, vacant land and commercial development. The site is bounded immediately to the north by Rancho Road with commercial development beyond, to the west by commercial development, the south by a mix of commercial development and undeveloped vacant land, and to the east by commercial development. The site itself consists entirely of undeveloped, vacant land which supports a native creosote scrub plant community. Much of the western portion of the site has been heavily disturbed and removed of vegetation by recent grading activities and the creation of artificial berms. Additionally, anthropogenic disturbances such as illegal dumping and off-road vehicular use, are heavily concentrated along the site boundaries.

Topography and Soils

On-site elevation ranges from approximately 2,959 to 2,938 feet above mean sea level and generally slopes from west to east, with no areas of topographic relief with the exception of slight elevational changes within the areas surrounding the artificial berms. Based on the NRCS USDA Web Soil Survey, the project site is historically entirely underlain by Bryman Loamy Fine Sand (2 to 5 percent slopes).

Vegetation

The project site consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances, including off-road vehicular use and illegal dumping. These disturbances occur primarily along the project boundaries, with relatively little disturbance occurring near the center of the project site. Additionally, most of the vegetation has been removed from the western portion of the site, and this area has been recently graded. Refer to Attachment B, *Site Photographs*, for representative site photographs.

The site supports one plant community, creosote scrub, and one land cover type, disturbed (refer to Exhibit 4, *Vegetation* in Attachment A). On-site vegetation density varies from unvegetated to moderately vegetated. Common plant species observed on-site include creosote (*Larrea tridentata*), rubber rabbitbrush (*Ericameria nauseosa*), Mediterranean mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), salt cedar (*Tamarix ramosissima*), mulefat (*Baccharis salicifolia*), horseweed (*Erigeron canadensis*), pampas grass (*Cortaderia selloana*), teddy-bear cholla (*Cylindropuntia bigelovii*), lemonscent (*Pectis angustifolia*), prostrate sandmat (*Euphorbia protstrata*), desert marigold (*Baileya multiradiata*), and spineflower (*Chorizanthe* sp.).

Wildlife

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

Fish

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

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 within the vicinity of the project site. Therefore, no amphibians are expected to occur on the project site and are presumed absent.

Reptiles

The survey area provides limited foraging and cover habitat for local reptile species adapted to conditions within the Mojave Desert. The only reptilian species observed was western side-blotched lizard (*Uta stansburiana elegans*). Common reptilian species that could be expected to occur include Great Basin fence lizard (*Sceloporus occidentalis longipes*), Great basin gopher snake (*Pituophis catenifer deserticola*), and red racer (*Coluber flagellum piceus*).

Birds

The project site and surrounding area provide suitable foraging and nesting habitat for bird species adapted to conditions within the Mojave Desert. Bird species detected during the field investigation include cactus wren (*Campylorhynchus brunneicapillus*), American kestrel (*Falco sparverius*), house finch (*Haemorhous mexicanus*), common raven (*Corvus corax*), loggerhead shrike (*Lanius ludovicianus*), and mourning dove (*Zenaida macroura*). Owl pellets were also observed on the project site, but the contributing species is unknown.

Mammals

The survey area provides moderate foraging and cover habitat for mammalian species adapted to conditions surrounding the Mojave Desert. Mammalian species detected during the field investigation include coyote (*Canis latrans*), California ground squirrel (*Otospermophilus beecheyi*), and white-tailed antelope squirrel (*Ammospermophilus leucurus*). Additional common mammalian species that could be expected to occur include desert cottontail (*Sylvilagus audubonii*).

Nesting Birds

No active nests or birds displaying nesting behavior were observed during the field survey, which was conducted outside the breeding season. The project site provides minimal nesting opportunities for year-round and seasonal avian residents, as well as migrating songbirds that are adapted to conditions surrounding the Mojave Desert.

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 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.

Migratory Corridors and Linkages

Habitat linkages provide connections between larger 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 still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both anthropogenic 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. 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 4.6 miles east of the site. The site is separated from this identified regional wildlife corridors and linkages by existing development and roadways, and undeveloped land, and 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; however, 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.

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 or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

The project site does not support any discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the Corps, Regional Board, or CDFW. A query of the NWI database determined that no potential blueline streams, riverine, or other aquatic resources occur within or adjacent to the project site. Therefore, project activities will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required.

Special-Status Biological Resources

The CNDDB Rarefind 5 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 Adelanto USGS 7.5-minute quadrangle. Due to the proximity of the proposed project site to the quadrangle boundaries, the Victorville USGS 7.5-minute quadrangle was also queried. 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 twelve (12) special-status plant species and forty-five (45) special-status wildlife species as having potential to occur within the Adelanto and Victorville USGS 7.5-minute quadrangles. No special-status plant communities were identified as having potential to occur within these quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project site 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 of the project site is presented in Attachment D*: Potentially Occurring Special-Status Biological Resources*.

Special-Status Plants

According to the CNDDB and CNPS, twelve (12) special-status plant species have been recorded in the Adelanto and Victorville quadrangles (refer to Attachment D). No special-status plant species were observed within the proposed project footprint during the field investigation. The majority of the project site consists of vacant, undeveloped land which supports a native creosote scrub community. According to the CNDDB and CNPS, twelve (12) special-status plant species have been recorded in the Adelanto and Victorville quadrangles (refer to Attachment D). No special-status plant species were observed on-site during the field investigation. The project site consists vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances and is primarily surrounded by existing development. These disturbances have reduced the ability of the on-site habitat to provide suitable habitat for special-status plant species known to occur in the general vicinity. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and all are presumed to be absent. No focused surveys are recommended.

Special-Status Wildlife

According to the CNDDB, forty-five (45) special-status wildlife species have been reported in the Adelanto and Victorville quadrangles (refer to Attachment D). No special-status wildlife species were observed during the field investigation. The project site supports a creosote scrub community, which is capable of providing potential foraging and nesting/denning opportunities for wildlife species, especially those adapted to a high degree of anthropogenic disturbance. 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 California horned lark (*Eremophilia alpestris actia*), loggerhead shrike (*Lanius ludovicianus*), and a low potential to support prairie falcon (*Falco mexicanus*).

None of the aforementioned special-status wildlife species are state or federally listed as threatened or endangered. In order to ensure impacts to these avian species do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. With implementation of the pre-construction nesting bird clearance survey, impacts to special-status avian species will be less than significant and no mitigation will be required.

Critical Habitats

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 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 Clean Water Act Permit from the United States Army Corps of Engineers). 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 nearest Critical Habitat designation is located approximately 2.6 miles to the northeast for southwestern willow flycatcher (*Empidonax traillii extimus*). Therefore, no impacts to federally designated Critical Habitat will occur from implementation of the proposed project.

Conclusion

Based literature review and field survey, and existing site conditions discussed in this report, implementation of the project will have no significant impacts on federally or State listed species known to occur in the general vicinity of the project site. Additionally, the project will have no effect on designated Critical Habitat, or regional wildlife corridors/linkage because none exists within the area. No jurisdictional drainage and/or wetland features were observed on the project site during the field investigation. No further surveys are recommended. With completion of the recommendations provided below, no impacts to year-round, seasonal, or special-status avian residents or special-status species will occur from implementation of the proposed project.

Recommendations

Migratory Bird Treaty Act and Fish and Game Code

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). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season.

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 no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will

be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. 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.

Please do not hesitate to contact Tom McGill at (951) 285-6014 or tmcgill@elmtconsulting.com or Travis McGill at (909) 816-1646 or travismcgill@elmtconsulting.com should you have any questions this report.

Sincerely,

Thomas J. McGill, Ph.D.
Managing Director

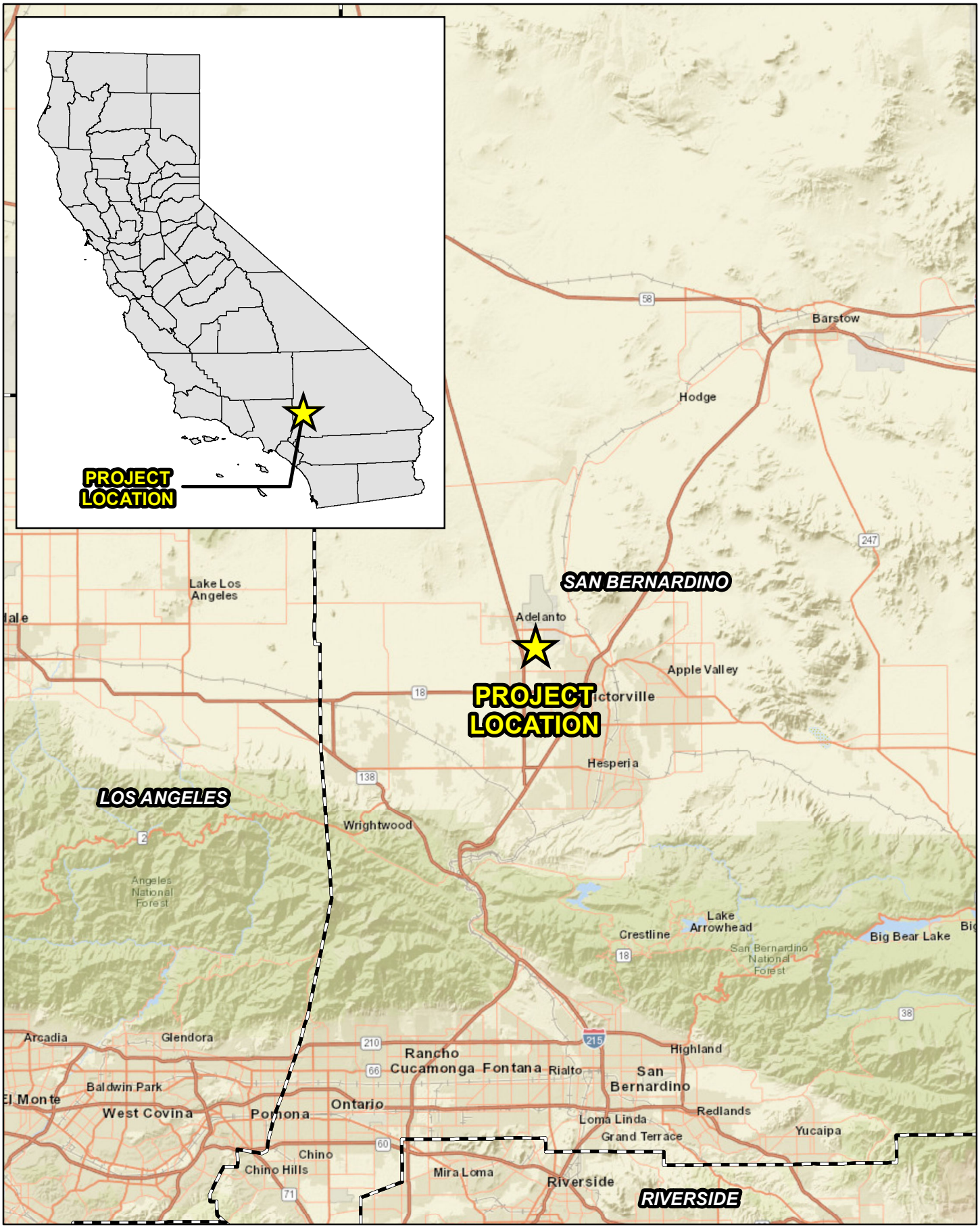
Travis J. McGill
Director

Attachments:

A. *Project Exhibits*
B. *Site Plan*
C. *Site Photographs*
D. *Potentially Occurring Special-Status Biological Resources*
E. *Regulations*

Attachment A

Project Exhibits



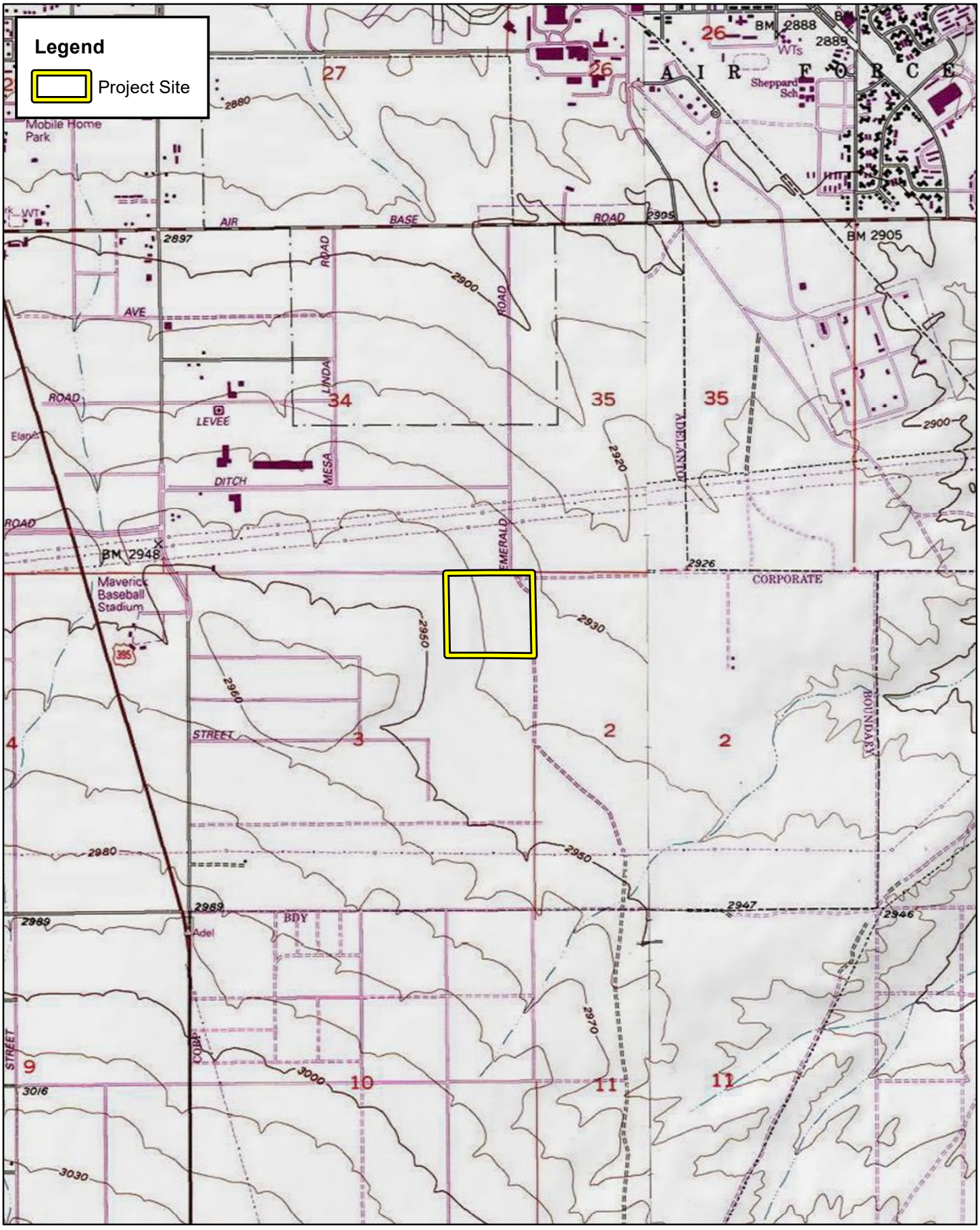
ELMT CONSULTING

Source: World Street Map, San Bernardino County

RANCHO 38 PROJECT SITE
BIOLOGICAL RESOURCES ASSESSMENT

Regional Vicinity

Exhibit 1



RANCHO 38 PROJECT SITE
BIOLOGICAL RESOURCES ASSESSMENT

Site Vicinity

ELMT CONSULTING

0 1,000 2,000 4,000 Feet

Source: USA Topographic Map, San Bernardino County

Exhibit 2

RANCHO 38 PROJECT SITE
BIOLOGICAL RESOURCES ASSESSMENT

Project Site

ELMT CONSULTING

0 125 250 500 Feet

Source: ESRI Aerial Imagery, San Bernardino County

Exhibit 3

RANCHO 38 PROJECT SITE
BIOLOGICAL RESOURCES ASSESSMENT

Vegetation

ELMT CONSULTING

0 125 250 500 Feet

Source: ESRI Aerial Imagery, San Bernardino County

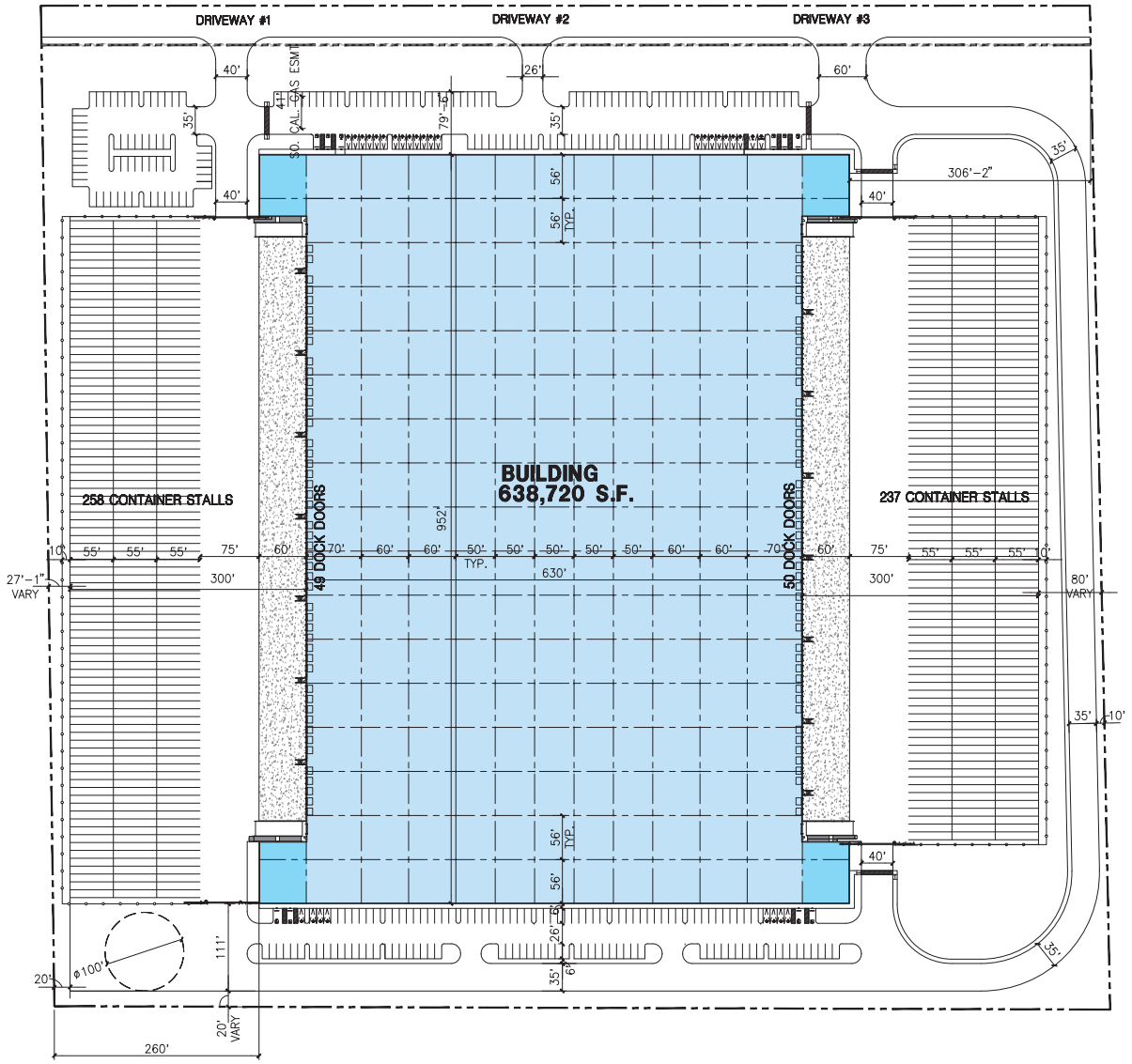
Exhibit 4

Attachment B

Site Plan

CAUTION: IF THIS SHEET IS NOT 30"X42", IT IS A REDUCED PRINT

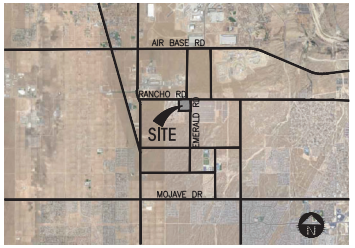
RANCHO RD



Tabulation

SITE AREA	
In s.f.	1,639,542 sf
In acres	37.64 ac
BUILDING AREA	
Future Office - 1st floor	20,000 sf
Future Office - 2nd floor	20,000 sf
Warehouse	598,720 sf
TOTAL	638,720 sf
FLOOR AREA RATIO	
Maximum Allowed	
Actual	0.390
SITE COVERAGE	
Maximum Allowed	
Actual	37.7%
AUTO PARKING REQUIRED	
Office: 1/300 s.f. (30,000 / 300)	133 stalls
Whse: 1st 20K @ 1/1,000 s.f. (20,000)	20 stalls
2nd 20k @ 1/2,000 s.f. (20,000)	10 stalls
above 40K @ 1/4000 s.f. (579, 940)	140 stalls
TOTAL	303 stalls
AUTO PARKING PROVIDED	
Standard (9' x 18')	316 stalls
TRAILER CONTAINER STALLS	
Trailer Container Stalls (12' x 55')	495 stalls
LANDSCAPE REQUIREMENT = 10%	163,954 sf

Aerial Map



Legend

- POTENTIAL OFFICE WITH 2ND FLOOR
- WAREHOUSE
- DRIVE THRU DOOR

north

1" = 60'
0 60 120 180

Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.

Conceptual Site Plan

RANCHO ROAD

ADELANTO, CA 92301.

18831 Bardeen Ave. - Ste. #100
Irvine, CA 92612
(949) 863-1770
www.hparchs.com

OCTOBER 13, 2022 / Job #22644

Scheme 7

Attachment C

Site Photographs

Photograph 1: From the northwest corner of the project site looking south along the western boundary.

Photograph 2: From the northwest corner of the project site looking east along the northern boundary and Rancho Road.

Photograph 3: From middle of the northern boundary of the project site, looking south through the middle of the site.

Photograph 4: From the northeast corner of the project site, looking diagonally southwest through the middle of the site.

Photograph 5: From the northeast corner of the project site, looking west along Rancho Road and the northern boundary of the site.

Photograph 6: From the middle of the eastern boundary of the project site, looking west through the middle of the site.

Photograph 7: From the middle of the project site, looking west toward the western boundary through existing artificial berms on the western portion of the site.

Photograph 8: From the middle of the western boundary of the project site, looking east through the middle of the site.

Photograph 9: From the southwest corner of the project site, looking north along the western boundary.

Photograph 10: From the southwest corner of the project site, looking east through existing vegetation along the southern boundary.

Photograph 11: From the middle of the southern boundary of the project site, looking north through the middle of the site.

Photograph 12: From the southeast corner of the project site, looking north along the eastern boundary and an existing unpaved access road.

Attachment D

Potentially Occurring Special-Status Biological Resources

Table D-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 Coopers hawk	Fed: **END** CA: SSC	Found in mixed and deciduous forests, open and riparian woodlands, small, wooded lots, and forested mountain regions.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Agelaius tricolor tricolored blackbird	Fed: **THR** CA: SSC	Prefers wetland and grassland habitats, wetlands, and active agricultural areas. Breeds and nests in marshes in cattails, bullrushes, and willows. Forages in irrigated pastures, dry rangeland.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Anaxyrus californica arroyo toad	Fed: None CA: WL	Found in low gradient, medium-to-large streams and rivers with intermittent and perennial flow in coastal and desert drainages from central California to Baja California, Mexico. Require exposed sandy streamsides with stable terraces for burrowing, and scattered vegetation.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Aquila chyrsaetos golden eagle	Fed: None CA: FP/WL	Hunts over marshes and along rivers. Generally found in open mountain areas, foothills, plains, and open country like tundra, prairie, rangeland, and desert.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Ardea alba great egret	Fed: None CA: THR	Forages in mud flats and along the edges of lakes, large marshes, shallow coastal lagoons and estuaries, and rivers in wooded areas. Usually nests in trees or shrubs, often near water, sometimes in thickets and lower in marshes and ponds.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Ardea herodias great blue heron	Fed: None CA: None	Found in both saltwater and freshwater habitats from open coasts, marshes, sloughs, riverbanks, and lakes. Forages in grasslands and agricultural fields, as well as backyard goldfish ponds. Nests in trees.	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** Portions of the project site support line-of-sight opportunities favored by burrowing owls; however, no suitable burrows (>4 inches in diameter) are present. In addition, adjacent and surrounding development supports tall structures that provide perching opportunities for predators of burrowing owls.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
Buteo swainsoni Swainson's hawk	Fed: None CA: **THR**	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Chaetodipus fallax pallidus pallid San Diego pocket mouse	Fed: None CA: SSC	Resides in coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland habitats. Prefers rocky/gravely areas with yucca overstory and in desert scrub environments near or in the pine-juniper belt.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Circus hudsonius northern harrier	Fed: None CA: SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Coccyzus americanus occidentalis western yellow-billed cuckoo	Fed: None CA: WL	Found in low-to-moderate-elevation forests lining the rivers and streams of the western United States. Cottonwood (*Populus* spp.) and willow (*Salix* spp.) forests are most often used. Require relatively large contiguous patches of riparian habitat for nesting. Winter in woody, lowland vegetation near freshwater sources.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Contopus cooperi olive-sided flycatcher	Fed: DL CA: FP	Breed mostly in boreal forest and western coniferous forests from sea level to over 10,000 feet. Found frequently in burned forests and other open areas like forest edges, meadows, and ponds with an abundance of insects.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Corynorhinus townsendii Townsends big-eared bat	Fed: None CA: None	Found in pine forests, native prairies, riparian communities, active agricultural areas, coastal, and arid desert scrub habitats. Prefer large open areas for roosting. Elevation ranges from sea level to over 10,000 feet.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Empidonax traillii willow flycatcher	Fed: None CA: **THR**	Can be found in bushes, willow thickets, brushy fields, and upland copses. Breeds in thickets of deciduous trees and shrubs, especially in willows or along woodland edges. Common near streams or marshes, but may be found in drier habitats as well.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Empidonax traillii extimus southwestern willow flycatcher	Fed: None CA: SSC	Requires moist microclimatic and vegetative conditions. Breeds only in dense riparian vegetation near surface water or saturated soil. Frequently nests in nonnative tamarisk (*Tamarix* spp.), as well as willow (*Salix* spp.).	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 permanent and intermittent waters of rivers, creeks, small lakes and ponds, marshes, irrigation ditches, and reservoirs. Basks on land or near water on logs, branches or boulders.	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**
Eremophilia alpestris actia California horned lark	Fed: **END** CA: SSC	Found in grasslands along the coast, deserts near sea level, and alpine dwarf-shrub habitat above the treeline. Common in fields, deserts, and tundra. Forages on open ground. Generally avoids areas with many trees or bushes.	No	**Moderate** Suitable foraging habitat is present within the project site.
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	**Low** Suitable foraging habitat is present on-site; no suitable nesting habitat is present within or adjacent to the site.
Falco peregrinus anatum American peregrine falcon	Fed: None CA: SSC	Found in wide variety of open habitats, from tundra to desert mountains. Often near water, especially along coast. Migrants may fly far out to sea. Often found in cities, nesting on building ledges and feeding on pigeons.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
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 desert tortoises, sign, or burrows were observed during the habitat assessment. Marginal habitat is present within the project site; however, the majority of the site is too densely vegetated for this species. In addition, adjacent and surrounding development has fragmented habitats in the vicinity of the site and excluded the site from more suitable areas.
Helminthoglypta mohaveana Victorville shoulderband	Fed: None CA: None	Only known to occur in the Mojave Desert near Victorville in San Bernadino County.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Icteria virens yellow-breasted chat	Fed: None CA: SSC	Lives in thickets and along other dense, regrowing areas such as bramble bushes, clearcut areas, powerline corridors, and shrubs along streams. Can sometimes be found in overgrown pastures and in margins of woodlands. Winters in open scrub and woodland edges in lowland areas.	No	**Presumed Absent** No suitable habitat is 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	**Moderate** Foraging habitat is present, but the project site is highly fragmented from other suitable habitat and is subject to a high degree of anthropogenic disturbance.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
Lasionycteris noctivagans silver-haired bat	Fed: None CA: SSC	Found primarily in forested habitats at lower elevations to over 3,600 feet. Seeks shelter in loose bark, dead trees, snags, and inside hollow tree cavities, and cliff faces. Common in coniferous, mixed coniferous, and deciduous forests, especially old-growth areas. Forages in disturbed areas, small clearings, and along roadways and waterways.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Lasiurus cinereus hoary bat	Fed: None CA: SSC	Habitat varies nationwide, but lives in arid regions of the Southwest. Can be found wintering along the coast.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Microtus californicus mohavensis Mojave river vole	Fed: None CA: **END**	Prefers habitat that is moist, including meadows, freshwater marshes, and irrigated pastures in locations surrounding the Mojave River between elevations of 2,460 to 2,700 feet.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Myotis ciliolabrum western small-footed myotis	Fed: **END** CA: **END**	Found in mesic and arid conifer forests around rocky outcrops, talus, clay banks, and riparian woodland. Can sometimes be found roosting in loose bark, buildings, bridges, caves, and mines. Prefers being near a source of water with a large insect population.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Myotis yumanensis Yuma myotis	Fed: None CA: SSC	Resides in moist and dry forests, riparian zones, grasslands, shrubsteppe, and deserts. Closely associated with rivers, streams, ponds, and lakes.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Nannoopterum auritum double-crested cormorant	Fed: **END** CA: **END**	Can be found along coasts, bays, in lakes and rivers, and larger open bodies of water. Nests on rocky islands and shores, or in trees and sea cliffs over water.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Phrynosoma blainvillii coast horned lizard	Fed: None CA: SSC	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e. fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Piranga rubra summer tanager	Fed: None CA: None	Breeds in open spaces of woodlands and forest edges. Prefers oaks and riparian woodlands of cottonwood and willow.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
Plebulina emigdionis San Emigdio blue butterfly	Fed: None CA: None	Resides in shadscale scrub in desert canyons and near washes. Found only from Inyo County through the Mojave Desert, San Joaquin Valley, Bouquet and Mint Canyons, and Los Angeles County. Reliant on four-wing saltbush (*Atriplex canescens*) as obligate larval host plant.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Pseudocopaeodes eunus eunus alkali skipper	Fed: None CA: SSC	Found in salty desert habitats within grassy spots on alkali flats.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Pyrocephalus rubinus vermilion flycatcher	Fed: None CA: SSC	Found in any open country in the Southwest, including arid scrublands, farmlands, deserts, parks, and canyon mouths. Sometimes winters along the coastlines. Reliant on stream corridors within scrub ecosystems, in areas where willow, sycamore, cottonwood, mesquite, and other bottomland trees grow. Nests along stream corridors.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Rana draytonii California red-legged frog	Fed: None CA: SSC	Common in wooded areas adjacent to streams. Breeds in aquatic habitats including pools and backwaters within streams, creeks, ponds, marshes, sag and dune ponds, and lagoons. Can also breed within artificial environments, such as stock ponds.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Setophaga petechia yellow warbler	Fed: None CA: THR	Found in bushes, swamp edges, streams, and gardens. Breeds in second-growth woods, orchards, roadside thickets, and along the edges of lakes, swamps and marshes. Nests in small trees or bushes.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Siphateles bicolor mohavensis Mohave tui chub	Fed: None CA: SSC	The only fish native to the Mojave River. Restricted from the base of the San Bernadino Mountains to Soda Dry Lake. Requires slow-moving alkali waters with an abundance of aquatic vegetation. Can be found in deep pools or shallower out-flow streams.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Spinus lawrencii Lawrence's goldfinch	Fed: None CA: None	Breeds in a variety of habitats including streamside trees, oak woodland, open pine woodland, pinyon juniper woods, and chaparral. Often found close to water in dry country. Migrates and winters in weedy fields, farmland, bushy areas, and stream sides.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Spizella breweri Brewer's sparrow	Fed: None CA: None	Habitats include sagebrush and brushy plains.	No	**Presumed Absent** No suitable habitat is 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	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
Thamnophis hammondii two-striped gartersnake	Fed: None CA: None	Found near or in permanent sources of fresh water. Common around streams with rocky beds bordered by willows and other riparian vegetation, including mountain slopes and desert oases. Feeds primarily on fish and amphibians.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Toxostoma bendirei Bendire's thrasher	Fed: None CA: None	Prefers relatively open grassland, shrubland, or woodland with scattered trees or shrubs for breeding. Generally found in brushy habitats in deserts or grasslands, and Joshua tree stands.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Toxostoma lecontei Le Conte's thrasher	Fed: None CA: SSC	An uncommon to rare, local resident in southern California deserts from southern Mono Co. south to the Mexican border, and in western and southern San Joaquin Valley. Occurs primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats; also occurs in Joshua tree habitat with scattered shrubs.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Vireo bellii pusillus least Bell's vireo	Fed: None CA: SSC	Commonly found in lowland riparian vegetation throughout most of California. Can be found along foothill streams in the desert as well. Winters in southern Baja California, Mexico among mesquite scrub habitats within arroyos, palm groves, and hedgerows boarding agricultural and residential areas.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Xanthocephalus xanthocephalus yellow-headed blackbird	Fed: None CA: SSC	Breeds and roosts in freshwater wetlands with dense, emergent vegetation such as cattails. Often forages in fields, and winters in large, open agricultural areas. Nests in reeds directly over the water.	No	**Presumed Absent** No suitable habitat is 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** No suitable habitat is present within or adjacent to the project site.
SPECIAL-STATUS PLANT SPECIES				
Canbya candida white pygmy-poppy	Fed: None CA: None CNPS: 4.2	Occurs on gravelly, sandy, granitic soils in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. Found at elevations ranging from 2,297 to 5,249 feet above mean sea level (msl). Blooming period is from March to June.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Chorizanthe spinosa Mojave spineflower	Fed: None CA: None CNPS: 4.2	Grows in alkaline or non-alkaline soils in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and playas. Found at elevations ranging from 20 to 4,265 feet. Blooming period is from March to July.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Diplacus mohavensis Mojave monkeyflower	Fed: None CA: None CNPS: 1B.2	Found only in the Mojave Desert, growing in sandy or gravelly habitat along hillsides and slopes, limestone, granite, and fine gravel in wash bottoms and edges. Grows at elevations of 1,968 to 3,280 feet. Blooms from April to May.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
Eremothera boothii* ssp. *boothii Booth's evening-primrose	Fed: None CA: None CNPS: 2B.3	Can be found in sagebrush desert on dry rocky slopes, loose soils, sand or ash, and sometimes along roadsides from low desert plains to mountains and slopes at over 6,000 feet. Blooms from February to August.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Loeflingia squarrosa* var. *artemisiarum sagebrush loeflingia	Fed: None CA: None CNPS: 2B.2	Grows in sandy soils within desert dunes, Great Basin scrub, and Sonoran desert scrub habitats. Blooming period is from April to May. Grows in elevation from 2,297 to 5,299 feet.	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Lycium torreyi Torrey's box-thorn	Fed: None CA: None CNPS: 4.2	Common within coastal sage scrub communities on coastal bluffs, but also in low, sparse, saline desert areas. Requires fine, silty, alluvial soils. Blooms from March to May but can fruit from June to September.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Muilla coronata crowned muilla	Fed: None CA: None CNPS: 4.2	Found in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats. Blooming period is from May to April. Grows in elevation from 2,198 to 6,430 feet.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Pediomelum castoreum Beaver dam breadroot	Fed: None CA: None CNPS: 1B.2	Occurs in sandy soils, washes, and roadcuts within Joshua tree woodland and Mojavean desert scrub. Found at elevations ranging from 2,000 to 5,000 feet. Blooming period is from April to May.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Sclerocactus polyancistrus Mojave fish-hook cactus	Fed: None CA: None CNPS: 1B.2	Grows in desert scrub, Joshua tree woodlands, hills, alluvial slopes, creosote-bush scrub, and canyons, often on limestone substrate. Blooms from April to June.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Scutellaria bolanderi ssp. austromontana Southern mountains skullcap	Fed: None CA: None CNPS: 4.2	Found throughout the mountain and coastal regions from Oregon to Baja California. Grows in gravelly soils, stream banks, forest and woodland habitats of oak or pine. Prefers open areas, often those cleared by fire. Blooms from June to August.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Symphyotrichum defoliatum San Bernadino aster	Fed: None CA: None CNPS: 4.2	Grows in grassland and meadow habitats, as well as disturbed areas. Prefers freshwater-marsh habitat in freshwater wetland, coastal sage scrub, or southern oak woodland communities. Blooms from July to November.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Yucca brevifolia western Joshua tree	Fed: None CA: CE CNPS: N/A	Occurs in a variety of arid habitats within the Mojave Desert. Found at elevations ranging from 1,600 to 6,600 feet. Blooming period is from March to June.	No	**Presumed Absent** Was not observed onsite. Documented in the area

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

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

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

DL - Delisted
FP – California Fully Protected
SSC – California Species of Special Concern
WL – California Watch List
CE – Candidate Endangered

in California, but More Common Elsewhere
4 Plants of Limited Distribution – A Watch List

Attachment E

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.

---

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.