APPENDIX 2

Biological Resources Assessment, Jurisdictional Delineation And Land Use Consistency Analysis For the Mission Springs Water District's Vista Reservoir Expansion

Desert Hot Springs Area of Riverside County, California
USGS –*Seven Palms Valley* Quadrangle
Township 3 S, Range 4 E; and Township 3 S, Range 5 E

Date Prepared: January 2021

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Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

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Lisa Patterson, National Senior Environmental Project Manager

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Executive Summary

Jacobs Engineering Group, Inc. (Jacobs) was retained by Tom Dodson and Associates (TDA) to conduct a Biological Resource Assessment (BRA) for the Mission Springs Water District (District) proposed second reservoir at the exiting Vista Reservoir site (Project). The project is located at the northern terminus of Valencia Drive in the City of Desert Hot Springs. The project is mapped within the USGS 7.5-minute map for Seven Palms Valley in Section 19, Township 2 South and Range 5 East. The approximate GPS coordinates of the project site are 33.983003°, -116.493301°. Refer to Figures 1 and 2 for the regional and site location maps.

The District is a participant of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), and consequently the entire proposed Project site lies within the CVMSHCP Area. However, the Project area is not located within or immediately adjacent to a Conservation Area.

The Project site contains an existing reservoir, and is bounded by residential to the south and undeveloped lands to the east, north, and west. The location for the additional reservoir tank is characterized by disturbed largely unvegetated and compacted areas with some disturbed creosote bush scrub at the margins. There are several sensitive species documented within the Project vicinity, including the State and federally-listed as threatened desert tortoise (*Gopherus agassizii*) and burrowing owl (*Athene cunicularia*), which is a State and federal Species of Special Concern (SSC).

The CVMSHCP requires a habitat assessment for burrowing owl (BUOW). If habitat for the BUOW is present within the Project area, a focused survey is required. Suitable BUOW habitat was identified on site during the habitat assessment survey. Additionally, there is some moderately-suitable habitat for desert tortoise within and adjacent portions of the Project site. Therefore, focused protocol-level surveys for these species were conducted within the Project site and surrounding areas, wherever suitable habitat was present. However, the result of the focused desert tortoise and BUOW surveys was that no desert tortoise or BUOW individuals or sign were detected within the survey area. Therefore, these species are considered absent from the Project site at the time of survey.

No other listed or otherwise sensitive species or sensitive habitat was observed within the Project area and none are expected to occur on site.

No intermittent or ephemeral dry washes that would meet the definitions of State and federal jurisdictional waters as defined by Section 1600 of the State of California Fish and Game Code (FGC) or "Waters of the United States" (WoUS) as defined by Section 404 of the Clean Water Act (CWA) occur on the reservoir site. Therefore, no regulatory permits from these agencies may be required for this Project.

1 Introduction

Mission Springs Water District (MSWD or District) provides water and sewer services to the communities of Desert Hot Springs, West Garnet, North Palm Springs, and various portions of unincorporated Riverside County. MSWD, as the Lead Agency pursuant to California Environmental Quality Act (CEQA), is proposing to develop a second reservoir at the exiting Vista Reservoir site.

Jacobs has prepared this BRA and protocol-level focused desert tortoise and non-breeding season BUOW surveys report for the District's proposed Project. The BRA fieldwork and focused sensitive species surveys were conducted by Senior Project Ecologist Lisa Patterson on November 2, 2020. The purpose of the BRA is to address potential effects of the 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 of Fish and Game]) and/or the California Native Plant Society (CNPS).

The Project area was assessed for sensitive species known to occur locally. Attention was focused on those State- and/or federally-listed as threatened or endangered species and California Fully Protected species that have been documented in the Project vicinity, whose habitat requirements are present within or adjacent the Project site. Results of the biological resources assessment survey and focused surveys are intended to provide sufficient baseline information to the Project proponent and, if required, to federal and State regulatory agencies, including the U.S. Fish and Wildlife Service (USFWS) and CDFW, respectively, to determine if impacts will occur to sensitive biological resources and to identify mitigation measures to offset those impacts. Project site falls entirely within the CVMSHCP area, however, it is not within or adjacent to a Conservation Area.

In addition to the BRA and focused surveys conducted, Jacobs conducted a Jurisdictional Determination (JD) of the Project area. The purpose of this evaluation was to assess the potential presence and extent of State and/or federal jurisdictional waters within the Project area, potentially subject to regulation by the USACE under Section 404 of the CWA, Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA and Porter Cologne Water Quality Control Act, and CDFW under Section 1600 of the California FGC, respectively.

1.1 *Project Description*

The existing Vista Reservoir site is approximately 1.23 acres located in the northern portion of the District's service area; more specifically, at the northern terminus of Valencia Drive. The existing reservoir site as well as the surrounding area consists of mild to steep slopes desert scrub habitat. The reservoir site entry is compacted dirt road with unconsolidated asphalt base spread on the road and parking areas.

The proposed Vista Reservoir Project includes constructing a new 300,000-gallon reservoir approximately 30' northwest of the existing reservoir, see Figure 3 Site Plan. Development of the new reservoir at will require the construction of a retaining wall along the east side of the reservoir pad with heights ranging from 2' to 10'. In order to ensure no additional runoff on the adjacent southerly property, a v-ditch will be constructed around the existing tank area. Additionally, other drainage improvements include rip-rap energy dissipaters will be constructed to reduce storm flow velocities.

1.2 *Location*

The project is located at the northern terminus of Valencia Drive in the City of Desert Hot Springs. The project is mapped within the USGS 7.5-minute map for Seven Palms Valley in Section 19, Township 2 South and Range 5 East. The approximate GPS coordinates of the project site are 33.983003°, -116.493301°. Refer to Figures 1 and 2 for the regional and site location maps.

1.3 *Environmental Setting*

The Project site is within the City of Desert Hot Springs and adjacent unincorporated areas of Riverside County. The Desert Hot Springs area is situated in the northwestern end of the Coachella Valley and is bordered on the north and northeast by the Little San Bernardino Mountains, on the east/southeast by the Seven Palms Valley and Edom Hills and on the west by the San Bernardino Mountain foothills. The Desert Hot Springs area is subject to both seasonal and annual variations in temperature and precipitation. Average annual maximum temperatures within this region peak at 108.2 degrees Fahrenheit (° F) in July and fall to an average annual minimum temperature of 42.3° F in December/January. Average annual precipitation is greatest from November through March and reaches a peak in January (1.13 inches). Precipitation is lowest in the months of May and June (0.05 inches). Annual total precipitation averages 5.49 inches.

Hydrologically, the Project area is located within the Mission Creek Hydrologic Sub-Area (HSA 719.42) which comprises a 73,873-acre drainage area within the larger Whitewater River Watershed (HUC 18100201). The Whitewater River is the major hydrogeomorphic feature within the Whitewater Watershed.

The primary soil types within the Project area are Ironlung-Rock outcrop complex 30-75 percent loopes, and Chuckawalla very gravelly sandy clay loam 5-15 percent slopes. These soil types consist of fine to gravelly loam that are comprised of alluvium derived from granitoid parent material as well as granite outcrops. Both soil types are excessively drained soils with very low to negligible runoff classes.

The general Project vicinity consists of residential development and disturbed undeveloped land, and existing paved and unpaved roads.

1.4 *Biological Resources Assessment*

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 area were reviewed for documented occurrences of sensitive species in the Project vicinity (approximately 3 miles). The USFWS threatened and endangered species occurrence data overlay, the USFWS Information for Planning and Consultation (IPaC) online tool and the most recent versions of the California Natural Diversity Database (CNDDB) and California Native Plant Society Electronic Inventory (CNPSEI) databases were searched for sensitive species data on the S*even Palms Valley* USGS 7.5-Minute Series Quadrangle. 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 Project site (approximately 3 miles). Other available technical information on the biological resources of the area was also reviewed including previous surveys and recent findings.

Biological Resources Assessment

Lisa Patterson conducted a biological resources assessment of the Project area on November 2, 2020. The survey area encompassed the entire planned disturbance area and included 100 percent coverage of the site, as well as an approximately 200-meter and 400-meter buffer transects surrounding the site where feasible

and appropriate. Wildlife species were detected during field surveys by sight, calls, tracks, scat, or other sign. In addition to species observed, expected wildlife usage of the site was determined based upon known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. The focus of the faunal species surveys was to identify potential habitat for special status wildlife within the Project area.

Protocol-level Desert Tortoise Survey

Desert tortoise surveys was conducted November 2, 2020. in accordance with the protocols described in the USFWS's 2009 *"Desert Tortoise (Mojave Population) Field Manual: (Gopherus agassizii),"* the 2010 *"Pre-Project Field Survey Protocol for Potential Desert Tortoise Habitats,"* and the August 31, 2017 survey protocol update, *"Preparing for Any Action That May Occur Within the Range of The Mojave Desert Tortoise (Gopherus agassizii)."* In accordance with the USFWS survey protocol, 100 percent visual coverage of the survey area was achieved by walking 10-meter (30-foot) wide belt transects over the entire Project site, to provide sufficient coverage, wherever there was potentially suitable desert tortoise habitat present (i.e. Sonoran mixed woody and succulent scrub habitat), to provide sufficient coverage to find signs of desert tortoise use to find signs of desert tortoise use (e.g., scat, burrows, carcasses, courtship rings, drinking depressions, etc. in addition to live tortoises). Portions of the Project area that were not surveyed to protocol-level coverage consisted of existing development and other disturbed areas that no longer support suitable desert tortoise habitat.

In addition to the 100 percent coverage of the Project site, the surveyor walked 200- meter and 400-meter transects around the perimeter of the Project site, in accordance with the USFWS 2010 *Pre-Project Field Survey Protocol for Potential Desert Tortoise Habitats*. It should be noted that these "zone of influence" transects are no longer required as of the 2017 updated protocol. However, to provide additional sampling of the areas adjacent the Project site, the 200-meter and 400-meter transects around the perimeter of the Project site were included in the survey. The transect routes were calculated and downloaded to handheld global positioning system (GPS) units that were used to accurately navigate the transects. Site photographs were taken during the field survey to catalog representative habitat (See attached Site Photos).

Non-breeding Season Burrowing Owl Survey

The focused BUOW survey was conducted in a manner consistent with the intent of the *"Burrowing Owl Survey Protocol and Mitigation Guidelines"* prepared by the California Burrowing Owl Consortium (1993) and the March 7, 2012 *"California Department of Fish and Game Staff Report on Burrowing Owl Mitigation."* Focused BUOW surveys were conducted during the non-breeding season from October to December of 2018. The surveys consisted of walking transects spaced approximately 10 meters (30 feet) apart to provide 100 percent visual coverage of the Project site. Adjacent areas that were not accessible on foot were surveyed with binoculars. During the survey, the biologists looked for BUOW and sign including, burrows, molted feathers, cast pellets, prey remains, owl white wash, and suitable surrogate burrows. The area was also assessed for soil type and level of friability as well as habitat type and habitat structure.

1.5 *Jurisdictional Delineation*

Jacobs regulatory specialist, Lisa Patterson, conducted a desktop and site evaluation of the Project area for the presence of riverine/riparian/wetland habitat and jurisdictional waters (i.e., WoUS), as regulated by the USACE and RWQCB, and/or jurisdictional streambed and associated riparian habitat as regulated by the CDFW.

Aerial photographs of the Project area were viewed and compared with the surrounding USGS 7.5-Minute Topographic Quadrangle map to identify drainage features within the survey area as indicated from topographic changes, blue-line features, or visible drainage patterns. The USFWS National Wetland Inventory and Environmental Protection Agency (EPA) Water Program "My Waters" Google Earth Pro data layer were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site(s). Similarly, the United States Department of Agriculture (USDA) – Natural Resources Conservation Service (NRCS) Web Soil Survey was reviewed for soil types found within the Project area to identify the soil series in the area and to check these soils to determine whether they are regionally identified as hydric soils. Upstream and downstream connectivity of waterways (if present) were reviewed on Google Earth Pro aerial photographs and topographic maps to determine jurisdictional status. The lateral extent of potential USACE jurisdiction was measured at the Ordinary High Watermark (OHWM) in accordance with regulations set forth in 33CFR part 328 and the USACE guidance documents listed in Section 5 of this report.

To be considered a *jurisdictional wetland* under the federal CWA, Section 404, an area must possess three (3) wetland characteristics: hydrophytic *vegetation*, hydric *soils*, and wetland *hydrology*.

- *Hydrophytic vegetation*: Hydrophytic vegetation is plant life that grows, and is typically adapted for life, in permanently or periodically saturated soils. The hydrophytic vegetation criterion is met if more than 50 percent of the dominant plant species from all strata (tree, shrub, and herb layers) is considered hydrophytic. Hydrophytic species are those included on the *2016 National Wetland Plant List (Western Mountains, Valleys & Coast Region)* (Lichvar, 2016). Each species on the list is rated according to a wetland indicator category, as shown in Table 1. To be considered hydrophytic, the species must have *wetland indicator status*, i.e., be rated as OBL, FACW or FAC.

Table 1. Wetland Indicator Vegetation Categories

Category	Probability
Obligate Wetland (OBL)	Almost always occur in wetlands (estimated probability >99%)
Facultative Wetland (FACW)	Usually occur in wetlands (estimated probability 67 to 99%)
Facultative (FAC)	Equally likely to occur in wetlands and non-wetlands (estimated probability 34 to 66%)
Facultative Upland (FACU)	Usually occur in non-wetlands (estimated probability 67 to 99%)
Obligate Upland (UPL)	Almost always occur in non-wetlands (estimated probability >99%)

- *Hydric Soil*: Soil maps from the USDA-NRCS Web Soil Survey (USDA 2019) were reviewed for soil types found within the Project area. Hydric soils are saturated or inundated long enough during the growing season to develop anaerobic conditions that favor growth and regeneration of hydrophytic vegetation. There are several indirect indicators that may signify the presence of hydric soils including hydrogen sulfide generation, the presence of iron and manganese concretions, certain soil colors, gleying, and the presence of mottling. Generally, hydric soils are dark in color or may be gleyed (bluish, greenish, or grayish), resulting from soil development under anoxic (without oxygen) conditions. Bright mottles within an otherwise dark soil matrix indicate periodic saturation with intervening periods of soil aeration. Hydric indicators are particularly difficult to observe in sandy soils, which are often recently deposited soils of flood plains (entisols) and usually lack sufficient fines (clay and silt) and organic material to allow use of soil color as a reliable indicator of hydric conditions. Hydric soil indicators in sandy soils include accumulations of organic matter in the surface horizon, vertical streaking of subsurface horizons by organic matter, and organic pans.

The hydric soil criterion is satisfied at a location if soils in the area can be inferred or observed to have a high groundwater table, if there is evidence of prolonged soil saturation, or if there are any indicators suggesting a long-term reducing environment in the upper part of the soil profile. Reducing conditions are most easily assessed using soil color. Soil colors were evaluated using the Munsell Soil Color Charts (Gretag/Macbeth, 2000). Soil pits were dug to an approximate depth of 18 inches to evaluate soil profiles for indications of anaerobic and redoximorphic (hydric) conditions in the subsurface.

- *Wetland Hydrology*: The wetland hydrology criterion is satisfied at a location based upon conclusions inferred from field observations that indicate an area has a high probability of being inundated or saturated (flooded, ponded, or tidally influenced) long enough during the growing season to develop anaerobic conditions in the surface soil environment, especially the root zone (USACE, 1987 and 2008b).

Evaluation of CDFW jurisdiction followed guidance in the Fish and Game Code and *A Review of Stream Processes and Forms in Dryland Watersheds* (CDFW, 2010). Specifically, CDFW jurisdiction would occur where a stream has a definite course showing evidence of where waters rise to their highest level and to the extent of associated riparian vegetation.

2 Results

2.1 *Existing Biological and Physical Conditions*

The Project site consists urban environments and undeveloped land, occupying flat to moderately sloped terrain. The Project occurs at the northern end of an existing residential development, and appears the surrounding area are utilized for hiking and other urban recreational activities including OHV use, illegal dumping, and litter. The reservoir site is highly disturbed by the existing reservoir, access, and maintenance activities. The surveys were conducted in optimal conditions during active timeframes for the target species.

2.1.1 Habitat

Habitat that exists within and adjacent to the 1.2-acre reservoir site consists primarily unvegetated disturbed lands. The vegetated areas that do exist on slopes and the margins of the site are characterized by Sonoran mixed woody scrub habitat (CVMSHCP GIS Vegetation Layer 2019). Native plant species identified within the Project area include creosote bush (*Larrea tridentata*), catclaw acacia (*Acacia greggii*), white bursage (*Ambrosia dumosa*), brittlebush (*Encelia farinosa*), desert trumpet (*Eriogonum inflatum*), hairy desert sunflower (*Geraea canescens*), , desert dandelion (*Malacothrix glabrate*), and Ferocactus (*Ferocactus sp*),. Non-native, invasive plant species identified within the Project area include Saharan mustard (*Brassica tournefortii*), foxtail brome (*Bromus madritensis* ssp. *rubens*), Russian thistle (*Salsola tragus*), Mediterranean grass (*Schismus* ssp.) and planted Eucalyptus trees around the existing reservoir (*Eucalyptus spp*).

2.1.2 Wildlife

Amphibians and Reptiles

No amphibian species were observed or otherwise detected within the Project area and none are expected to occur. The only reptiles observed within the Project area was western side-blotched lizard (*Uta stansburiana elegans*).

Birds

Avian species observed in the Project area include common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), Say's phoebe (*Sayornis saya*), bushtit (*Psaltriparus minimus*) and mourning dove (*Zenaida macroura*).

Mammals

Identification of mammals within the Project area was generally determined by physical evidence rather than direct visual identification. This is because 1) many of the mammal species that potentially occur onsite are nocturnal and would not have been active during the survey and 2) no mammal trapping was performed. Mammal species observed or otherwise detected during the reconnaissance-level survey included black-tailed jackrabbit (*Lepus californicus*) and domestic dogs. Other common species expected to occur within the Project area include coyote (*Canis latrans*), Merriams' kangaroo rat (*Dipodomys merriami*), and desert cottontail (*Sylvilagus audubonii*).

2.2 *Special Status Species and Habitats*

The CNDDB, CNPSEI, and other relevant literature and databases, 61 sensitive species (29 plant species, 32 animal species) and three sensitive habitats have been documented in the *Seven Palms Valley*, USGS 7.5-minute series quadrangles. This list of sensitive species and habitats includes any State- and/or federally-listed threatened or endangered species, California Fully Protected species, CDFW designated SSC, and otherwise Special Animals. "Special Animals" is a general term that refers to all the taxa the CNDDB 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.

Of the 11 State- and/or federally-listed species documented within the *Seven Palms Valley* quad, the following four State- and/or federally-listed species have been documented in the Project vicinity (within approximately 3 miles):

- Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*)
- desert tortoise (*Gopherus agassizii*)
- Coachella Valley fringe-toed lizard (*Uma inornata*)
- Least Bell's vireo (*Vireo bellii pusillus*)
- Southwestern willow flycatcher (Empidonax traillii extimus)

In addition to those species identified in the CNDDB search, the USFWS IPaC query (Appendix B) identified the both southwestern willow flycatcher and least Bell's vireo. These species are riparian-obligate migratory bird species; and the habitat requirements for southwestern willow flycatcher and least Bell's vireo (i.e., riparian habitats) are absent from the Project area and immediate vicinity and the Project will not affect either of these state or federally-listed endangered species. Therefore, no further discussion of these species is warranted.

Although not a State- or federally-listed as threatened or endangered species, burrowing owl (*Athene cunicularia* [BUOW]) are considered a State and federal SSC and this species is protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California FGC (FGC #3513 & #3503.5). Furthermore, this species has been documented approximately 0.25 mile west of the 60-acre WVWRF site. Therefore, BUOW will be included in the discussion below.

An analysis of the likelihood for occurrence of all CNDDB sensitive species documented in the *Seven Palms Valley*, quad is provided in Table 2. This analysis considers 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 site, based on required habitat elements and range relative to the current site conditions. Additionally, the results of the USFWS IPaC List are included in Appendix B.

The Project site is not within any sensitive habitats, including any USFWS designated Critical Habitat for any federally-listed species. Further, the project is not located in a conservation area as defined by the CVMSHCP.

2.2.1 Special Status Species

No State- and/or federally-listed threatened or endangered species, or other sensitive species were observed on site during the field survey and there is no suitable habitat for any sensitive species within the area of the Collection System component of the Project. However, some of the habitat requirements for several sensitive species documented within the Project vicinity (approximately 3 miles) are present within and adjacent the proposed 60-acre WVWRF site, as well as adjacent a portion of the Conveyance System component of the project. In addition to the BRA survey, focused protocol-level surveys were conducted within the Project area for desert tortoise and BUOW.

Coachella Valley milk-vetch – Endangered (Federal)

The federally-listed as endangered Coachella Valley milk-vetch is an annual or short-lived perennial plant in the Fabacae (pea) family. This species is primarily found on loose aeolian (i.e. wind transported) or alluvial (i.e. water transported) sands that are located on dunes or flats, and along disturbed margins of sandy washes in the Coachella Valley, Riverside County, California (USFWS 2009). The number of standing plants at any given time is only a partial indication of population size because the other portion of the population is the seed bank in the substrate that can persist dormant for several years (USFWS 2009). Coachella Valley milk-vetch typically blooms from February through May (Calflora 2017).

> *Findings*: A focused Coachella Valley milk-vetch survey was not conducted. Further, no Coachella Valley milk-vetch were observed during the BRA survey, or other focused sensitive species surveys, and this species is not expected to occur within the Project area.
>
> There are no Coachella Valley milk-vetch occurrences documented within the Project site and the habitat on site is not-suitable for this species, which occurs primarily on loose aeolian or alluvial sands located on dunes or flats, and along disturbed margins of sandy washes (USFWS 2009). The soils within the Project area consist of compacted sands that have become stabilized due to a moderately-dense vegetation cover, including several non-native species, particularly Saharan mustard and common Mediterranean grass (see attached Site Photos). Furthermore, the CVMSHCP has modeled suitable Coachella Valley milk-vetch habitat within the Plan area and the Project site is completely outside of any areas of modeled Coachella Valley milk-vetch habitat.

Desert Tortoise – Threatened (State/Federal)

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 BLM 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. With the adoption of the West Mojave Plan (BLM 2005), all lands that are outside Desert Wildlife Management Areas are characterized as Category 3 Habitat, which is the lowest priority management area for viable populations of the desert tortoise.

> *Findings*: According to the literature review, the nearest documented desert tortoise occurrence (2004) is approximately 3.3 miles northeast of the Project area. The USFWS desert tortoise Critical Habitat overlay, does not identify the Project site within any USFWS designated desert tortoise Critical Habitat. Furthermore, the Project site is not within a BLM designated Desert Wildlife Management Area (USFWS 2011). Therefore, the habitat surrounding the site would be characterized as Category 3 Habitat by the BLM.
>
> The habitat within and adjacent to the proposed Project, consists of disturbed Sonoran mixed woody scrub habitat that is marginally-suitable for desert tortoise. Therefore, focused protocol-level desert tortoise surveys were conducted in accordance with the USFWS survey protocols, within the Project impact area and surrounding buffer area, wherever there was potentially suitable desert tortoise habitat present (i.e. Sonoran mixed woody and succulent scrub habitat).
>
> The result of the protocol desert tortoise survey was that no evidence of desert tortoise presence was found in the survey area. No desert tortoise individuals or sign including other desert tortoise burrows or scat were observed. Therefore, desert tortoises are considered absent from the Project area at the time of survey.

Coachella Valley fringe-toed lizard – Threatened (Federal)/ Endangered (State)

The Coachella Valley fringe-toed lizard (CVFTL) is a medium-sized lizard that has physical adaptations to keep fine sand out of its eyes, mouth, nose, and ears and is restricted to sand dune habitats on the floor of the Coachella Valley in Riverside County, California (USFWS 2010). CVFTL is specialized to occupy a specific habitat type consisting of accumulations of windblown (aeolian) sand. Deeper sand deposits with more topographic relief are preferred by the species over flatter sand sheets (USFWS 2010). CVFTL are typically active from February to October and dormant from November to January. During the summer months, the lizards escape the heat by "swimming" or burrowing beneath the sand and restricts its activities to the early morning and late afternoon hours (USFWS 2010).

Threats to CVFTL primarily consist of habitat destruction/alteration due to urban and agricultural development, OHV use, windbreaks, exotic vegetation, and other disruptions to the formation of the wind-blown sand drifts this lizard requires. It is estimated that approximately 90-95 percent of historical CVFTL

habitat has been lost and currently only 15,000-20,000 acres remain available (USFWS 2010). Thus, the CVFTL was listed as threatened under the federal ESA on September 25, 1980 and as endangered under the CESA that same year. Critical Habitat was designated for this species by the USFWS at the time of listing.

> *Findings*: A focused CVFTL survey was not conducted, but no CVFTL were observed during the BRA survey, or other focused sensitive species surveys, and none are expected to occur within the Project area. The conditions present within the Project area are not suitable for CVFTL. This species requires aeolian sand dunes, particularly deeper sand deposits with more topographic relief than flatter sand sheets (USFWS 2010). There is no sand dune habitat within the Project site or immediate surrounding area. Rather, the habitat on site consists of relatively hilly Sonoran mixed woody scrub habitat. The sandy soils on site are compacted and stabilized due to a moderately-dense vegetation cover, including several non-native species, particularly Saharan mustard and common Mediterranean grass (see attached Site Photos). Furthermore, the CVMSHCP has modeled suitable CVFTL habitat within the Plan area and the Project site is completely outside of any areas of modeled suitable CVFTL habitat. Therefore, the site does not contain any habitat that would be considered suitable to support CVFTL and this species is not expected to occur within the Project area.

Burrowing owl – SSC

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.

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 FGC (FGC #3513 & #3503.5).

> *Findings*: Based upon the literature review, the nearest documented BUOW occurrence (2007) is approximately 0.25 mile west of the proposed reservoir site. There are no BUOW occurrences documented within the Project site.
>
> Given the definition provided in the *2012 CDFG Staff Report on Burrowing Owl Mitigation*, "Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey." The habitat within and adjacent the proposed reservoir site, does contain marginally suitable habitat for this species for the following reasons:

- *The site and immediate vicinity contain areas of short, sparse vegetation, and*
- *The site contains patches of well-drained, friable soils.*

Therefore, focused non-breeding season BUOW survey was conducted within the Project area during the 2020 non-breeding season.

Prior to performing the field surveys, available databases and documentation, such as the USFWS threatened and endangered species occurrence data overlay as well as the most recent version of the CNDDB, were reviewed for documented occurrences of BUOW in the local vicinity within the *Seven Palms Valley* quad.

The surveys were conducted on calm weather days, during peak BUOW activity between the morning hours of 6:00 a.m. and 10:00 a.m. and evening hours of 3:30 p.m. to 6:30 p.m. in accordance with the *"Burrowing Owl Survey Protocol and Mitigation Guidelines"* prepared by the California Burrowing Owl Consortium (1993) and the March 7, 2012 *"California Department of Fish and Game Staff Report on Burrowing Owl Mitigation."*

All natural and non-natural substrates were inspected and searched for signs of BUOW including, burrows, molted feathers, cast pellets, prey remains, and owl white-wash. All potential BUOW burrows encountered were examined for shape, scat, pellets, and tracks. A digital camera was used to take representative photographs, and Google Earth Pro was accessed to provide recent aerial photographs of the Project site and surrounding area.

The result of the focused BUOW surveys is that no BUOW individuals or sign were observed within the survey area. Therefore, BUOW are considered absent from the Project area at the time of survey.

2.2.2 Special Status Habitats

The Project site is not within any special status habitats, including any USFWS designated Critical Habitat for any federally-listed species. The Project will not result in any impacts to adjacent Critical Habitat units, or any other special status habitats.

2.3 *Jurisdictional Delineation*

The Project site is within the Mission Creek Hydrologic Sub-Area (HSA 719.42) which comprises a 73,873-acre drainage area within the larger Whitewater River Watershed (HUC 18100201). This watershed is primarily within Riverside County with a small portion of San Bernardino County. The Whitewater River Watershed is bound on the north by the Santa Ana and Southern Mojave Watersheds, on the southeast by the Salton Sea Watershed, on the south by the San Felipe Creek Watershed and on the southwest by the San Jacinto and Santa Margarita Watersheds. The Whitewater River Watershed encompasses a portion of the San Bernardino and Little San Bernardino Mountains to the north and the San Jacinto Mountains to the south and is approximately 1,500 square miles in area. The Whitewater River is the major hydrogeomorphic feature within the Whitewater River Watershed.

Waters of the U.S.

The USACE has authority to permit the discharge of dredged or fill material in WoUS under Section 404 CWA. WoUS are defined in the 2019 Navigable Waters Protection Rule: "All waters used in interstate or foreign commerce; all interstate waters including interstate wetlands; all other waters such as intrastate

lakes, rivers, streams (including intermittent streams), mudflats, sand flats, adjacent wetlands, sloughs, wet meadows, playa lakes or natural ponds, where the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; or wetlands adjacent to these waters" (Section 404 of the CWA; 33 CFR 328.3 (a). CWA jurisdiction exists over the following:

1. all traditional navigable waters (TNWs);
2. all wetlands adjacent to TNWs;
3. non-navigable tributaries of TNWs that are relatively permanent waters (RPWs) i.e., tributaries that typically flow year-round or have continuous flow at least seasonally; and
4. every water body determined to have a significant nexus with TNWs.

There are no features within the Project site that meets any of the criteria to be a WoUS.

USACE Wetlands

Areas meeting all three parameters would be designated as USACE wetlands. None of the three required parameters, hydrophitic vegetation, hydric soils and/or wetland hydrology, are present within the Project site. Therefore, no wetlands were identified in the study area during this investigation based of the absence of hydrophitic vegetation, hydric soil indicators and/or wetland hydrology.

State Lake/Streambed

The Project site is situated on flat to gently-sloped terrain consisting primarily of residential development, roads and Sonoran mixed woody scrub habitat. There are no drainage features with a discernable bend and bank, riparian habitat, or other features that would fall under Section 1600 of the FGC.

2.4 *Land Use Designations*

Coachella Valley MSHCP

The County of Riverside developed the CVMSHCP to enhance and maintain biological diversity and ecosystem processes while allowing future economic growth. The CVMSHCP sets Conservation Goals and Objectives to ensure the conservation of the Covered Species and conserved natural communities in the MSHCP Reserve System. In addition to setting Conservation Goals and Objectives for the Covered Species and conserved natural communities, the MSHCP has designated Core Habitat, Other Conserved Habitat, Essential Ecological Processes, and Biological Corridors and Linkages. The CVMSHCP area is divided into Conservation Areas based on a combination of ecological and jurisdictional factors. The CVMSHCP is intended to satisfy the legal requirements to authorize the "take" of species covered under the Plan during otherwise lawful activities, by providing for the conservation of the Covered Species.

The proposed reservoir site is outside any Conservation Areas (Figure 4). Because the Project site is not located within or adjacent to a conversation area and will not impact any Biological Corridors and Linkages or Essential Ecological Processes; no measures identified in Section 4.5 of the CVMSHCP to minimization indirect effects from development sharing a common boundary with Conservation Areas will be required for this project.

The Project proponent should be prepared to pay the MSHCP fees and restrict all project related impacts to the project site and/or other areas outside of the Conservation Areas. No other conservation or avoidance measures are expected.

3 Conclusions and Recommendations

3.1 *Sensitive Biological Resources*

A BRA and focused protocol-level desert tortoise and BUOW surveys were conducted by Lisa Patterson on November 2, 2020, to identify potential suitable habitat for special status species that have been documented within the Project vicinity, including the state- and/or federally-listed species discussed in Section 3.2.1 (above), as well as BUOW. The result of the surveys is that no listed plant or animal species were detected within the Project area and none are expected to occur. The Project site consists urban environments and undeveloped land. The Project is within an undeveloped 1.23-acre site consisting of disturbed Sonoran mixed woody scrub habitat. Due to the environmental conditions within the Project area and surrounding land uses, the Project site is not likely to support any of the state- or federally-listed species that have been documented in the Project vicinity.

The Project is not located within any USFWS designated Critical Habitat for threatened or endangered species and will not impact any Critical Habitat, or otherwise sensitive habitats.

Coachella Valley milk-vetch

The proposed 1.23-acre reservoir site is does not contain suitable habitat to support the federally endangered Coachella Valley milk-vetch. Further, the sandy soils within the Project area are stabilized due to a moderately-dense vegetation cover (see attached Site Photos), including several non-native, invasive species and Coachella Valley milk-vetch typically occurs on loose aeolian or alluvial sands located on dunes or flats, and along disturbed margins of sandy washes. Furthermore, the CVMSHCP has modeled suitable Coachella Valley milk-vetch habitat within the Plan area and the Project site is completely outside of any areas of modeled Coachella Valley milk-vetch habitat. Therefore, it is unlikely this species occurs within the Project area in any significant numbers and any potential project-related impacts would be considered less than significant.

Additionally, the Project will not impact any MSHCP Conservation Areas or USFWS designated Critical Habitat for Coachella Valley milk-vetch and this species is one of the CVMSHCP Covered Species. The CVMSHCP provides "take" authorization for Covered Species during otherwise lawful activities, by providing for the conservation of the Covered Species. The District is a signatory to the CVMSHCP. Since the Coachella Valley milk-vetch is a Covered Species under the CVMSHCP and the Project will not impact any MSHCP Conservation Areas or USFWS designated Critical Habitat for Coachella Valley milk-vetch, "take" authorization is provided for any potential Project-related impacts to this species.

Desert tortoise

The habitat within and adjacent the proposed 1.23-acre reservoir site consists of disturbed Sonoran mixed woody scrub habitat that is marginally-suitable for desert tortoise and this species has not been documented in the Project vicinity. Additionally, the result of focused protocol-level desert tortoise surveys conducted in 2020, within the Project impact area and surrounding buffer area, was that no evidence of desert tortoise presence was found in the survey area. No desert tortoise individuals or sign including other desert tortoise burrows or scat were observed. Therefore, desert tortoises are considered absent from the Project area at the time of survey and the Project is not likely to impact this species.

Burrowing owl

There is suitable BUOW habitat within and adjacent the proposed 1.23-acre reservoir site. The result of focused non-breeding season BUOW surveys conducted in 2020, was that no BUOW individuals or sign were observed within the survey area. Therefore, BUOW are considered absent from the Project area at the time of survey and the Project is not likely to impact this species. However, given that there is suitable BUOW habitat within the Project area and this species has been documented in the near Project vicinity, it is recommended that:

- A **30-day** preconstruction **BUOW survey** be conducted by a qualified biologist prior to commencement of Project activities, to avoid any potential Project-related impacts to BUOW that may move onto the site in the future.

According to protocol and standard practices, the results of the habitat assessment surveys will remain valid for the period of one year. After which time, if the site has not been disturbed in the interim, another survey may be required to determine the persisting absence of desert tortoise, BUOW and other sensitive flora and fauna on-site. Regardless of survey results and conclusions given herein, desert tortoise and BUOW are protected by applicable state and/or federal laws, including but not exclusive to the CESA and Federal ESA. As such, if a desert tortoise or BUOW are found on-site during work activities, all activities likely to affect the animal(s) should cease immediately and regulatory agencies should be contacted to determine appropriate management actions. Additionally, it should be noted that desert tortoise may be handled only by a qualified biologist who has been given authorization by the appropriate agencies (i.e. USFWS and CDFW).

Nesting Birds

The Project site and surrounding area consists of Sonoran mixed woody scrub habitat that is suitable to support nesting birds. As discussed, most birds are protected by the MBTA. In general, impacts to all bird species (common and special status) can be avoided by conducting work outside of the nesting season, which is generally February 1st through August 31st. However, if all work cannot be conducted outside of nesting season, the following is recommended:

- To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist shall conduct pre-construction Nesting Bird Surveys (NBS) prior to Project-related disturbance to suitable nesting areas to identify any active nests. If no active nests are found, no further action will be required. If an active nest is found, the biologist will set appropriate no-work buffers around the nest which will be based upon the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity and duration of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

3.2 *Jurisdictional Waters*

No intermittent or ephemeral dry washes that would meet the definitions of State and federal jurisdictional waters as defined by Section 1600 of the State of California Fish and Game Code (FGC) or "Waters of the United States" (WoUS) as defined by Section 404 of the Clean Water Act (CWA) occur on the reservoir site. Therefore, no regulatory permits from these agencies may be required for this Project.

3.3 *Land Use Designations*

The Project is within the CVMSHCP boundary. The proposed 1.23-acre reservoir site are entirely outside any Conservation Areas (Figure 4) and will not impact any Biological Corridors and Linkages or Essential Ecological Processes. Finally, the project is not adjacent to a Conservation Area. Therefore, no conservation or avoidance measures are expected, and the Project as described, would be consistent with the Conservation Goals and Objectives set forth in the CVMSHCP.

4 Literature Cited

American Ornithologists' Union. 1989. Thirty-seventh supplement to the American Ornithologists' Union Check-list of North American birds. Auk 106: 532-538.

Calflora: Information on California plants for education, research and conservation. [web application]. 2018. Berkeley, California: The Calflora Database [a non-profit organization]. Available: http://www.calflora.org/. (Accessed: March 5, 2019).

California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines.

California Department of Fish and Game. 1995. Staff report on burrowing owl mitigation. Memo from C.F. Raysbrook, Interim Director to Biologist, Environmental Services Division, Department of Fish and Game. Sacramento, CA.

California Department of Fish and Game (CDFG). 2010. A Review of Stream Processes and Forms in Dryland Watersheds. Prepared by Kris Vyverberg, Senior Engineering Geologist, Conservation Engineering. December 2010.

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resources Agency. March 7, 2012.

California Native Plant Society (CNPS). 2019. Inventory of Rare and Endangered Plants of California. Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, California. Available at: http://www.cnps.org/inventory (Accessed: March 5, 2019).

California Natural Diversity Data Base (CNDDB). 2019. Annotated record search for special animals, plants and natural communities. Natural Heritage Division, Sacramento, California. (Accessed: March 5, 2019).

Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss.

Goldwasser, S. 1981. Habitat requirements of the Least Bell's Vireo. Calif. Dept. Fish & Game, Nongame Wildlife Investigations Rep. 81.09, Proj. E-W4, Job IV-38.1. Nongame Bird and Mammal Sec. Rep. 81.09.

Jepson Flora Project (eds.) 2019, *Jepson eFlora*, http://ucjeps.berkeley.edu/eflora/. (Accessed: March 5, 2019).

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. *The National Wetland Plant List*: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X.

Munz, P.A. 1974. A Flora of Southern California. University of California Press, Berkeley, California.

Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey. Map Unit Descriptions. San Bernardino County Area, California. Available at: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm. (Accessed: March 5, 2019).

Sawyer, John O., Keeler-Wolf, Todd, and Evens, Julie M. 2009. A manual of California vegetation. Second Edition. California Native Plant Society, Sacramento, California, USA. 1,300 pages.

Skinner, M.W. and B. M. Pavlik, eds. 1994. *Inventory of Rare and Endangered Vascular Plants of California*, 5th edition. California Native Plant Society, Sacramento, California.

U.S. Army Corps of Engineers (USACE). 2001. USACE Minimum Standards for Acceptance of Preliminary Wetlands Delineations, November 30, 2001 (Minimum Standards).

U.S. Army Corps of Engineers (USACE). 2007. Jurisdictional Determination Form Instructional Guidebook (JD Form Guidebook). May 30.

U.S. Army Corps of Engineers (USACE). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers (USACE). 2014. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (A Delineation Manual). August 2008.

U.S. Bureau of Land Management (BLM). 1980. The California Desert Conservation Area Plan. U.S. Bureau of Land Management, Riverside, California. 173 pp.

U.S. Bureau of Land Management (BLM) and California Department of Fish and Game (CDFG). 1988. A Sikes Act Management Plan for the Desert Tortoise Research Natural Area and Area of Critical Environmental Concern. U.S. Bureau of Land Management, Ridgecrest, California. 43 pp. + unpaginated appendices.

U.S. Bureau of Land Management (BLM). 1989. Map produced by BLM for the California Desert Conservation Area, dated January 1989, showing desert tortoise Category I, 2, and 3 Habitats in California. Riverside, CA.

U.S. Bureau of Land Management (BLM). 2005. Final Environmental Impact Report and Statement for the West Mojave Plan, a Habitat Conservation Plan and California Desert Conservation Area Plan Amendment. Moreno Valley, CA.

U.S. Fish and Wildlife Service (USFWS). National Wetlands Inventory. Website: http://wetlands.fws.gov. (Accessed: March 5, 2019).

U.S. Fish and Wildlife Service (USFWS). 1994. The desert tortoise (Mojave population) recovery plan. U.S. Fish and Wildlife Service, Region 1, Lead Region, Portland, Oregon. 73 pp. + appendices.

U.S. Fish and Wildlife Service (USFWS). 2008. Field survey protocol for any nonfederal action that may occur within the range of the desert tortoise. Ventura, CA.

U.S. Fish and Wildlife Service (USFWS). 2009. Desert Tortoise (Mojave Population) Field Manual: (*Gopherus agassizii*). Region 8, Sacramento, California.

U.S. Fish and Wildlife Service (USFWS). 2009. *Astragalus lentiginosus* var. *coachellae* (Coachella Valley milk-vetch) 5-Year Review: Summary and Evaluation. Carlsbad Fish and Wildlife Office, Carlsbad, California.

U.S. Fish and Wildlife Service (USFWS). 2010. Coachella Valley fringe-toed Lizard (*Uma inornata*) 5-Year Review: Summary and Evaluation. Carlsbad Fish and Wildlife Office, Carlsbad, California.

U.S. Fish and Wildlife Service (USFWS). 2010. Pre-Project Field Survey Protocol for Potential Desert Tortoise Habitats. Available at: https://www.fws.gov/carlsbad/PalmSprings/DesertTortoise/DT%20Pre-Project%20Survey%20Protocol_2010%20Field%20Season.pdf.

U.S. Fish and Wildlife Service (USFWS). 2011. Revised recovery plan for the Mojave population of the desert tortoise (*Gopherus agassizii*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. 222 pp.

U.S. Fish and Wildlife Service (USFWS). 2017. Preparing for Any Action That May Occur Within the Range of The Mojave Desert Tortoise (*Gopherus agassizii*). Available at: https://www.fws.gov/nevada/desert_tortoise/documents/manuals/Mojave%20Desert%20Tortoise_Pre-Project%20Survey%20Protocol_2017.pdf.

Western Regional Climate Center. Period of Record Monthly Climate Summary for Palm Springs, California (046635). Available at: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6635. (Accessed: March 5, 2019).

Table 2
CNDDB Species
Occurrence Potential

Table 2. CNDDB Species and Habitats Documented Within the *Desert Hot Springs, Seven Palms Valley, Palm Springs* and *Cathedral City* USGS 7.5-minute Quadrangles

Scientific Name	**Common Name**	**Listing Status**	**Other Lists**	**Habitat**	**Occurrence Potential**
Astragalus lentiginosus var. *coachellae*	Coachella Valley milk-vetch	Endangered/ None	G5T1; S1; CNPS: 1B.2	Sonoran Desert scrub, desert dunes. Sandy flats, washes, outwash fans, sometimes on dunes. 35-695 m.	There is no suitable habitat within the Project Area. Occurrence potential is **zero**.
Athene cunicularia	burrowing owl	None/ None	G4; S3; CDFW: SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	There is suitable habitat for this species within the Project area. However, the result of protocol BUOW surveys conducted in 2020 was that no BUOW or sign was observed in the Project area. Therefore, BUOW are considered absent from the Project site at the time of survey. Occurrence potential is **low**.
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	None/ None	G5T34; S3S4; CDFW: SSC	Desert border areas in eastern San Diego County in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Some marginally suitable habitat for this species is present within the Project area. Occurrence potential is **low**.
Crotalus ruber	red-diamond rattlesnake	None/ None	G4; S3; CDFW: SSC	Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	No suitable habitat for this species exists within the Project area. Occurrence potential is **low**.
Desert Fan Palm Oasis Woodland	Desert Fan Palm Oasis Woodland	None/ None	G3; S3.2		This habitat is **absent** from the Project area.
Euphorbia arizonica	Arizona spurge	None/ None	G5; S3; CNPS: 2B.3	Sonoran Desert scrub. Sandy soils. 150-900 m.	There is no suitable habitat within the Project Area. Occurrence potential is **zero**.
Falco mexicanus	prairie falcon	None/ None	G5; S4; CDFW: WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	No suitable nesting habitat (i.e. cliffs) exists within the Project area. Further, the small size and disturbance level makes it unlikely to be utilized for hunting. Occurrence potential is **low**.
Gopherus agassizii	desert tortoise	Threatened/ Threatened	G3; S2S3	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat.	Although the Project area is disturbed, some marginally suitable habitat for this species is present within the Project area. The result of protocol desert tortoise surveys conducted 2020 were negative for this species. Therefore, this species is considered absent from the Project.

Scientific Name	Common Name	Listing Status	Other Lists	Habitat	Occurrence Potential
Linanthus maculatus ssp. *Maculatus*	Little San Bernardino Mtns. linanthus	None/ None	G2T2; S2; CNPS: 1B.2	Desert dunes, Sonoran Desert scrub, Mojavean Desert scrub, Joshua tree woodland. Sandy places. Usually in light-colored quartz sand; often in wash or bajada. 135-1220 m.	There is no suitable habitat within the Project site. Occurrence potential is **zero**.
Neotoma lepida intermedia	San Diego desert woodrat	None/ None	G5T3T4; S3S4; CDFW: SSC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	No suitable habitat for this species exists within the Project area. Occurrence potential is **zero**.
Ovis canadensis nelsoni	desert bighorn sheep	None/ None	G4T4; S3; CDFW: FP	Widely distributed from the White Mtns in Mono Co. to the Chocolate Mts in Imperial Co. Open, rocky, steep areas with available water and herbaceous forage.	No suitable habitat for this species exists within the Project area. Occurrence potential is **zero**.
Selaginella eremophila	desert spike-moss	None/ None	G4; S2S3; CNPS: 2B.2	Sonoran Desert scrub, chaparral. Shaded sites, gravelly soils; crevices or among rocks. 225-1570 m.	The environmental requirements for this species are absent from the Project area. Occurrence potential is **low**.
Streptanthus campestris	southern jewelflower	None/ None	G3; S3; CNPS: 1B.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland. Open, rocky areas. 605-2590 m.	The Project area is outside the known elevation range for this species and the habitats this species is associated with are not present within the Project area. Occurrence potential is **zero**.
Toxostoma lecontei	Le Conte's thrasher	None/ None	G4; S3; CDFW: SSC	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Some moderately-suitable habitat for this species is present within the Project site. Occurrence potential is **low**.
Uma inornate	Coachella Valley fringe-toed lizard	Threatened/ Endangered	G1Q; S1	Limited to sandy areas in the Coachella Valley, Riverside County. Requires fine, loose, windblown sand (for burrowing), interspersed with hardpan and widely-spaced desert shrubs.	No suitable habitat for this species exists within the Project area. Occurrence potential is **low**.

Coding and Terms

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

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

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

Global Rankings (Species or Natural Community Level):

G1 = Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = Secure – Common; widespread and abundant.

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

State Ranking:

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

California Rare Plant Rankings (CNPS List):

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

Threat Ranks:

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

FIGURES

SOURCE: Google Earth

FIGURE 1

JACOBS

Regional Location

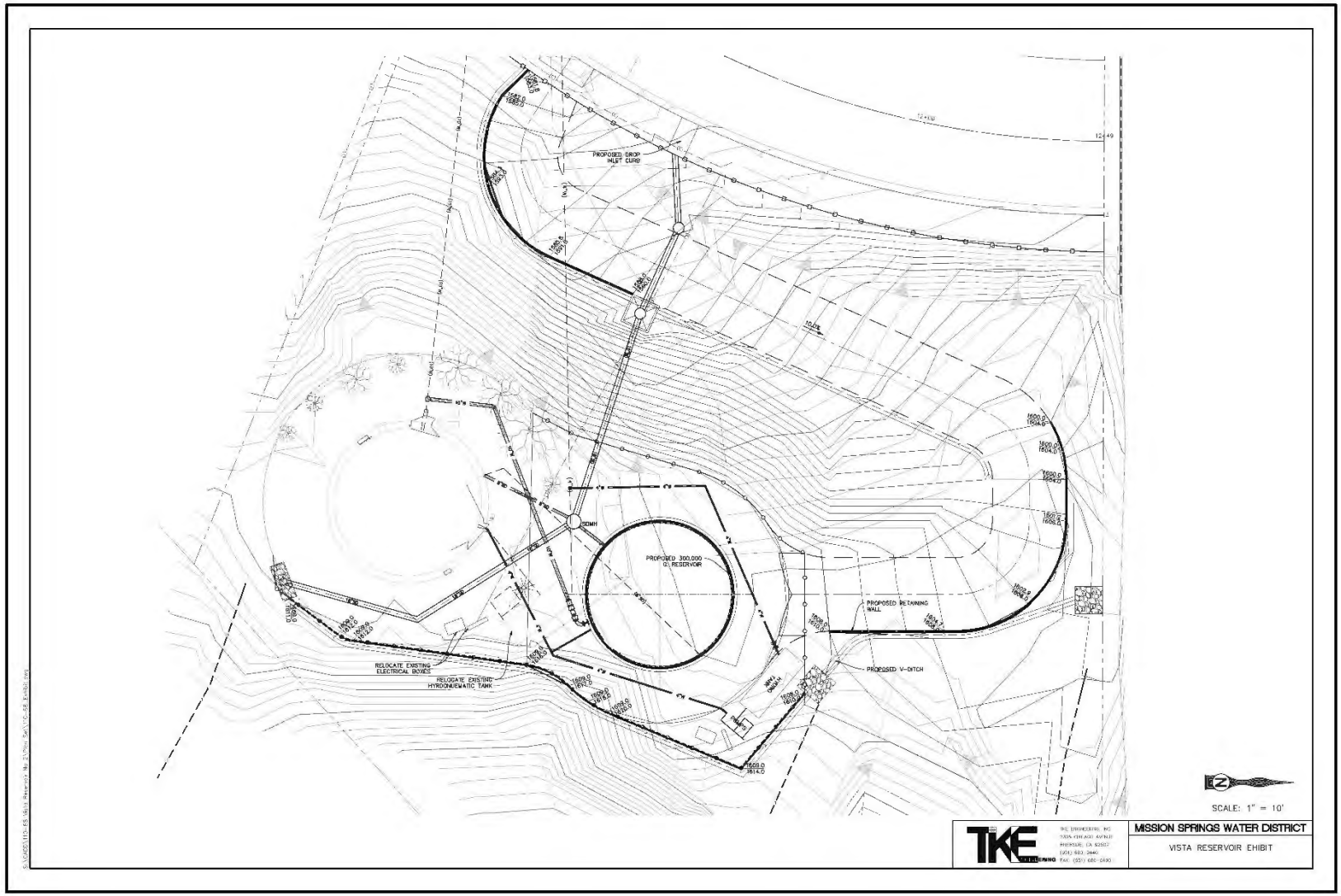
MSWD West Valley Water Reclamation Program

SOURCE: Google Earth

FIGURE 2

MSWD Site Location

MSWD West Valley Water Reclamation Program



SOURCE: Design Engineers TKE

FIGURE 3a

Site Plan

MSWD West Valley Water Reclamation Program

SITE PHOTOGRAPHS

Photo 1. Looking north at the existing reservoir and access road.

Photo 2. Looking north at existing parking area and general area for the proposed reservoir.

Photo 3. Looking east at the northern edge of the existing reservoir tank and the general location of the new tank.

Photo 4. Looking east at the general location of the new tank.

	Photo 5. Looking southwest at the general location of the new tank.
	Photo 6. Looking south at the general location of the new tank.

Appendix A – Regulatory Framework

REGULATORY FRAMEWORK

Federal Regulations

Clean Water Act

The purpose of the Clean Water Act (CWA) of 1977 is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "waters of the United States" without a permit from the United States Army Corps of Engineers (USACE). The definition of waters of the United States includes rivers, streams, estuaries, territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 Code of Federal Regulations [CFR] 328.3 7b). The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may override a USACE permit. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; in California this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

Federal Endangered Species Act (ESA)

The federal Endangered Species Act (ESA) of 1973 protects plants and wildlife that are listed by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) as endangered or threatened. Section 9 of the ESA (USA) prohibits the taking of endangered wildlife, where taking is defined as any effort to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 United States Code [USC] 1538). Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect an endangered species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity, provided the action will not jeopardize the continued existence of the species. The ESA specifies that the USFWS designate habitat for a species at the time of its listing in which are found the physical or biological features "essential to the conservation of the species," or which may require "special Management consideration or protection..." (16 USC § 1533[a][3].2; 16 USC § 1532[a]). This designated Critical Habitat is then afforded the same protection under the ESA as individuals of the species itself, requiring issuance of an Incidental Take Permit prior to any activity that results in "the destruction or adverse modification of habitat determined to be critical" (16 USC § 1536[a][2]).

Interagency Consultation and Biological Assessments

Section 7 of ESA provides a means for authorizing the "take" of threatened or endangered species by federal agencies, and applies to actions that are conducted, permitted, or funded by a federal agency. The statute requires federal agencies to consult with the USFWS or National Marine Fisheries Service (NMFS), as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. If a Proposed Project "may affect" a listed species or destroy or modify critical

habitat, the lead agency is required to prepare a biological assessment evaluating the nature and severity of the potential effect.

Habitat Conservation Plans

Section 10 of the federal ESA requires the acquisition of an Incidental Take Permit (ITP) from the USFWS by non-federal landowners for activities that might incidentally harm (or "take") endangered or threatened wildlife on their land. To obtain a permit, an applicant must develop a Habitat Conservation Plan that is designed to offset any harmful impacts the proposed activity might have on the species.

Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)

The CVMSHCP is a regional multi-agency conservation plan that provides for the long-term conservation of approximately 240,000 acres of open space and 27 plant and animal species in the Coachella Valley. The entire City of Bermuda Dunes lies within the CVMSHCP area. The stated overall goal of the CVMSHCP is, "… to enhance and maintain biological diversity and ecosystem processes while allowing future economic growth." The CVMSHCP balances environmental protection and economic development objectives in the plan area and simplifies compliance with endangered species laws.

The Plan is subdivided according to specific resource conservation goals that have been organized according to geographic areas defined as Conservation Areas that serve as natural habitat for covered species. These areas are identified as Core, Essential, or Other Conserved Habitat for special-status plant, invertebrate, amphibian, reptile, bird, and mammal species, Essential Ecological Process Areas, and Biological Corridors and Linkages. For each Conservation Area, Conservation Objectives and required measures are articulated for conserving Core Habitat for covered species, Essential Ecological Processes necessary to maintain habitat viability, Biological Corridors and Linkages as needed, and the less common Conserved Natural Communities.

Conservation Goals are managed within the Conservation Areas as a Reserve System. The Conservation Goals of the CVMSHCP Reserve System are:

- Represent native ecosystem types or natural communities across their natural range of variation in a system of conserved areas.
- Maintain or restore self-sustaining populations or metapopulations of the species included in the Plan to ensure permanent Conservation so that Take Authorization can be obtained for currently Listed Species (animal species) and Non-listed Species can be covered in case they are listed in the future.
- Sustain ecological and evolutionary processes necessary to maintain the functionality of the conserved natural communities and Habitats for the species included in the Plan.
- Maximize connectivity among populations and avoid Habitat fragmentation within Conservation Areas to conserve biological diversity, ecological balance, and connected populations of Covered Species.
- Minimize adverse impacts from OHV use, illegal dumping, edge effects, exotic species, and other disturbances in accordance with the Management and Monitoring Programs.
- Manage the Conservation Areas adaptively to be responsive to short-term and long-term environmental change and new science.

Under the CVMSHCP, a Take Authorization, except for three of the covered species, is allowed for covered activities in accordance with the federal Endangered Species Act (ESA) and the California Natural Community Conservation Planning Act. Covered activities include development permitted or approved by

local permittees, which includes new Projects approved pursuant to county and city general plans. Take activities are limited within Conservation Areas.

Mitigation for the impacts of development on the covered species and their habitats is through payment of a fee to the City of Coachella which is in turn used by the Coachella Valley Conservation Commission to minimize and mitigate impacts of the Taking and provide for conservation of the covered and non-covered species through the acquisition and maintenance of habitat.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (16 U.S.C. Sections 661 to 667e et seq.) applies to any federal Project where any body of water is impounded, diverted, deepened, or otherwise modified. Project proponents are required to consult with the USFWS and the appropriate state wildlife agency.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (The Eagle Act) (1940), amended in 1962, was originally implemented for the protection of bald eagles (*Haliaeetus leucocephalus*). In 1962, Congress amended the Eagle Act to cover golden eagles (*Aquila chrysaetos*), a move that was partially an attempt to strengthen protection of bald eagles, since the latter were often killed by people mistaking them for golden eagles. This act makes it illegal to import, export, take (molest or disturb), sell, purchase, or barter any bald eagle or golden eagle or part thereof. The golden eagle, however, is accorded somewhat lighter protection under the Eagle Act than that of the bald eagle.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 implements international treaties between the United States and other nations created to protect migratory birds, any of their parts, eggs, and nests from activities, such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code (CFGC).

Executive Orders (EO)

> *Invasive Species – EO 13112 (1999)*: Issued on February 3, 1999, promotes the prevention and introduction of invasive species and provides for their control and minimizes the economic, ecological, and human health impacts that invasive species cause through the creation of the Invasive Species Council and Invasive Species Management Plan.
>
> *Migratory Bird – EO 13186 (2001)*: Issued on January 10, 2001, promotes the conservation of migratory birds and their habitats and directs federal agencies to implement the Migratory Bird Treaty Act. Protection and Enhancement of Environmental Quality—EO 11514 (1970a), issued on March 5, 1970, supports the purpose and policies of the National Environmental Policy Act (NEPA) and directs federal agencies to take measures to meet national environmental goals.

Migratory Bird Treaty Reform Act

The Migratory Bird Treaty Reform Act (Division E, Title I, Section 143 of the Consolidated Appropriations Act, 2005, PL 108–447) amends the Migratory Bird Treaty Act (16 U.S.C. Sections 703 to 712) such that nonnative birds or birds that have been introduced by humans to the United States or its territories are excluded from protection under the Act. It defines a native migratory bird as a species present in the United States and its territories as a result of natural biological or ecological processes. This list excluded two additional species commonly observed in the United States, the rock pigeon (*Columba livia*) and domestic goose (*Anser domesticus*).

Birds of Conservation Concern

Birds of Conservation Concern (BCC) is a USFWS list of bird species identified to have the highest conservation priority, and with the potential for becoming candidates for listing as federally threatened or endangered. The chief legal authority for BCC is the Fish and Wildlife Conservation Act of 1980 (FWCA). Other authorities include the FESA, the Fish and Wildlife Act of 1956, and the Department of the Interior U.S Code (16 U.S.C. § 701). The 1988 amendment to the FWCA (Public Law 100-653, Title VIII) requires the Secretary of the Interior, through the USFWS, to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973" (USFWS, 2008a).

State Regulations

California Fish and Game Code Sections 1600 through 1606 of the CFGC

This section requires that a Streambed Alteration Application be submitted to the CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by the Department and the applicant is the Streambed Alteration Agreement. Often, Projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

California Endangered Species Act

The California Endangered Species Act (CESA) (Sections 2050 to 2085) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats by protecting "all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation." Animal species are listed by the CDFW as threatened or endangered, and plants are listed as rare, threatened, or endangered. However, only those plant species listed as threatened or endangered receive protection under the California ESA.

CESA mandates that state agencies do not approve a Project that would jeopardize the continued existence of these species if reasonable and prudent alternatives are available that would avoid a jeopardy finding. There are no state agency consultation procedures under the California ESA. For Projects that would affect a species that is federally and State listed, compliance with ESA satisfies the California ESA if the California Department of Fish and Wildlife (CDFW) determines that the federal incidental take authorization is consistent with the California ESA under Section 2080.1. For Projects that would result in

take of a species that is state listed only, the Project sponsor must apply for a take permit, in accordance with Section 2081(b).

Fully Protected Species

Four sections of the California Fish and Game Code (CFGC) list 37 fully protected species (CFGC Sections 3511, 4700, 5050, and 5515). These sections prohibit take or possession "at any time" of the species listed, with few exceptions, and state that "no provision of this code or any other law will be construed to authorize the issuance of permits or licenses to 'take' the species," and that no previously issued permits or licenses for take of the species "shall have any force or effect" for authorizing take or possession.

Bird Nesting Protections

Bird nesting protections (Sections 3503, 3503.5, 3511, and 3513) in the CFGC include the following:

- Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird.
- Section 3503.5 prohibits the take, possession, or needless destruction of any nests, eggs, or birds in the orders Falconiformes (new world vultures, hawks, eagles, ospreys, and falcons, among others), or Strigiformes (owls).
- Section 3511 prohibits the take or possession of fully protected birds.
- Section 3513 prohibits the take or possession of any migratory nongame bird or part thereof, as designated in the MBTA. To avoid violation of the take provisions, it is generally required that Project-related disturbance at active nesting territories be reduced or eliminated during the nesting cycle.

Native Plant Protection Act

The Native Plant Protect Act (NPPA) (1977) (CFGC Sections 1900-1913) was created with the intent to "preserve, protect, and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Game Commission has the authority to designate native plants as endangered or rare and to protect endangered and rare plants from take. CESA (CFGC 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the Fish and Game Code.

Appendix B – USFWS IPaC List

&

CNDDB Element List

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional **site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.**

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Riverside County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

http://www.fws.gov/carlsbad/

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS

Least Bell's Vireo Vireo bellii pusillus — Endangered
Wherever found
There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/5945

Southwestern Willow Flycatcher Empidonax traillii extimus — Endangered
Wherever found
There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/6749

Reptiles

NAME	STATUS
Coachella Valley Fringe-toed Lizard Uma inornata	**Threatened**

Wherever found
There is final critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/2069

Desert Tortoise Gopherus agassizii — **Threatened**
There is final critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/4481

Flowering Plants

NAME	STATUS
Coachella Valley Milk-vetch Astragalus lentiginosus var. coachellae	**Endangered**

Wherever found
There is final critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/7426

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- **Measures for avoiding and minimizing impacts to birds** http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- **Nationwide conservation measures for birds** http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES

	THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Costa's Hummingbird Calypte costae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9470	Breeds Jan 15 to Jun 10
Lawrence's Goldfinch Carduelis lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Rufous Hummingbird selasphorus rufus **This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.** **https://ecos.fws.gov/ecp/species/8002**	**Breeds elsewhere**

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. **The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that** week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season ( )
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. **"BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and**
3. **"Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).**

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting

point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
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In Reply Refer To: January 04, 2021
Consultation Code: 08ECAR00-2021-SLI-0447
Event Code: 08ECAR00-2021-E-00989
Project Name: MSWD - Vista Reservoir

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2021-SLI-0447
Event Code: 08ECAR00-2021-E-00989
Project Name: MSWD - Vista Reservoir
Project Type: WATER SUPPLY / DELIVERY
Project Description: New Water Reservoir
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.982882450000005,-116.49332377869601,14z

Counties: Riverside County, California

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Reptiles

NAME	STATUS
Coachella Valley Fringe-toed Lizard *Uma inornata* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2069	Threatened
Desert Tortoise *Gopherus agassizii* Population: Wherever found, except AZ south and east of Colorado R., and Mexico There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4481	Threatened

Flowering Plants

NAME	STATUS
Coachella Valley Milk-vetch *Astragalus lentiginosus var. coachellae*	Endangered

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/7426

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Seven Palms Valley (3311684))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Astragalus lentiginosus var. coachellae Coachella Valley milk-vetch	PDFAB0FB97	Endangered	None	G5T1	S1	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Chaetodipus fallax pallidus pallid San Diego pocket mouse	AMAFD05032	None	None	G5T34	S3S4	SSC
Crotalus ruber red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC
Desert Fan Palm Oasis Woodland Desert Fan Palm Oasis Woodland	CTT62300CA	None	None	G3	S3.2	
Euphorbia arizonica Arizona spurge	PDEUP0D060	None	None	G5	S3	2B.3
Falco mexicanus prairie falcon	ABNKD06090	None	None	G5	S4	WL
Gopherus agassizii desert tortoise	ARAAF01012	Threatened	Threatened	G3	S2S3	
Linanthus maculatus ssp. maculatus Little San Bernardino Mtns. linanthus	PDPLM041Y1	None	None	G2T2	S2	1B.2
Neotoma lepida intermedia San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
Ovis canadensis nelsoni desert bighorn sheep	AMALE04013	None	None	G4T4	S3	FP
Selaginella eremophila desert spike-moss	PPSEL010G0	None	None	G4	S2S3	2B.2
Toxostoma lecontei Le Conte's thrasher	ABPBK06100	None	None	G4	S3	SSC
Uma inornata Coachella Valley fringe-toed lizard	ARACF15010	Threatened	Endangered	G1Q	S1	
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	

Record Count: 15