



August 4, 2016

Lilburn Corporation
Attn: Cheryl Tubbs
1905 Business Center Dr.
San Bernardino, CA 92408

RE: BIOLOGICAL RESOURCES ASSESSMENT
VICTORVILLE RESIDENTAL CARE FACILITY
CITY OF VICTORVILLE, COUNTY OF SAN BERNARDINO, CALIFORNIA

Dear Ms. Tubbs,

Jericho Systems, Inc. (Jericho) is pleased to provide the results of the general biological resources assessment of the Victorville Residential Care Facility (Project), located in Victorville, California. The purpose of the assessment was to identify biological resources that occur within or adjacent to the project footprint and to determine if project-related impacts may result to those resources.

This letter report is designed to address potential effects of the proposed project to designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) or species designated as sensitive by the California Department of Fish and Wildlife (CDFW, formerly California Department and Fish and Game) or the California Native Plant Society (CNPS).

The site was assessed for sensitive species known to occur locally. Particular attention was focused on those State and/or federally listed as threatened or endangered species that have been documented in the project vicinity, whose habitat requirements are present within the project vicinity. This includes:

- desert tortoise (*Gopherus agassizii*)
- western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)
- southwestern willow flycatcher (*Empidonax traillii extimus*)
- least Bell's vireo (*Vireo bellii pusillus*)
- Mohave ground squirrel (*Xerospermophilus mohavensis*)

In addition to the above listed species, the site was assessed for its potential suitability to support burrowing owl (*Athene cunicularia*). Although not a State or federally listed as threatened or endangered species, burrowing owl are considered a State and federal Species of Special Concern and are a migratory bird protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California Fish and Game Code (CDFG Code #3513 & #3503.5). Burrowing owl are known to occur throughout the region and have been documented within the project vicinity.

PROJECT DESCRIPTION

Fairway Equity, LLC is proposing to develop a residential care facility comprised of 100 assisted living units, 50 sub-acute rehab beds, 50 basic skilled nursing beds and 50 one-bedroom independent living units on 25 acres.

PROJECT LOCATION

The project site is generally located in the southern portion of Section 22 & 23, Township 5 North, Range 4 West and is depicted on the Victorville U. S. Geological Survey's (USGS) 7.5-minute topographic map.

The project site is specifically located east of Interstate 15, on Yates Rd., south of Horseshoe Ln., west of Park Rd. Parcel number 048002163 is located within the City of Victorville, San Bernardino County, California. Parcels number 047913108 and 047913109 are located in an unincorporated section of San Bernardino County, California. However, these parcels are all directly adjacent to each other. The total area of disturbance shown on Figure 3 is approximately 38 acres.

ENVIRONMENTAL SETTING

The City of Victorville is subject to both seasonal and annual variations in temperature and precipitation. The local climatic conditions in the project area are characterized by hot summers, mild winters, infrequent rainfall, and dry humidity. The average annual temperature is 62.3°F, ranging between 31-100°F. The rainy season begins in November and continues through April, with the quantity and frequency of rain varying from year to year. The average annual rainfall is approximately 6.18 inches.

Soils in this area consist of three different types:

- Cajon sand is comprised of sand derived from alluvium. This soil type is somewhat excessively drained and is considered farmland of statewide importance.
- Kimberlina loamy fine sand. This sand is derived from alluvium and contains loamy fine sand, sandy loam and fine sandy loam. These soils are well drained and considered prime farmland if irrigated.
- Victorville sand. These soils are derived from alluvium derived from granite and contain sandy loam, stratified sandy loam to fine sandy loam, stratified and to sandy loam, and clay loam to loam. These soils are moderately well drained and considered prime farmland if irrigated.

Hydrologically, the City of Victorville is located within an undefined Hydrologic Sub-Area (HSA 628.20) which comprises a 556,821-acre drainage area within the larger Mojave Watershed (HUC 18090208).

The habitat on site consists primarily of a mix of big sagebrush (Holland code 35210) and desert saltbush scrub (Holland code 36110) and desert wash habitats. The site has been subject to historic human disturbances and showed signs of recent disturbances such as OHV trails, dirt road, and trash. Surrounding land uses include: undeveloped, residential development and rail road.

SPECIAL STATUS SPECIES 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 the continued existence and existing knowledge of population levels.

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) administers the federal ESA of 1973. The ESA provides a legal mechanism for listing species as either threatened or endangered, and a process of protection for those species listed. Section 9 of the ESA prohibits "take" of threatened or endangered species. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. "Take" can include adverse modification of habitats used by a threatened or endangered species during any portion of its life history. Under the regulations of the ESA, the USFWS may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act. Take authorization can be obtained under Section 7 or Section 10 of the act.

California Endangered Species Act

The CDFW, formerly Fish and Game, administers the State CESA. The State of California considers an endangered species one whose prospects of survival and reproduction are in immediate jeopardy. A

threatened species is 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. And a rare species is one present in such small numbers throughout its range that it may become endangered if its present environment worsens. Rare species applies to California native plants. Further, all raptors and their nests are protected under Section 3503.5 of the California Fish and Game Code. Species that are California fully protected include those protected by special legislation for various reasons, such as the California condor. Species of Special Concern (SSC) is an informal designation used by CDFW for some declining wildlife species that are not proposed for listing as threatened or endangered. This designation does not provide legal protection, but signifies that these species are recognized as sensitive by CDFW.

The Migratory Bird Treaty Act

Nesting birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C 703-711). The MBTA provides protection for nesting birds that are both residents and migrants whether or not they are considered sensitive by resource agencies. The MBTA prohibits take of nearly all native birds. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law. The USFWS, in coordination with the CDFW administers the MBTA. CDFW's authoritative nexus to MBTA is provided in FGC Sections 3503.5 which protects all birds of prey and their nests and FGC Section 3800 which protects all non-game birds that occur naturally in the State.

Jurisdictional Waters

In addition to potential impacts to designated critical habitats and special status species, potential impacts to jurisdictional waters must be considered. Impacts to jurisdictional waters typically require regulatory approvals from one or more of the following regulatory agencies: U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or CDFW.

ASSESSMENT METHODOLOGY

Literature Review

Data regarding biological resources on the project site were obtained through literature review and field investigations. Prior to performing the surveys, available databases and documentation relevant to the project site was reviewed for documented occurrences of sensitive species in the area. The USFWS threatened and endangered species occurrence data overlay, as well as the most recent versions of the California Natural Diversity Database (CNDDDB) and California Native Plant Society Electronic Inventory (CNPSEI) databases were searched for sensitive species data on the *Victorville* and *Hesperia* USGS 7.5-minute series quadrangles. The proposed project site occurs in the southern portion of the *Victorville* USGS quad and the site's close proximity to the *Hesperia* quad lead to its inclusion in the review. These databases contain records of reported occurrences of State and federally listed species or otherwise sensitive species and habitats that may occur within the vicinity of the subject property. Other available technical information on the biological resources of the area was also reviewed including previous surveys and recent findings.

Field Study

Jericho biologists Shannon Dye and Eugene Jennings conducted a biological resources assessment of the project area on July 19, 2016 with a follow up verification by Shay Lawrey and Daniel Smith on July 29, 2016. The survey area encompassed both the proposed access point and project location. Wildlife species were detected during field surveys by sight, calls, tracks, scat, or other sign. In addition to species actually

observed, expected wildlife usage of the site was determined according to known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. The main focus of the faunal species surveys was to identify potential habitat for special status wildlife within the project area.

RESULTS – LITERATURE REVIEW

According to the CNDDDB, CNPSEI, and other relevant literature and databases, 35 sensitive species (7 plant species and 28 animal species) have been documented in the *Victorville* and *Hesperia* USGS 7.5-minute series quadrangle. This list of sensitive species and habitats includes any State and/or federally listed threatened or endangered species, CDFW designated SSC, and otherwise Special Animals. “Special Animals” is a general term that refers to all of the taxa the CNDDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of “species at risk” or “special status species.” The CDFW considers the taxa on this list to be those of greatest conservation need.

An analysis of the likelihood for occurrence of federally listed species documented within the regional vicinity is provided in Table 1 and for occurrence of all CNDDDB sensitive species documented in the *Victorville* and *Hesperia* quads is provided in Table 2. This analysis takes into account species range as well as documentation within the vicinity of the project area and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions. According to the databases, no sensitive habitat, including USFWS designated critical habitat, occurs within or adjacent to the project site.

Special Status Species Background

Desert Tortoise

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

In 1992 the US Bureau of Land Management issued the *California Statewide Desert Tortoise Management Policy* which included categorizing habitat into three levels of classification. The management goal for Category I areas is to maintain stable, viable populations and to increase the population where possible. The management goal for Category II areas is to maintain stable, viable populations. The management goal for Category III areas is to limit population declines to the extent feasible. In April 1993, the BLM amended the CDCA plan to delineate these three categories of desert tortoise habitat on public lands. Although habitat categories apply only to public lands administered by the BLM, regulatory agencies typically determine habitat compensation ratios based on the nearest BLM habitat categories (Desert Tortoise Compensation Team 1991). With the adoption of the West Mojave Plan (U.S. Bureau of Land Management 2005), all lands that are outside Desert Wildlife Management Areas, including the subject parcel, are characterized as Category 3 Habitat, which is the lowest priority management area for viable populations of the desert tortoise.

Western Yellow-billed Cuckoo

The western yellow-billed cuckoo (YBCU) is a federally listed threatened and State listed endangered species. YBCU typically breed in open woodland (especially where undergrowth is thick), parks, and deciduous riparian woodland, moist thickets, orchards, overgrown pastures. In the West, YBCU nest in tall cottonwood (*Populus fremontii*) and willow (*Salix* sp.) riparian woodlands; in tree, shrub, or vine, an average of 1-3 meters above ground (Harrison 1979). The western subspecies (*occidentalis*) requires

patches of at least 10 hectares (25 acres) of dense riparian forest with a canopy cover of at least 50 percent in both the understory and overstory and typically nests in mature willows (Biosystems Analysis 1989).

Southwestern Willow Flycatcher

The southwestern willow flycatcher (SWFL) is a State and federally listed endangered species. This small passerine bird has a grayish-green back and wings, whitish throat, a light gray-olive breast, and pale yellowish belly. The SWFL is a neotropical migrant that breeds in the southwestern United States from mid-April to early-September. In the fall, it migrates south to its wintering grounds in portions of South America, Central America and Mexico. (60 FR 10694). The SWFL breeds in dense riparian habitats along rivers, streams, and other wetlands at elevations ranging from sea level to 8,500 feet (Sogge 1997). Plant species closely associated with the SWFL include willows (*Salix* sp.), boxelder (*Acer negundo*), seepwillow (*Baccharis* sp.), with an overstory of cottonwood (*Populus fremontii*) (62 FR 39129). Occupied habitat is generally dominated by shrubs and trees 13 to 23 feet or more in height, which provide dense lower and mid-story vegetation approximately 10 to 13 feet aboveground. This dense vegetation is often interspersed with open water, small openings, or sparse vegetation, creating a mosaic that is not uniformly dense (62 FR 39129). The SWFL was listed as federally endangered on February 27, 1995, under the ESA (60 FR 10694) and the USFWS has designated critical habitat for the species.

Least Bell's Vireo

The least Bell's vireo (LBVI) is a State and federally-listed endangered bird species. This species is a small, olive-gray migratory songbird that nests and forages almost exclusively in riparian woodland habitats. LBVI nesting habitat typically consists of well-developed overstory, understory, and low densities of aquatic and herbaceous cover. The understory frequently contains dense sub-shrub or shrub thickets. These thickets are often dominated by plants such as narrow-leaf willow, mulefat, young individuals of other willow species such as arroyo willow or black willow, and one or more herbaceous species. LBVI generally begin to arrive from their wintering range in southern Baja California and establish breeding territories by mid-March to late-March. The LBVI was listed as federally endangered on May 2, 1986, under the ESA (51 FR 16483) and the USFWS has designated critical habitat for the species.

Mohave Ground Squirrel

The Mohave ground squirrel (MGS) is a State listed threatened species. MGS is small, grayish, diurnal squirrel measuring about 9 inches from nose to tip of tail. It typically inhabits sandy soils of alkali sink and creosote bush scrub habitat. They forage on leaves and seeds, and aestivate/hibernate for long periods of the year. Plants documented as forage for MGS include: fiddleneck (*Amsinckia tessellata*), atriplex (*A. canescens*, *A. polycarpa*, and *A. hymenelytra*), coreopsis (*Coreopsis* sp.), spiny hopsage (*Grayia spinosa*), winterfat (*Krascheninnikovia lanata*), wolfberry (*Lycium andersonii*), Joshua tree (*Yucca brevifolia*) and the seeds of Joshua tree. It is suspected that MGS forage on the plant species with the highest water content available at the time. MGS is endemic to 2 million hectares in the western Mojave Desert. In much of this region, the geographic range of the species is considered to lie west of the Mojave River. However, in the Victorville and Barstow areas, there are records of MGS occurrence on the east side of the Mojave River. MGS are listed as threatened by CDFW due to habitat loss, fragmentation, and deterioration (Brooks and Matchett 2002). CDFW does not designate critical habitat for this species.

Burrowing Owl

The BUOW is a ground dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW is heavily dependent upon the presence of mammal burrows, with ground squirrel burrows being a common choice, in its habitat to provide shelter from predators, inclement weather and to provide a nesting place (Coulombe 1971). They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows. BUOW spend a

great deal of time standing on dirt mounds at the entrance to a burrow, or perched on a fence post or other low to the ground perch from which they hunt for prey. They feed primarily on insects such as grasshoppers, June beetles and moths, but will also take small rodents, birds, and reptiles. They are active during the day and night, but are considered a crepuscular owl; generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31.

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

Designated Critical Habitat

The site is not located within or adjacent to any USFWS designated critical habitat nor is it within a Desert Wildlife Management Area as recommended in the Desert Tortoise (Mojave Population) Recovery Plan (U.S. Fish and Wildlife Service 1994b) and formally adopted in March 2006 as a result of the West Mojave Plan (U.S. Bureau of Land Management 2005). The proposed project will not impact any critical habitat or otherwise sensitive habitats and no further action is required.

RESULTS – FIELD STUDY

Habitat

The habitat on site consists primarily of a mix of big sagebrush (Holland code 35210) and desert saltbush scrub (Holland code 36110) and desert wash habitats. Much of the vegetative cover onsite consists of big sagebrush (*Artemisia tridentata*) and fourwing saltbush (*Atriplex canescens*), with several Joshua tree (*Yucca brevifolia*) scattered mostly throughout the northern portion of the project site. There is also a small patch of riparian vegetation (approx. 5 acres) consisting mostly of Fremont cottonwood (*Populus fremontii*) with some willow (*Salix* sp.), adjacent the eastern boundary of the project site and extending into a small area within the southeastern corner of the site. The vegetation within this area most closely resembles Fremont cottonwood series riparian forest (Holland code 61000) and is associated with an unnamed drainage that flows through the southern end of the project site.

The project site is located within the developed area of the City of Victorville and adjacent to the unincorporated neighborhood community of Spring Valley Lake. The site and surrounding area has been subject to historic human disturbances and showed signs of recent disturbances such as OHV trails, dirt road, and trash. It is surrounded by a mixture of residential development, a park, railway and disturbed undeveloped land.

Wildlife

Four birds and two mammals were observed onsite during the survey. Species observed or otherwise detected on or in the vicinity of the project site during the surveys included; Cooper's hawk (*Accipiter cooperii*), Anna's hummingbird (*Calypte anna*), common raven (*Corvus corax*), mourning dove (*Zenaidura macroura*), black-tailed jack rabbit (*Lepus californicus*) and desert cottontail (*Sylvilagus auduboni*).

Special Status Species

No State and/or federally listed threatened or endangered species, or other sensitive species (with the exception of Cooper's hawk) were observed on site during the reconnaissance-level field survey. There is

some habitat within the proposed project footprint, as well as the project vicinity, that is marginally-suitable for several sensitive species identified in the CNDDDB search (Table 2).

Desert Tortoise

Although the habitat onsite consists primarily of desert scrub communities and desert wash, the project site is no longer considered suitable to support desert tortoise due to the high level of disturbance within the site and surrounding area, as well as the presence of impermeable barriers that completely isolate the project site from any contiguous habitat that exists within the region. The project area is surrounded by existing development. The project site is bordered on the west by BNSF railway, on the south by residential development, on the north by a man-made lake, and on the east by previous agricultural fields. According to the CNDDDB, the nearest documented desert tortoise occurrence (2008) is approximately 3.2 miles north of the project site and east of the Mojave River, within an area of suitable habitat that is not restricted by development. There are no documented desert tortoise occurrences within the project site or surrounding area and this species is not expected to occur within the project area. Therefore, no potential direct or indirect impacts to desert tortoise can be identified, and presence/absence surveys for this species are not warranted or recommended.

Western Yellow-billed Cuckoo (YBCU)

There is not sufficient riparian forest or similar habitat within or adjacent the project site to support YBCU. The small patch of riparian vegetation within and adjacent the southeast corner of the site covers an area of approximately 5 acres and this species requires large patches of at least 25 acres of riparian forest. Additionally, YBCU typically nest in mature willows within dense riparian forests with a canopy cover of at least 50 percent in both the understory and overstory. The riparian vegetation onsite consists mostly of cottonwood with a poorly-developed understory and few willows. According to the CNDDDB the only documented YBCU occurrence (1978) within the vicinity of the project site was near the Mojave Narrows Regional Park, on the north side of the Mojave River, which is located within 1 mile north of the project site. Recent surveys conducted in 2012 within the vicinity of this historical occurrence did not detect YBCU and this species is considered possibly extirpated from the area. This species is not likely to occur within or adjacent the project site. Therefore, no potential direct or indirect impacts to YBCU can be identified, and focused surveys for this species are not warranted or recommended.

Southwestern Willow Flycatcher (SWFL)

The riparian vegetation onsite and adjacent consists mostly of cottonwood and covers a relatively small area. Within 0.5 – 1 mile northwest of the project site exists roughly 190 hectares (470 acres) of relatively undisturbed and contiguous riparian forest/riparian scrub habitat, within the Mojave River floodplain. Given that such extensive area of suitable habitat is available within 1 mile of the project site, it is unlikely SWFL would utilize the small patch of marginally-suitable habitat within and adjacent the project site. According to the CNDDDB, the only documented SWFL occurrence (1990) within the vicinity of the project site was within dense riparian habitat located in the Upper Narrows section of the north side of the Mojave River, approximately 1.5 miles north of the project site. This species is not likely to occur within or adjacent the project site. Therefore, no potential direct or indirect impacts to SWFL can be identified, and focused surveys for this species are not warranted or recommended.

Least Bell's Vireo (LBVI)

As was stated for SWFL (above), given that such extensive area (approx. 470 acres) of suitable habitat is available within 0.5 – 1 mile of the project site, it is unlikely LBVI would utilize the small patch of marginally-suitable habitat within and adjacent the project site. According to the CNDDDB, there are numerous documented LBVI occurrences throughout the Mojave River including several within 1 mile of the project site. These occurrences (2005) are all documented within dense riparian habitat located in the Mojave River floodplain northeast of the project site. This species is not likely to occur within or adjacent

the project site. Therefore, no potential direct or indirect impacts to LBVI can be identified, and focused surveys for this species are not warranted or recommended.

Mohave Ground Squirrel

Although a focused MGS trapping survey was not performed, Jericho conducted a MGS habitat assessment of the proposed project site. The habitat assessment for MGS included a pedestrian field assessment, review of reported occurrences of the MGS in the region (CNDDDB 2016), and adherence to CDFW's criteria for assessing potential impacts to the Mohave ground squirrel. The criteria questions are as follows:

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

The subject parcel falls within the historic range of the MGS but is located outside, to the south, of the MGS Conservation Area set forth in the West Mojave Plan (U.S. Bureau of Land Management 2005). The site does contain native desert scrub habitat, but the diversity of forage plants for MGS is lacking. Furthermore, the project site is completely surrounded by development and isolated from potentially occupied habitat to the north and west. According to the CNDDDB, MGS were historically documented (1919) within 3 miles north of the project site. However, this location is now completely developed and MGS are most likely extirpated from the vicinity. The most recent record of MGS within the region is from 2011, where one individual was found just east of the Town of Adelanto, west of Highway 395, approximately 10 miles northwest of the project site (Leitner 2015). Numerous protocol MGS trapping grids were sampled in the general vicinity of the project area between 2008 and 2012. MGS were not detected and were considered absent during those protocol trapping sessions (Leitner 2015). The site is no longer considered suitable to support MGS and this species is not expected to occur within the project area. Therefore, no potential direct or indirect impacts to MGS can be identified, and presence/absence surveys for this species are not warranted or recommended.

Burrowing owl

The conditions present onsite are marginally-suitable for BUOW. The assessment survey was structured, in part, to detect BUOW, which have been observed in the vicinity of the project site (within 3 miles). The survey consisted of walking transects spaced to provide 100% visual coverage of the project site. The result of the survey was that no evidence of BUOW was found in the survey area. No burrows of appropriate size, aspect or shape were located and no BUOW pellets, feathers or white wash was found. No burrowing owl individuals were observed. According to the CNDDDB, there are 24 documented occurrences of BUOW within the *Victorville* and *Hesperia* quads. The nearest documented BUOW occurrence (2006) is approximately 2.75 miles west of the project site. Since the conditions present onsite are marginally-suitable for BUOW and this species has been documented within the vicinity, a preconstruction BUOW survey is recommended to avoid any potential project-related impacts to this species.

Nesting Birds

The project site and immediate surrounding areas do contain habitat suitable for nesting birds. Nesting bird surveys should be conducted prior to any construction activities taking place during the nesting season to avoid potentially taking any birds or active nests. In general, impacts to all bird species (common and special status) can be avoided by conducting work outside of the nesting season (generally February 1st to August 31st), and conducting a worker awareness training. However, if all work cannot be conducted outside of nesting season, a project-specific Nesting Bird Management Plan can be prepared to determine suitable buffers.

Jurisdictional Waters

There are potentially jurisdictional waters within the project site. A large (roughly 50 – 200 feet in width) desert wash flows through the southern portion of the project site. The small patch of riparian habitat located within and adjacent to the southeastern corner of the project site is associated with this ephemeral stream. It is fed by off-site flows originating southwest of the project site and appears to be tributary to the Mojave River, which is located north and west of the project site, within 0.5 – 1 mile of the site. The Mojave River is a jurisdictional water subject to the Clean Water Act (CWA) and Fish and Game Code and is therefore under the jurisdictions of U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW. Any project-related impacts to the ephemeral stream that exists onsite will likely require a Streambed Alteration Agreement from the CDFW, and CWA Sections 401/404 permits from the RWQCB and Corps respectively.

CONCLUSIONS AND RECOMMENDATIONS

Based on the literature review and personal observations made in the immediate vicinity, no State and/or federally listed threatened or endangered species are documented/or expected to occur within the survey area (project site). No other sensitive species were observed within the project area.

BUOW have been documented in the vicinity. However, no BUOW individuals or sign were observed onsite during the survey. The project site does contain some habitat that would be considered suitable for BUOW. Therefore, a preconstruction BUOW survey is recommended prior to the commencement of any project-related work activities to avoid any potential project-related impacts to this species. Additionally, since there is some habitat within the project site and adjacent area that is suitable for nesting birds in general, a preconstruction nesting bird survey is recommended prior to the commencement of any project-related work activities to avoid any potential project-related impacts to nesting birds.

Several Joshua tree (see attached photos) were observed within the northern portion of the project site. Joshua tree and cacti are protected under specific sections of the Codes of Regulations for the Cities of Hesperia, Apple Valley, and Adelanto and County of San Bernardino. A Protected Plant Plan is typically required by these municipalities before the project can be initiated.

There is a potentially jurisdictional ephemeral stream that flows through the southern portion of the project site. As previously stated, any project related impacts to the ephemeral stream that exists onsite will likely require a Streambed Alteration Agreement from the CDFW, and CWA Sections 401/404 permits from the RWQCB and Corps respectively. Therefore, we recommend that a routine Jurisdictional Delineation be conducted for the proposed project site to determine what potential impacts to jurisdictional waters may occur as result of the proposed project.

Please do not hesitate to contact me at 909-915-5900 should you have any questions or require further information.

Sincerely,

A handwritten signature in black ink, appearing to read "Shay Lawrey", is centered on a light gray rectangular background.

Shay Lawrey, President
Ecologist/Regulatory Specialist

Attachments:

- Attachment A – Tables
- Attachment B – Figures
- Attachment C – Site Photos

REFERENCES

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**Table 1. Federally Listed Species
 Documented within the Regional Vicinity**

Common Name	Scientific Name	Status	Documented Locally	Found in Project Area	Suitable Habitat	Determination of Project Affects
<u>Fish</u>						
Mohave tui chub	<i>Siphateles bicolor mohavensis</i>	FE/SE	Yes (extirpated)	No	No	No Affect
<u>Reptiles</u>						
Desert tortoise	<i>Gopherus agassizii</i>	FT/ST	Yes	No	No	No Affect
<u>Amphibians</u>						
California red-legged frog	<i>Rana draytonii</i>	FT	Yes (possibly extirpated)	No	No	No Affect
Arroyo toad	<i>Anaxyrus californicus</i>	FE	Yes	No	No	No Affect
<u>Birds</u>						
Western Yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	FT/SE	Yes (possibly extirpated)	No	No	No Affect
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE/SE	Yes	No	No	No Affect
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE/SE	Yes	No	No	No Affect

Table 2. CNDDDB Sensitive Species Documented within the Victorville and Hesperia – USGS 7.5 Quadrangles.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
<i>Accipiter cooperii</i>	Cooper's hawk	None/None	G5, S4	Occurs in woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains. May also choose live oaks.	Species observed onsite. Species is present .
<i>Agelaius tricolor</i>	tricolored blackbird	None/None	G2G3, S1S2, SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.	Suitable habitat for this species does not occur onsite, though suitable habitat occurs in the vicinity. The nearest known occurrence is 4.7 miles away. Potential to occur is low .
<i>Anaxyrus californicus</i>	arroyo toad	Endangered/ None	G2G3, S2S3, SSC	Occurs in semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Prefers rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Aquila chrysaetos</i>	golden eagle	None/None	G5, S3, FP	Occurs in rolling foothills, mountain areas, sage-juniper flats, & desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Asio otus</i>	long-eared owl	None/None	G5, S3?, SSC	Occurs in riparian bottomlands grown to tall willows & cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	Suitable habitat for this species does occur along the eastern boundary of the site, as well as adjacent the site. Potential to occur is moderate .

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
<i>Athene cunicularia</i>	burrowing owl	None None	G4, S3, SSC	Occurs in open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Some suitable habitat for this species does not occur onsite. However, this species was not detected during the site assessment. Potential to occur is moderate .
<i>Buteo swainsoni</i>	Swainson's hawk	None/ Threatened	G5, S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Canbya candida</i>	white pygmy-poppy	None/None	G3G4, S3S4, CNPS 4.2	Occurs in Joshua tree woodland, mojavean desert scrub, pinyon and juniper woodland. Prefers sandy places. 600-1460 m.	Suitable habitat for this species does occur onsite. However, the most recent documented occurrence for this species in the area was in 1903. Potential to occur is low .
<i>Chaetodipus fallax pallidus</i>	pallid San Diego pocket mouse	None/None	G5T34, S3S4, SSC	Occurs in desert border areas in eastern San Diego co. In desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc. Prefers sandy herbaceous areas, usually in association with rocks or coarse gravel.	Suitable habitat for this species does occur onsite. However, the site is outside of the current known range of this species. Potential to occur is low .
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	Threatened/ Endangered	G5T2T3, S1	Occurs in riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Prefers nests in riparian jungles of willow, often mixed with cottonwoods, w/ lower story of blackberry, nettles, or wild grape. Riparian forest.	Suitable habitat for this species does not occur onsite. This species was documented within one mile of the project site in 1978, but is now considered possibly extirpated. Potential to occur is low .

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None/ Candidate Threatened	G3G4, S2, SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites. Prefers roosts in the open, hanging from walls & ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Suitable habitat for this species does occur onsite. However, there is a high level of human activity in the area, due to the adjacent residential development. Potential to occur is low .
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	Endangered/ Endangered	G5T2, S1	Occurs in riparian woodlands in southern California. Prefers riparian woodland.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Emys marmorata</i>	western pond turtle	None/None	G3G4, S3, SSC	Occurs in thoroughly aquatic ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, below 6000 ft. elevation. Prefers need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Eremothera boothii</i> ssp. <i>boothii</i>	Booth's evening-primrose	None/None	G5T4, S2, CNPS 2B.3	Occurs in Joshua tree woodland, pinyon and juniper woodland. Prefers 290-2410 m.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Gopherus agassizii</i>	desert tortoise	Threatened/ Threatened	G3, S2S3	Occurs most commonly in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Requires friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	Suitable habitat for this species does not occur onsite. The site is completely surrounded by development and this species is most likely extirpated from the area. Potential to occur is low .
<i>Helminthoglypta mohaveana</i>	Victorville shoulderband	None/None	G1, S1	Occurs in known only from along the Mojave river in San Bernardino County. Found among granite boulders and at the base of rocky cliffs. Aquatic; great basin flowing waters.	Suitable habitat for this species does not occur onsite. Potential to occur is low .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
<i>Icteria virens</i>	yellow-breasted chat	None/None	G5, S3, SSC	Occurs in summer resident; inhabits riparian thickets of willow & other brushy tangles near watercourses. Prefers nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft. of ground.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Lanius ludovicianus</i>	loggerhead shrike	None/None	G4, S4, SSC	Occurs in broken woodlands, savannah, pinyon-juniper, Joshua tree, & riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Suitable habitat for this species does occur onsite. Potential to occur is moderate – high .
<i>Lasiurus cinereus</i>	hoary bat	None/None	G5, S4	Occurs in open habitats or habitat mosaics, with access to trees for cover & open areas or habitat edges for feeding. Prefers roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Suitable habitat for this species does occur onsite and adjacent. Potential to occur is moderate .
<i>Microtus californicus mohavensis</i>	Mohave river vole	None/None	G5T1, S1, SSC	Occurs only in weedy herbaceous growth in wet areas along the Mojave River. May be found in some irrigated pastures. Prefers burrows into soft soil. Feeds on leafy parts of grasses, sedges and herbs. Clips grasses to form runways from burrow.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Mimulus mohavensis</i>	Mojave monkeyflower	None/None	G2, S2, CNPS 1B.2	Occurs in Joshua tree woodland, Mojavean desert scrub. Prefers dry sandy or rocky washes along the Mojave River. Elevation 600-1200 m.	Suitable habitat for this species does occur onsite. Potential to occur is moderate .
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	short-joint beavertail	None/None	G5T3, S3, CNPS 1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon-juniper woodland. Sandy soil or coarse, granitic loam. 425-1800 m.	Suitable habitat for this species does occur onsite. Potential to occur is moderate .
<i>Pediomelum castoreum</i>	Beaver Dam breadroot	None/None	G3, S2, CNPS 1B.2	Occurs in Joshua tree woodland, Mojavean desert scrub. Prefers sandy soils; washes and roadcuts. 610-1065 m.	Suitable habitat for this species does occur onsite. Potential to occur is moderate .

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
<i>Phrynosoma blainvillii</i>	coast horned lizard	None/None	G3G4, S3S4, SSC	Occurs in frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Prefers open areas for sunning, bushes for cover, patches of loose soil for burial, & abundant supply of ants & other insects.	Suitable habitat for this species does occur onsite. However, the site is located near the edge of this species current known range. Potential to occur is moderate .
<i>Piranga rubra</i>	summer tanager	None/None	G5, S1, SSC	Occurs in summer resident of desert riparian along lower Colorado river, & locally elsewhere in California deserts. Prefers requires cottonwood-willow riparian for nesting and foraging; prefers older, dense stands along streams.	Suitable habitat for this species does occur onsite and adjacent. Potential to occur is moderate .
<i>Plebulina emigdionis</i>	San Emigdio blue butterfly	None/None	G1G2, S1S2	Occurs in found in desert canyons & along riverbeds in Inyo, kern, Los Angeles & San Bernardino counties. Prefers host plant is <i>Atriplex canescens</i> ; maybe <i>Lotus purshianus</i> also.	Suitable habitat for this species does occur onsite. Potential to occur is moderate –high .
<i>Rana draytonii</i>	California red-legged frog	Threatened/None	G2G3, S2S3, SSC	Occurs in lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Scutellaria bolanderi ssp. austromontana</i>	southern mountains skullcap	None/None	G4T3, S3, CNPS 1B.2	Occurs in chaparral, cismontane woodland, lower montane coniferous forest. Prefers gravelly soils on streambanks or in mesic sites in oak or pine woodland. 425-2000 m.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Setophaga petechia</i>	yellow warbler	None/None	G5, S3S4, SSC	Occurs in riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in cascades and sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Suitable habitat for this species does occur onsite and adjacent. Potential to occur is moderate – high .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
<i>Siphateles bicolor mohavensis</i>	Mohave tui chub	Endangered/ Endangered	G4T1, S1, FP	Occurs in endemic to the Mojave river basin, adapted to alkaline, mineralized waters. Needs deep pools, ponds, or slough-like areas. Needs vegetation for spawning.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Symphytotrichum defoliatum</i>	San Bernardino aster	None/None	G2, S2, CNPS 1B.2	Occurs in meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Prefers vernal mesic grassland or near ditches, streams and springs; disturbed areas. 2-2040 m.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Toxostoma lecontei</i>	Le Conte's thrasher	None/None	G4, S3, SSC	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Suitable habitat for this species does occur onsite. Potential to occur is moderate .
<i>Vireo bellii pusillus</i>	least Bell's vireo	Endangered/ Endangered	G5T2, S2	Occurs in summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Prefers nests placed along margins of bushes or on twigs projecting into pathways, usually willow, <i>baccharis</i> , and mesquite.	Suitable habitat for this species does not occur onsite. Potential to occur is low .
<i>Vireo vicinior</i>	gray vireo	None/None	G4, S2, SSC	Occurs in dry chaparral; west of desert, in chamise-dominated habitat; mountains of Mojave desert, associated with juniper & <i>Artemisia</i> . Prefers to forage, nest, and sing in areas formed by a continuous growth of twigs, 1-5 ft. above ground.	Suitable habitat for this species does not occur onsite. Potential to occur is low .

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
<i>Xerospermophilus mohavensis</i>	Mohave ground squirrel	None/ Threatened	G2G3, S2S3	Occurs in open desert scrub, alkali scrub & Joshua tree woodland. Also feeds in annual grasslands. Restricted to Mojave desert. Prefers sandy to gravelly soils, avoids rocky areas. Uses burrows at base of shrubs for cover. Nests are in burrows.	Suitable habitat for this species does not occur onsite. The site is completely surrounded by development and this species is most likely extirpated from the area. Potential to occur is low .

Coding and Terms

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

Federal Species of Concern: "taxa for which the U.S. Fish and Wildlife Service has information that indicates proposing to list the taxa as endangered or threatened is possibly appropriate, but for which substantial data on the biological vulnerability and threats are not currently known or on file to support the immediate preparation of rules." (Arnold). All of these species have a limited range. In fact, some species are limited to the San Bernardino Mountains area, however, they are locally common.

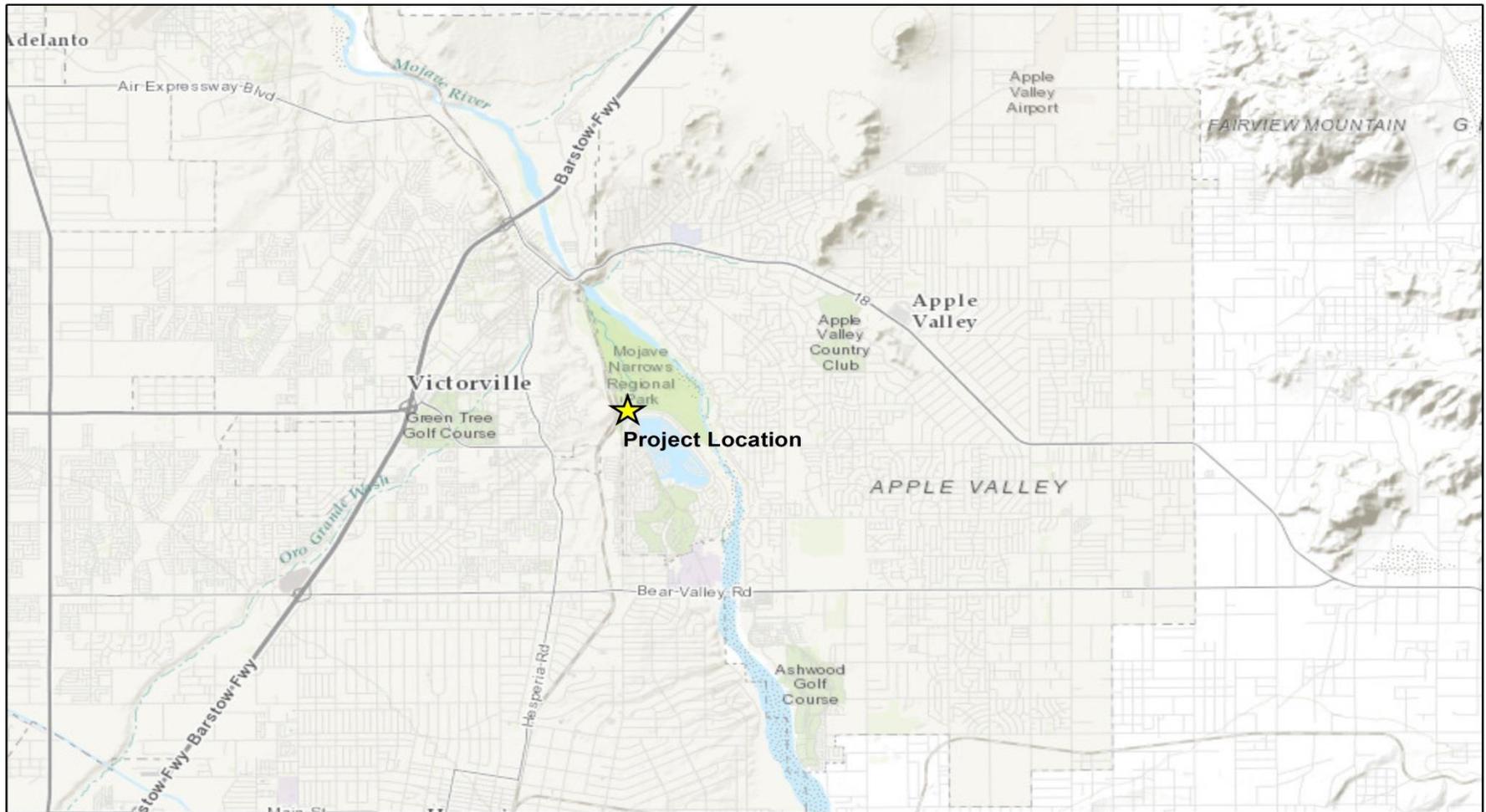
State Species of Special Concern: An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code: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

State Fully Protected: The classification of Fully Protected was the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians and reptiles. Please note that most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

State Plant Rankings:

- S1 - less than 6 element occurrences, or less than 1,000 individuals, or less than 2,000 acres
- S2 - 6 to 20 element occurrences, or between 1,000 and 3,000 individuals, or between 2,000 and 10,000 acres
- S3 - 21 to 100 element occurrences, or between 3,000 and 10,000 individuals, or between 10,000 and 50,000 acres
- S4 - No Threat Rank
- S5 - No Threat Rank
- SH - all sites in California are historical
- .1 - very threatened
- .2 - threatened
- .3 - no current threats known

Figure 1– Regional Overview



Regional Overview

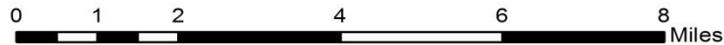
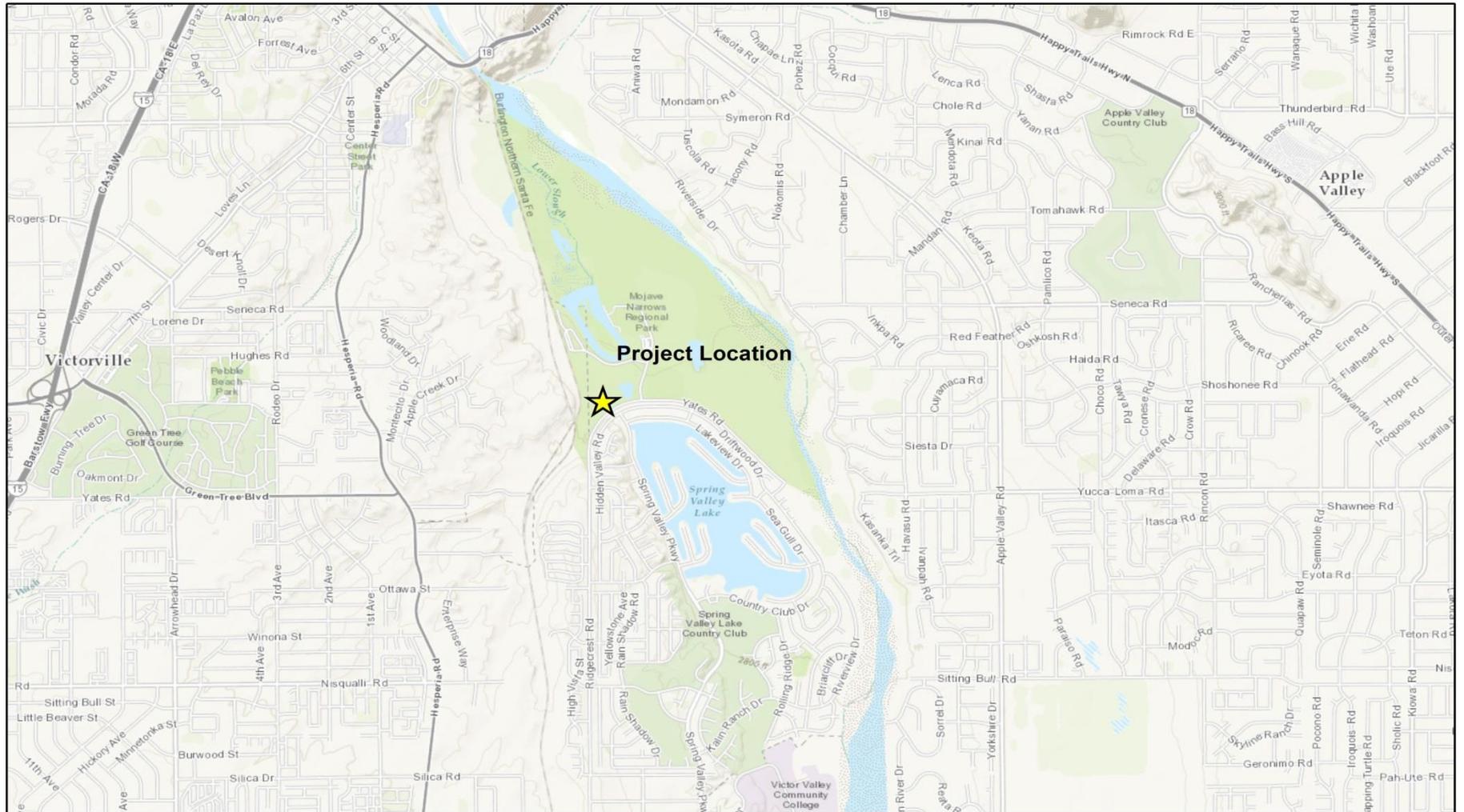


Figure 2 – Site Overview



Site Vicinity

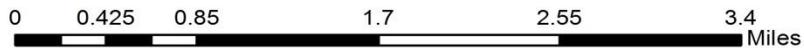


Figure 3 – Site Location



Site Location

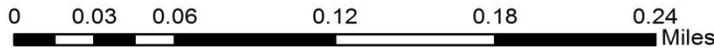
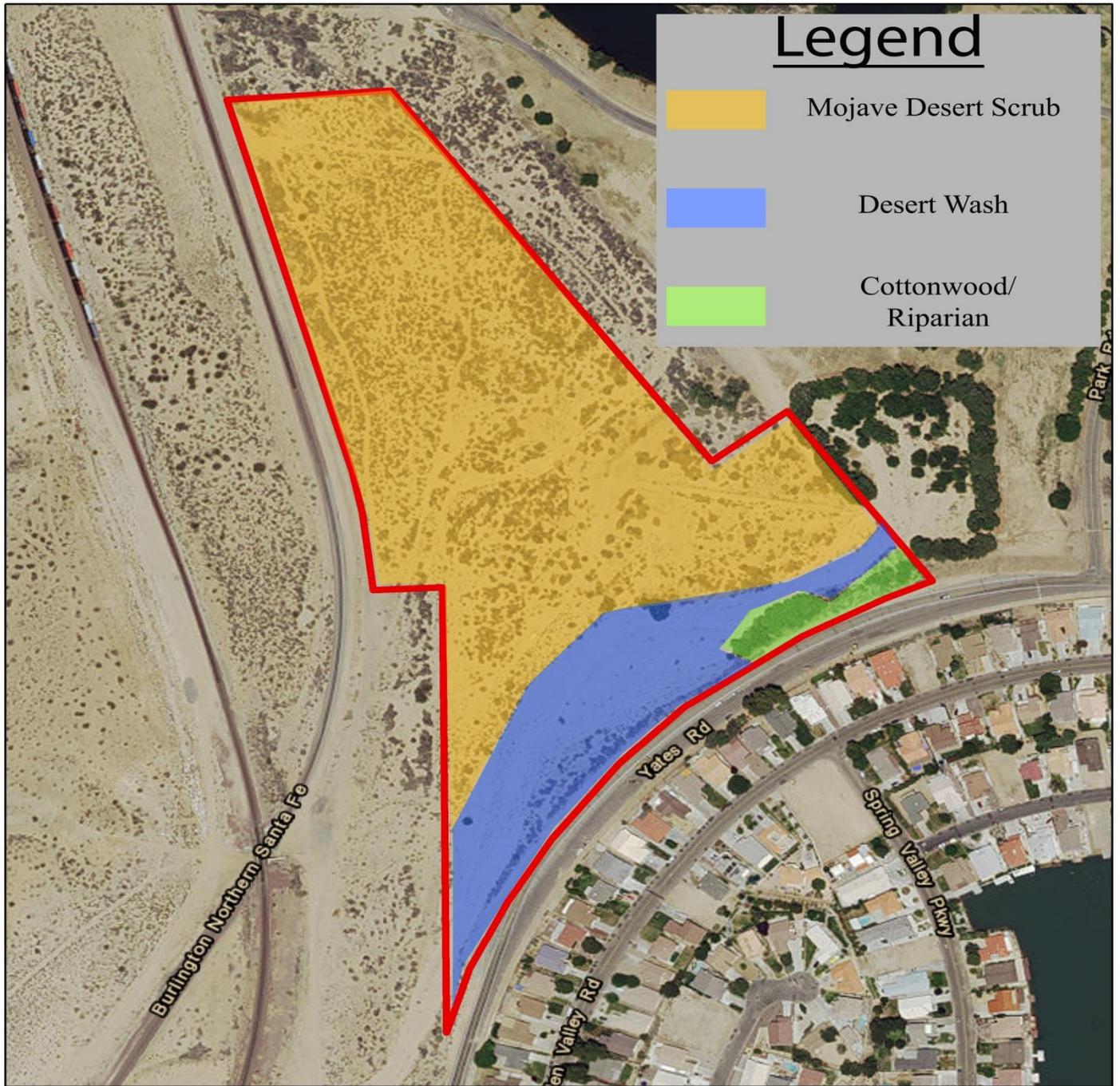


Figure 4 – Site Vegetation



Habitat Types

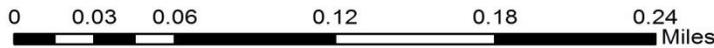
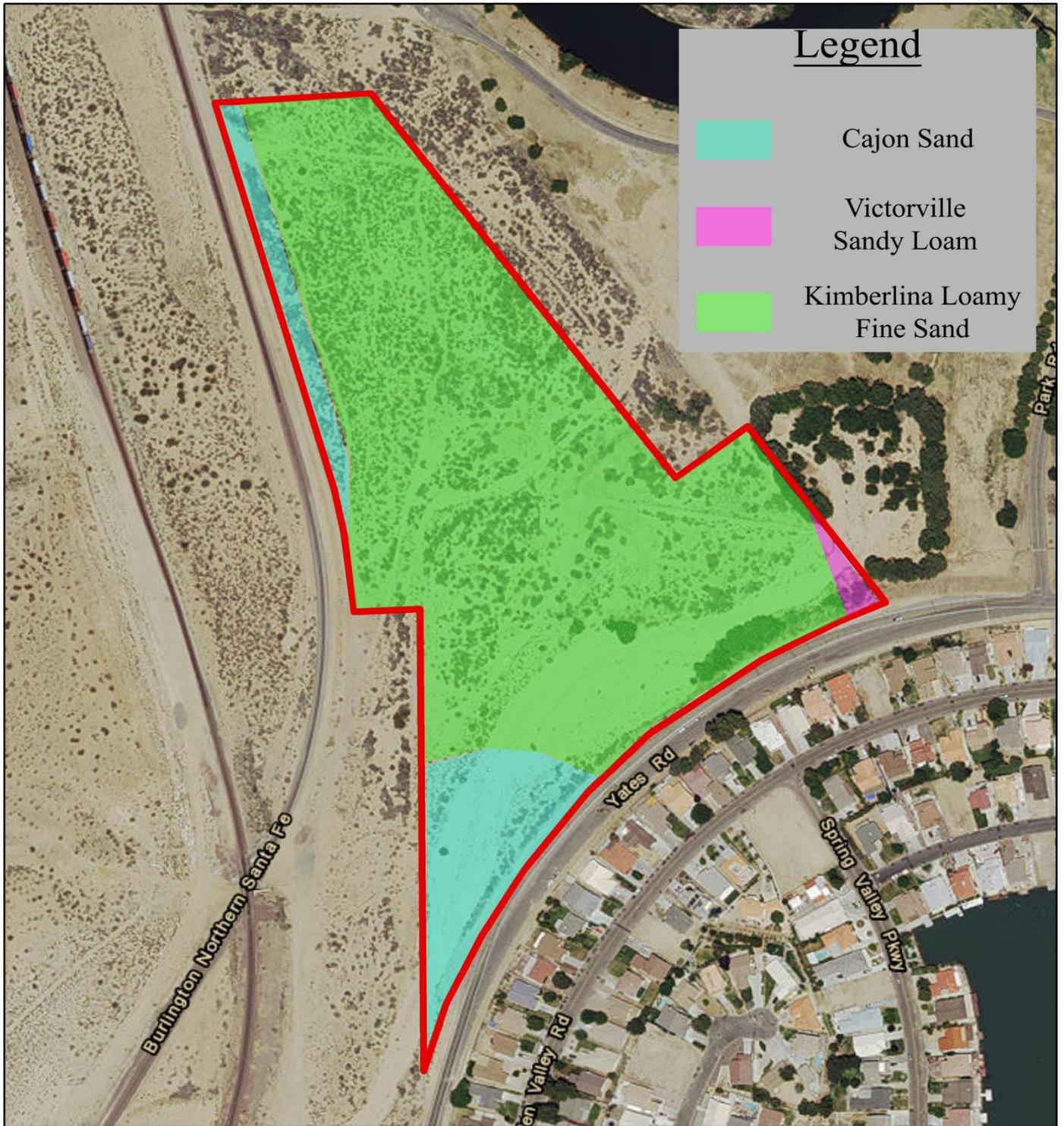


Figure 5 – Site Soils



Soil Types

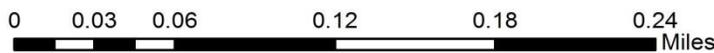




Photo 1. Southern boundary of project site, facing northeast across unnamed wash.



Photo 2. Representative desert scrub habitat with Joshua trees present onsite.



Photo 3. Representative Fremont cottonwood riparian forest habitat within and adjacent southeastern corner of the project site.



Photo 4. Unnamed wash, facing east from the north side of the wash, near the southern boundary of the project site.