BIOLOGICAL SURVEY

FOR THE

RECYCLED WATER PLANT NO. 5

LIQUID EXPANSION PROJECT

Prepared for:

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Certification: I hereby certify that the statements furnished herein and in the attached exhibits present data and information required for this Biological Survey to the best of my ability, and the facts, statements and information presented are true and correct to the best of my knowledge and belief.

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Lisa M. Patterson

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1.0 INTRODUCTION AND SUMMARY OF FINDINGS

The purpose of this report is to assess the biological resources and the potential impacts associated with the Inland Empire Utility Agencies (IEUA) proposal to expand the liquid treatment capabilities in Recycling Plant No. 5 (RP-5) located in the City of Chino, San Bernardino County, California. See Figure 1 and Figure 2 for Regional and Site Location maps.

The following is a summary of the proposed new onsite and offsite facilities at and in the vicinity of RP-5. These facilities will expand the treatment of liquid wastewater treatment process to Membrane Bioreactor (MBR) technology. The RP-5 Liquids Treatment Facility will be expanded from 15 million gallons per day (MGD) average capacity to 30 MGD average capacity and 60 MGD peak capacity. The outline below briefly describes all improvements, modifications, system expansions, and off-site improvements required to achieve 30 MGD capacity. There are no natural habitats occurring within the treatment plant site.

The following list of projects are proposed to facilitate the RP5 Liquids Treatment Expansion Project:

1) City of Chino Hills Butterfield Ranch Pump Station Modifications:
This subproject will modify the pumps and MCC at the existing Butterfield Ranch pump station.

2) Mountain Avenue Lift Station
This subproject will construct a new lift station off Mountain Ave., in the area where Solids Handling Facility is currently located. The new lift station will have two pumps with a 560-gpm total capacity.

3) **Butterfield Force Main**:
This subproject will construct a new dual force main from El Prado Rd. to Kimball Ave., along Mountain Ave. This force main is needed to convey flows to RP-5 now that flows generated outside of the Prado Basin will be pumped directly to RP-5, with the primary flow being from the Butterfield Ranch pump Station. All three lift stations mentioned identified in this project will feed into this new force main.

4) **RP-2 Lift Station Modifications**:
The purpose of this project is to convey wastewater flows discharged by gravity below the flood inundation level of the upgraded Prado Dam to the RP-5 treatment plant, as all other wastewater conveyed through the basin will be pumped directly from outside the basin RP-5.

5) RP-5 New Radio Tower:
This subproject is for the design and construction of a new Radio Tower at RP-5. The project includes a new structural tower, radio link package (i.e., radio, antenna, cabling), and electrical components to power the new radio tower.

The Area of Potential Effect (APE) is delineated to encompass the maximum extent of ground disturbance or construction areas required for the proposed expansion project, and geographically coincides with the existing limits of RP5, Mountain Avenue Lift Station, RP2, Butterfield Pump Station, and a proposed sewer main along Mountain Avenue between Kimball

Avenue and El Prado Road. The proposed project occurs entirely within the developed facilities and roads, and on a completely sites. The sites are all mapped on the USGS 7.5-minute quadrangle “Prado Dam”, all but Butterfield Pump State, Section 7, are situated in an unsectioned area of T2S R7W, San Bernardino Baseline and Meridian.

The project area no longer supports native plant communities, and the site does not provide suitable habitat for any of these sensitive plant and wildlife species identified in the state and federal data bases as having potential to occur in the general vicinity of the proposed project site. Finally, the project areas occur in or within 1,200-feet or less f designated critical habitat for the least Bell’s vireo. There are no primary constituent habitat elements within the project APE that would support this species, and the project will not adversely modify designated critical habitat.

There are no streams, channels, or wetland habitat associated with the project APE. Therefore, no regulatory permitting from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, or California Department of Fish and Wildlife will be required for this project.

FIGURE 1 – Regional Location Map

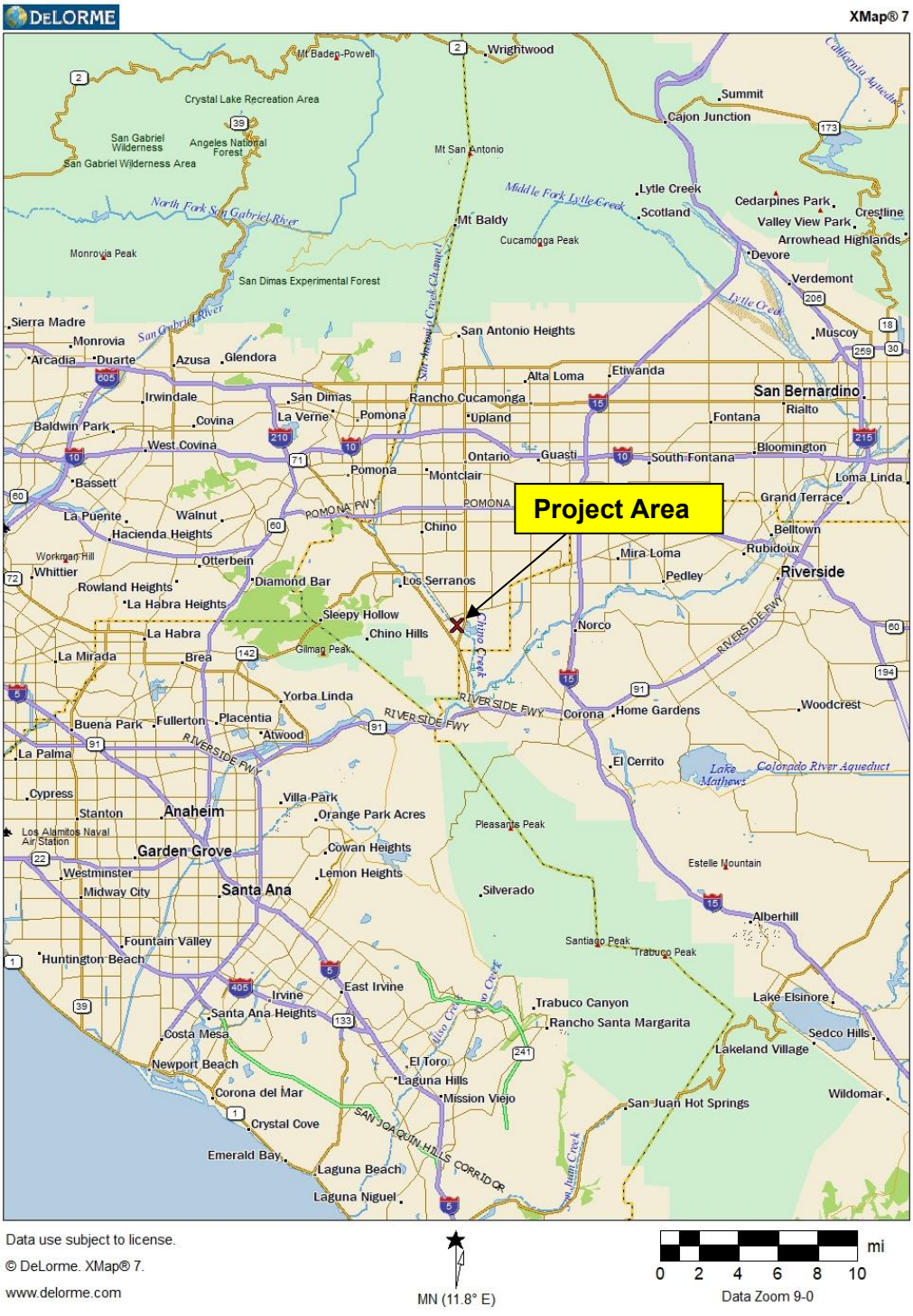


FIGURE 2 – Site Location Map

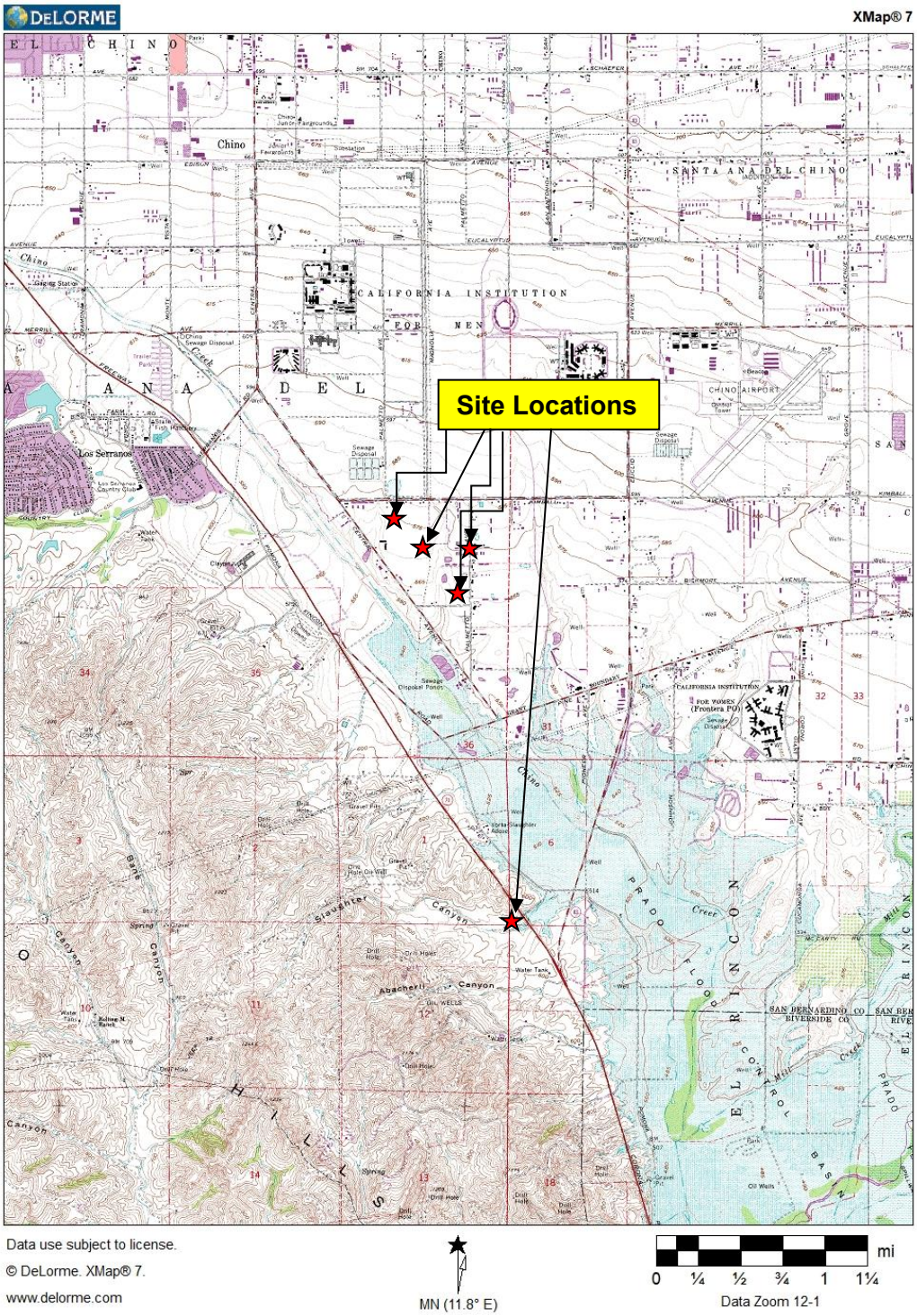


FIGURE 3– Impact Areas Location Map

FIGURE 4– Temporary Laydown Areas Location Map

2.0 REGULATORY SETTING AND STUDY METHODS

This chapter presents the methods used to identify biological resources on the project site. In addition, this chapter provides an overview of the various regulatory requirements, definitions of terms used, background review conducted, field surveys, post-field data processing, personnel and survey dates, and coordination efforts with agency and professional contacts. It also summarizes the study limitations and how they may influence the results presented in this report.

Before conducting field surveys, existing background information was reviewed to identify the locations of jurisdictional waters, special-status plant and wildlife species, special-status plant communities, natural lands, and federally designated or proposed critical habitat units recorded or potentially occurring in the proposed infrastructure improvement areas. This section summarizes the background information that was reviewed.

2.1 Regulatory Requirements

2.1.1 Federal

2.1.1.1 Clean Water Act

The purpose of the Clean Water Act (CWA) (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 was amended on September 8, 2023, and includes the following definition of Waters of the U.S:

The USACE has authority to permit the discharge of dredged or fill material in WOTUS under Section 404 of the CWA. According to the EPA and the Department of the Army's January 18, 2023 (amendment effective September 8, 2023) "Amended 2023 Waters Rule: Definition of 'Waters of the United States,'" WOTUS are defined as: "

(a)(1) Waters which are:

i) Currently used or were used in the past or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
ii) The territorial seas; or
iii)Interstate waters

(a)(2) Impoundments of Jurisdictional Waters

(a)(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water.

(a)(4) Adjacent Wetlands: Wetlands adjacent to the following waters: Areas meeting all three wetland parameters (i.e., hydrophitic vegetation, hydric soils and wetland hydrology) and are adjacent to other jurisdictional waters would be designated as USACE wetlands, and are adjacent to the following:

i) Waters identified in paragraph (a); or

ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters.

(a)(5) Additional Waters: Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing ponds of water with continuous surface connection to waters identified in paragraph (a)(1) or (a)(3) of this section.

There are no wetland or non-wetland WOTUS within the Project Area. Therefore, the Project will not result in any permanent or temporary impacts to WOTUS as defined above. 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 RWQCB.

2.1.1.2 Section 10 of the Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable waters of the United States.

2.1.1.3 Endangered Species Act

The Federal Endangered Species Act (FESA) (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 FESA (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 FESA, 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. FESA 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 FESA 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 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.

2.1.1.4 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.

2.1.1.5 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. Section 1801 et seq.) requires all federal agencies to consult with the NMFS on all actions or proposed actions (permitted, funded, or undertaken by the agency) that may adversely affect fish habitats. It also requires cooperation among NMFS, the councils, fishing participants, and federal and state agencies to protect, conserve, and enhance essential fish habitat, which is defined as those waters and substrates needed by fish for spawning, breeding, feeding, and growth to maturity.

2.1.1.6 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.

2.1.1.7 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (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).

2.1.1.8 Executive Orders (EO)

2.1.1.8.1 Invasive Species—Executive Order 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.

2.1.1.8.2 Protection of Wetlands—Executive Order 11990 (1977)

Issued on May 24, 1977, helps avoid the long-term and short-term adverse impacts associated with destroying or modifying wetlands and avoiding direct or indirect support of new construction in wetlands when there is a practicable alternative.

2.1.1.8.3 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*).

2.1.2 State

2.1.2.1 California Fish and Game Code (CFGC)

2.1.2.1.1 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.

2.1.2.1.2 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).

2.1.2.1.3 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.

2.1.2.1.4 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.

2.1.2.1.5 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.

2.1.2.1.6 Natural Communities Conservation Planning Act

This act was enacted to encourage broad-based planning to provide for effective protection and conservation of the state's wildlife resources while continuing to allow appropriate development and growth (CFGC Sections 2800 to 2835). Natural Community Conservation Plans (NCCP) may be implemented, which identify measures necessary to conserve and manage natural biological diversity within the planning area, while allowing compatible and appropriate economic development, growth, and other human uses.

2.1.2.1.7 Senate Concurrent Resolution No. 17 – Oak Woodlands

State Senate Concurrent Resolution No. 17 is legislation that requests state agencies having land use planning duties and responsibilities to assess and determine the effects of their decisions or actions within any oak woodlands containing Blue, Engleman, Valley, or Coast Live Oak. The measure requests those state agencies to preserve and protect native oak woodlands to the maximum extent feasible or provide replacement plantings where designated oak species are removed from oak woodlands. The mitigation measures, as described above, will ensure that impacts to oak woodlands are less than significant.

2.1.3 Local

General, Specific, or Rural Community Plans or Municipal Codes for each local jurisdiction through which the Project passes were reviewed for regulations pertaining to biological resources. Most of the local jurisdictions have few regulations relating to biological resources due to the low-density population nature of the land. Local regulations are listed below:

2.1.3.1 San Bernardino

2.1.3.1.1 Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009) Development Code 88.01.010

This Ordinance provides regulations and guidelines for the management of plant resources in the unincorporated areas of the County on property or combinations of property under public ownership. The intent is to:

(a) Promote and sustain the health, vigor and productivity of plant life and aesthetic values within the County through appropriate management techniques.

(b) Conserve the native plant life heritage for the benefit of all, including future generations.
(c) Protect native trees and plants from indiscriminate removal and to regulate removal activity.
(d) Provide a uniform standard for appropriate removal of native trees and plants in public and private places and streets to promote conservation of these valuable natural resources.
(e) Protect and maintain water productivity and quality in local watersheds.

(f) Preserve habitats for rare, endangered, or threatened plants and to protect animals with limited or specialized habitats.

2.2 Studies Required

Prior to beginning the field surveys, available information was reviewed from resource management plans and other relevant documents to determine locations and types of biological resources that have the potential to exist within and adjacent to the APE.

The 2023 California Natural Diversity Database (CDFW, 2023), U.S. Fish and Wildlife Service Quad lists and IPac (USFWS, 2023 Attached), California Native Plant Society Electronic Inventory of Rare and Endangered Plants of California, and National Wetlands Inventory (USFWR, 2015) were queried for occurrence of special status species and habitats within the Rp-5 Plant site. CDFW Bios database was also queried for general habitat types and potential features subject to environmental regulations (e.g., Clean Water Act [CWA], Porter-Cologne Water Quality Control Act [Porter-Cologne] and California Department of Fish and Wildlife's Fish and Game Code 1600 et seq. jurisdictional features) that may exist within or adjacent to the APE.
In addition to the aforementioned literature reviews, field surveys of the APE were performed to assess general and dominant vegetation types, habitat types, and the potential for special status wildlife and plant species to occur within the project area. Community types were based on observed dominant vegetation composition and density. Vegetation classifications of plant communities in the APE were derived from the criteria and definitions of Holland (1986). The result of this survey is that no follow-on or focused surveys are warranted.

2.3 Personnel and Survey Dates

The biological analysis for this site included in this section is based on a field survey conducted by Lisa Patterson on September 20, 2023 between 0800 and 1000. The weather condition was partly cloudy to cloudy with winds of 5 to 7 miles per hour and 85 degrees Fahrenheit.

2.4 Habitat Assessment

The APE was also assessed in the field for the potential to support special-status plant and animal species based on habitat suitability comparisons with reported occupied habitats. The following potential for occurrences definitions were utilized to assess the Project-related effects to species with the Project's footprint. Potential for occurrence designations were derived from Caltrans' standard environmental reference (Caltrans 2005):

Absent [A] - Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the Project's physical disturbance footprint, and no further survey or study is necessary to derermine the likely presence or absence of this species.

Habitat Prsent [HP] - Species distribution is restricted by substantive habitat requirements, which occur within the Project's physical disturbance footprint, and further survey or study may be necessary to determine the likely presence or absence of this species.

Present [P] - Species or species sign were observed within the Project's physical disturbance footprint.

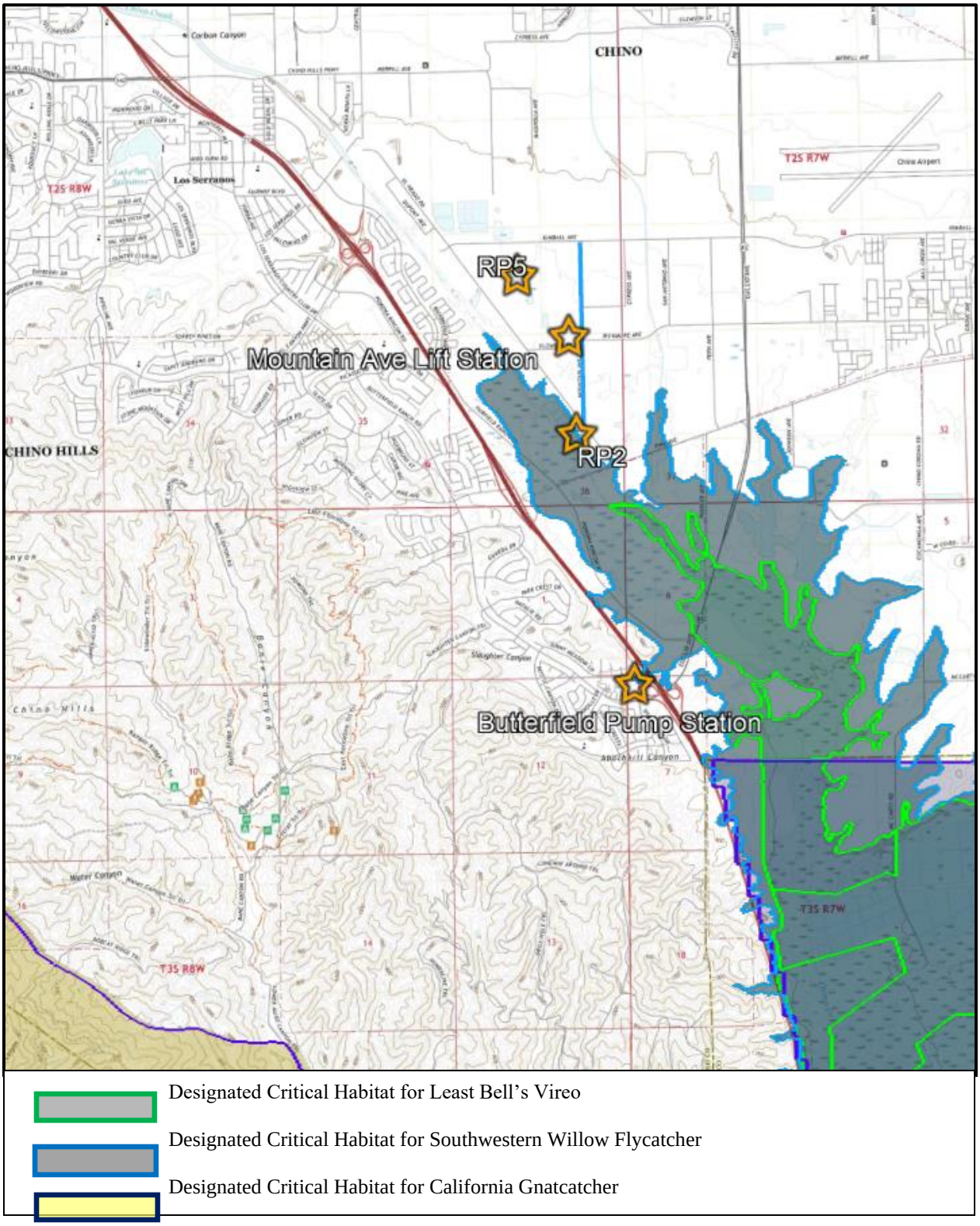
Critical Habitat [CH] - The Project's footprint is located within a designated critical habitat unit.

No focused Endangered Species Surveys were conducted.

2.5 Limitations That May Influence Results

Surveys were conducted during the appropriate time of year and conditions to detect any sensitive or listed species within the APE. Typically, biological surveys are valid for one year. Estimations and assumptions regarding the potential for jurisdictional waters and special-status species were based on assessments from previous projects, and existing IEUA permits and resource information.

FIGURE 5– Designated Critical Habitat Map



3.0 ENVIRONMENTAL SETTING

The general City of Chino area lies within the northern/northwestern portion of the Peninsular Geomorphic Province of southern California, which is characterized by northwest-southwest-trending faults, folds, and mountain ranges. The Site is situated on a broad alluvial fan, which extends from the southern flank of the San Gabriel Mountains and dips gradually southward to the confluence of San Antonio Channel, Cucamonga Channel/Mill Creek, and the Santa Ana River at the Prado Dam Flood Control Basin in Riverside County. Elevation ranges from 1,150 feet above mean sea level (amsl) in the northwest portion to 650 feet amsl in the south-central portion of the City (USGS 1978).

Climate
The City of Chino is located in the Transverse Ranges geomorphic province, which is characterized by an east-west trending series of steep mountain ranges and valleys (Jenkins 1980). It lies on the gentle, south-facing slope of an alluvial fan extending from the foothills of the San Gabriel Mountains to the Santa Ana River, the main natural waterway in the San Bernardino Valley. The Mediterranean climate of the region is typical of inland southern California lowlands, featuring hot, dry summers and mild, wet winters. The average annual rainfall in the region is approximately 12 inches, most of which typically falls between January and April.

Geology
Recent (quaternary) alluvium underlies the entire valley. The western portion of the proposed Project area is underlain by young alluvial-fan deposits. The eastern portion is primarily underlain with young eolian (wind driven) deposits with small areas of young alluvial-fan deposits, artificial fill, and young alluvial-valley deposits.

Soils
The Site is located in a region that is made of the alluvial valley floors, fans, and terraces that cover broad areas of southwest San Bernardino County, extending eastward from Chino to the general vicinity of Yucaipa. The Soil Conservation Service Soil Survey of San Bernardino County, Southwestern Part (USDA 1980) identifies four soil types mapped for the City area include:

- Chino Silt Loam (Cb) A Parent material: Alluvium derived from mixed silt loam and clay loam within flood plains.

- Chualar clay loam (CkA). This soil series consists of well drained, nearly level to moderately sloping soils formed on alluvial fans in granitic alluvium. These soils are rapidly permeable and are used mainly for irrigated citrus and dry farmed seeded pasture.

3.1 Description of the Existing Biological and Physical Conditions

The proposed project occurs entirely within the developed facility, and on a completely disturbed parcel (a closed wastewater treatment plant site). The project area no longer supports native plant communities, and the site does not provide suitable habitat for any of the sensitive plant and wildlife species identified in the state and federal data bases as having potential to occur in the general vicinity of the proposed project site. Further, based on habitat requirements for sensitive species identified in these database searches; and the availability and quality of habitats needed by each of the identified sensitive plant and wildlife species; it is determined that the project site

does not provide suitable habitat that would support any of the listed species. However, burrowing owl does occur along the southern boundary of the site and within the emergency overflow pond on the southeast corner of the parcel.

3.1.1 Vegetation Communities

3.1.1.1 Urban/ Disturbed

All of the facilities are completely hardscaped and do not support any vegetation communities. The proposed pipeline down Mountain Avenue is a busy asphalt road. The northern potion of this road is developed with commercial building sidewalks and andscaped parkways. The southern portion of the road is a developed and maintained golfcourse. With disturbed shoulders. There are no natural vegetative communities. This that does occur is characterized by storksbill (*Erodium cicutarium*), foxtail chess (*Bromus madritensis*), wild oats (*Avena barbata*), ripgut brome grass (*Bromus diandris*), and foxtail fescue (*Vulpia myuros*). Other species occurring in this community are short-pod mustard (*Brassica geniculata*), barley (*Hordium vulgare*), *Amsinkia sp*., and star thistle (*Centaurea melitensis*).

Due to the urban environment as well as the developed treatment facilities and pump stations, this area does not support a diverse fauna. The most common animal species observed on the site were dogs (*Canis lupus familularis*) and beachy ground squirrels (O*tospermophilus beecheyi*). Other common species include western meadowlark (*Sturnella magna*), and mourning doves (*Zenaida macroura*.

3.1.2 Animals

Due to the chronic disturbances, surrounding industrial uses, major arterial and highway road features, and adjacent construction, this area does not support a diverse fauna. The most common species observed on the site were dogs (Canis lupus familularis) and beachy ground squirrels (*Otospermophilus beecheyi*). Other common species include western meadowlark (*Sturnella magna*), and mourning doves (*Zenaida macroura*). A complete list of species observed on site is included as Appendix A

3.1.3 Disturbances

The level of disturbance within the Project APE is severe, and there are no natural habitats within the project APE. The majority of the areas adjacent the APE along the proposed facilities range from landscaped gardens, commercial building and facilities, to compacted unvegetated dirt pads, channel, basins, and roads.

3.1.4 Jurisdictional Determination

The result of the jurisdictional determination is that no features subject to jurisdiction by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act; the State Water Quality Control Board under Section 401 of the Clean Water Act, and California Department of Fish and Wildlife under Section 1600 of the Fish and Game Code occur within the APE. Further, no regulatory permitting is required.

3.2 Potentially Occurring Listed or Protected Species within the APE

California Department of Fish and Wildlife's CNDDB for the “Prado Dam” USGS 7.5 Minute Quadrangles, and the U.S. Fish and Wildlife Service’s IPac were reviewed, The following is a discussion of the species listed by the databases as occurring within the vicinity of the Project. Note the Species on the U.S. Fish and Wildlife Service's list are in bolded text.

TABLE 1: SPECIAL STATUS PLANT AND ANIMAL SPECIES KNOWN TO OCCUR OR POTENTIALLY OCCUR WITHIN THE PROJECT AREA (USGS PRADO DAM QUADRANGLE)

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
Abronia Villosa var. *aurita* Chaparral sand-verbena	N / N	Grows in sandy, bare areas of chaparral and coastal sage scrub.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Accipiter cooperi (nesting3) Cooper’s hawk	N/N	Oak and riparian woodlands, windrows, open fields. Known to use urban areas, occupying trees among residential and commercial uses.	No Suitable foraging habitat occurs within the APE, Observed on site during field surveys.
Accipiter striatus (nesting) sharp-shinned hawk	N/N	Variety of residential, chaparral, grassland, sage scrub, crop land, riparian, and oak woodland, windrows, open fields.	Marginally Suitable foraging habitat, however uncommon in the area. Probability of occurrence is low to moderate.
Agelaius tricolor ***Tricolored blackbird***	**N/N**	**Marshes and grasslands. Breeding colonies requires nearby water, nesting substrate, and open range foraging habitat of natural grassland, woodland, or agricultural cropland.**	No Suitable foraging habitat occurs within the APE, Observed on site during field surveys.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	N / N	Inhabits steep rocky hillsides with grass and forb patches in coastal sage scrub and sparse chaparral.	No Suitable foraging habitat occurs within the APE, Observed on site during field surveys.
Anaxyrus californicus **Arroyo Toad**	**E/N**	**Anaxyrus californicus prefers sandy or cobbly washes with swift currents and associated upland and riparian habitats, in Southern California and Baja California. An arroyo is also called a wash; it is a dry creek or stream bed. It fills and flows after sufficient rain, but only temporarily during specific seasons. The arroyo toad inhabits these areas alongside rivers with shallow pebble-like rocks near sandy terrains.**	**No suitable habitat for this species occurs within the APE. Therefore probability of occurrence is zero.**
Antrozous pallidus pallid bat	N/N	Oak and grassland ecotones. Prefers foraging in the open Roosts in attics or rock cracks; in the open, near foliage at night..	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
Aquila chrysaetos golden eagle	N / DFG fully protected species	Nests in cliff-walled canyons or large trees and nests and winters in rolling foothills mountain areas, sage-juniper flats and desert.	There is no suitable nesting substrate within the project APE, further there is no potential foraging within the APE
Ardea alba [Casmerodius albus] (rookery) great egret	N/N	Wet areas, fields, margins of open water.	No Suitable foraging habitat occurs within the APE, Observed on site during field surveys.5.
Ardea herodias (rookery) great blue heron	N/N	Wet areas, fields, margins of open water.	No Suitable foraging habitat occurs within the APE, Observed on site during field surveys.
Asio flammeus **short-eared owl**	**N / N**	**Nests in riparian bottomlands of tall willows and cotton- woods and in belts of live oak paralleling stream courses. Requires adjacent open lands for foraging and the presence of old nests of crows, hawks, or magpies for nests.**	**No suitable habitat occurs within the project APE, therefore, occurrence potential is low.**
Aspidoscelis tigris stejnegeri [Cnemidophorus tigris multiscutatus] coastal (western) whiptail	N/N	Open, often rocky areas with little vegetation or sunny microhabitats within shrub or grassland associations	Limited to no suitable habitat. Probability of this species occurring within the APE is low..
Astragalus brauntonii **Braunton's Milk-vetch**	**E/N**	**Astragalus brauntonii is a plant of the coastal prairie grasslands, coastal sage scrub, and chaparral plant communities of the region. It is often found growing in disturbed areas, especially in carbonate soils areas.[**	**The 16 known remaining populations are found in the southwestern Transverse Ranges (eastern Santa Monica Mountains, east end Simi Hills, south base San Gabriel Mountains), northern Peninsular Ranges (northwest side Santa Ana Mountains) — within Los Angeles, Orange, and Ventura Counties The site is outside the known range of this species and there are no suitable soils within the APE. Therefore the probability occurrence is zero.**

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
Athene cunicularia **burrowing owl**	**N/N**	**Subterranean nester, dependent upon burrowing animals such as ground squirrels and desert tortoise for burrow sites. Inhabits open, dry annual or perennial grasslands as well as deserts and scrublands characterized by low-growing vegetation. Shortgrass prairies, grasslands lowland scrub, agricultural lands, coastal dunes, desert floors, and some artificial open areas. Uses abandoned ground squirrel burrows and artificial structures such as berms, culverts, and underpasses.**	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Atriplex coulteri Coulter's saltbush	N / N	Grows on ocean bluffs, dunes and ridgetops, as well as in alkaline low places in coastal scrub, valley and foothill grassland between 10 and 440 meters.	No Suitable foraging habitat occurs within the APE, Observed on site during field surveys.
Baeolophus inornatus *Oak Titmouse*	N/N	It prefers open woodlands of warm, dry oak and oak-pine at low to mid-elevations but can also be found in forests as long as adequate oak trees are present.	No suitable habitat for this species occurs within the APE. Therefore probability of occurrence is zero.
Buteo regalis (wintering) ferruginous hawk	N/N	Grasslands and other open terrain of the plains and foothills. Wintering species. Primarily open fields with low vegetation.	No Suitable foraging habitat occurs within the APE, Observed on site during field surveys.
Buteo swainsoni *Swainson's Hawk*	N/N	Grasslands and other open terrain.	No Suitable foraging habitat occurs within the APE, Observed on site during field surveys..
California Walnut Woodland	N / N		No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur..
Calochortus weedii var. *intermedius* intermediate mariposa lily	N / N	Grows on dry, rocky open slopes and rock outcrops between 120-850meters in coastal scrub, chaparral, valley and foothill grassland.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Carduelis lawrencei Lawrence's Goldfinch	N/N	The typical nesting habitat is dry and open woods that are near both brushy areas and fields of tall annual weeds, usually within 0.5 mi (0.80 km) of a small body of water. It may nest in other habitats, including rural residential areas, but not in deserts or dense forests. Outside the nesting season it occurs in many open habitats including deserts, suburbs, and city parks	This species in not likely to occur during nesting season, however may utilize the area during migration or in winter. Probability of occurrence within the APE is low to moderate.

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
Carpodacus cassinii *Cassin's Finch*	N/N	Their breeding habitat is coniferous forest in mountains of western North America as far south as northern New Mexico and Arizona; also Southern California near Baja California. They nest in large conifers. They move to lower elevations in winter.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Calypte costae *Costa's Hummingbird*	N/N	Arid brushy deserts and any nearby gardens of the Southwestern United States and the Baja California Peninsula of Mexico.	Marginally Suitable foraging habitat, however uncommon in the area. Probability of occurrence is low to moderate.
Catostomus santaanae Santa Ana sucker	T / SC	This species is typically fund in small to medium sized streams with width less than 7 meters and depths of a few centimeters to over a meter. Suckers prefer clear water but can tolerate seasonal turbidity and sever periodic flooding. Adults prefer gravel and cobble substrates, but may tolerate sand. Juveniles may prefer sandy substrates. They appear intolerant of highly polluted or highly modified streams. It is endemic to Los Angeles basin south coastal streams.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
Chaetodipus [Perognathus] fallax fallax northwestern San Diego pocket mouse	None/None	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities Moderately gravelly and rocky substrates, disturbed grassland and open sage scrub vegetation with sandy-loam to loam soils.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
Charadrius montanus mountain plover	N/N	Dry upland prairies and plains, semi-desert, bare dirt fields.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
Circus cyaneus (nesting) northern harrier	N/N	Grasslands and other open terrain. Soars over open fields, low perches.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
Clemmys marmorata pallida southwestern pond turtle	SC / SC	This species inhabits permanent or nearly permanent bodies of water in many habitat types below 6000 ft elevation. Requires basking sites such as partially submerged logs, vegetation mats, or open mud banks and suitable nesting sites.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Cnemidophorus hyperythrus orange-throated whiptail	N / SC	Inhabits washes and other sandy areas with patches of brush and rocks with sufficient perennial plants to sustain termite populations in low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
Coccyzus americanus occidentalis western yellow-billed cuckoo	C / E	Nests in riparian thickets of willow and cottonwood with blackberry, nettles, or wild grape understory along the broad, lower flood-bottoms of larger river systems.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
Contopus cooperi *Olive-sided Flycatcher*	N/N	Breeding habitat is coniferous woods across Canada, Alaska and the northeastern and western United States, and other types of wooded area in California. Olive-sided flycatchers are abundant in early post fire landscapes that have burned at high severity. This species migrates to Central America and the Andes region of South America.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
Corynorhinus townsendii Townsend's big-eared bat	N/N	A wide variety of habitats including woodlands and arid grasslands. Roosts in mines and caves.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
Dendroica petechia brewsteri yellow warbler	N / SC	Most often nests in riparian areas with willows, cotton- woods, aspens, sycamores and alders but also in montane shrubbery in open conifer forests.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Diadophus punctatus modestus San Bernardino ringneck snake	N/N	Chaparral, coastal sage scrub, grassland, riparian, and woodlands	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Dodechahema leptoceras **Slendar-horned Spineflower**	**E/E**	**This plant grows in the silt-rich floodplains and washes of the foothills of the Transverse Ranges and the Peninsular Ranges of southern California. It is known from fewer than 40 reported sightings, many of which were in locations that have since been claimed for development or otherwise altered. About 19 occurrences are believed to exist now.[1] This plant has been recorded in only a few general areas, including Tujunga Wash and the flood lands surrounding the Santa Ana and San Jacinto Rivers**	**There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE**
Dudleya multicaulis many-stemmed dudleya	N/N	Grows in heavy, often clayey soil in chaparral, coastal scrub, valley and foothill grassland between 0 and 790 meters. Endemic to Southern California.	No suitable habitat occurs on the site. Occurrence potential is very low.

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
Dipodomys merriammi parvus ***San Bernardino kangaroo rat***	**E/N**	**Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. Prefers sandy loam substrates. Santa Ana River, Cajon Creek Wash, Lytle Creek Wash, City Creek, and upper Etiwanda Wash in San Bernardino County, and sites in western Riverside County**	**There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE**
Egretta thula (rookery) snowy egret	N/N	Wet areas, fields, margins of open water.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
Elanus leucurus (nesting) white-tailed kite	N/N	Open woodlands and grasslands, windrows. Hovers over open fields.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE.
Empidonax traillii **willow flycatcher**	**E / E**	**Inhabits extensive thickets of low, dense willows on edges of wet meadows, ponds, or backwaters between 2000-8000 elevation.**	**There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE**
Eremophila alpestris actia California horned lark	N/N	Variety of open habitats, usually where trees and large shrubs are absent.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Eriastrum densifolium **ssp.** ***sanctorum*** **Santa Ana River woollystar**	**E / E**	**Grows on sandy soils of riparian floodplains and terraced fluvial deposits between 150 and 610 meters. Formerly known from Orange and San Bernardino Counties but has been extirpated by much of its former range.**	**The site does not contain flood deposited terraces, and therefore, no suitable habitat occurs on the site. There is no potential for this species to occur on the site.**
Euderma maculatum spotted bat	N/N	Arid deserts, grasslands, and mixed conifer forests. Roosts in rock crevices.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Eumops perotis californicus California mastiff bat	N/N	Open areas with high cliffs.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Falco columbarius (wintering) merlin	N/N	Grasslands, coastal sage scrub and estuaries, windrows, open fields.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
Falco mexicanus (nesting) prairie falcon	N/N	Grasslands, coastal sage scrub and estuaries.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
Falco peregrinus anatum (nesting peregrine falcon*)*	Delisted/SE	Estuaries, wetlands, and coastal bluffs. Breeding habitat in high cliffs along the coast.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Gila orcutti Arroyo chub	N / N	Inhabits slow moving streams with mud or sand bottoms and emergent vegetation. Feeds on aquatic vegetation and associated invertebrates.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
Gymnogyps Californianus ***California Condor***	**E/E**	**Its range includes rocky, open-country scrubland, coniferous forest and oak savanna. Cliffs, rocky outcrops or large trees are used as nest sites (USFWS 1996). It scavenges on the carcasses of large mammals and also feeds on the carcasses of small mammals, but perhaps only where there are sufficient numbers at one site (L. Kiff in litt. 2009). Released birds have become increasingly independent in finding food and may range more than 400 km from release sites (Anon. 1998).**	**Although the APE is within 400 Km of foraging Condors, none have been observed in the area. Further there is no suitable sized carrion for forage within the urbanized area of the project site. The probability of this species occurring within the project APE is zero.**
Haliaeetus leucocephalus ***Bald Eagle***	**Delisted/N**	**The bald eagle typically requires old-growth and mature stands of coniferous or hardwood trees for perching, roosting, and nesting. Tree species reportedly is less important to the eagle pair than the tree's height, composition and location.[29] Perhaps of paramount importance for this species is an abundance of comparatively large trees surrounding the body of water.**	**There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE**
Icteria virens Yellow-breasted chat	N / N	A summer resident that nests in low, dense riparian growth consisting of willow, black- berry and wild grape. It forages and nests within 10 feet of the ground.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
Ixobrychus exilis *Least Bittern*	N/N	These birds nest in large marshes with dense vegetation from southern Canada to northern Argentina. The nest is a well-concealed platform built from cattails and other marsh vegetation.	There is no suitable habitat for this species within the APE. Further the APE is outside the known range for this species. There is no potential for this species to occur within the project APE

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
Lanius ludovicianus loggerhead shrike	N/N	Grasslands and open scrub. Forages in open country, using low perches (fences etc.) for scanning, and nests in dense scrub and brush.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Larus californicus (nesting colony California gull*)*	N/N	Nearly all types of fresh and salt water, cropland, landfills, refuse areas, open lawns.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Lasiurus xanthinus western yellow bat	N/N	Desert regions of the southwestern U.S., southern California. Capture sites are often associated with water features; open grassy areas and scrub, canyons and riparian areas, orchards. Particular association with palms in oases and ornamental palms in landscaping.	There is no suitable habitat for this species within the APE. Further the APE is outside the known range for this species. There is no potential for this species to occur within the project APE
Lepus californicus bennettii San Diego black-tailed jackrabbit	N/N	Coastal sage scrub and on the margins between shrub and herbaceous areas. Also know to occur in agricultural and ruderal areas.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Melanerpes lewis Lewis's Woodpecker	N/N	Three principal habitats are open ponderosa pine forest, open riparian woodland dominated by cottonwood, and logged or burned pine forest Breeding: From interior southern British Columbia and southwestern Alberta south to Lewis's Woodpecker range: Arizona and New Mexico, and from coastal California east to Colorado. Virtually the entire Canadian population occurs in British Columbia. Winter: Interior southern British Columbia (casually) south through the western states to northern Mexico, but mainly in the southwestern United Sta	The site is outside the known range of this species and there are no suitable soils within the APE. Therefore the probability occurrence is zero.
Myotis ciliolabrum small-footed myotis	N/N	Feeds among trees or over brush. Roosts in caves, mines, and in cliff or rock openings.	Probability of this species occurring within the APE is moderate to high.
Myotis yumanensis Yuma myotis	N/N	Water and wooded canyon bottoms. Roosts in caves and abandoned buildings.	Probability of this species occurring within the APE is moderate.
Neotoma lepida intermedia San Diego desert woodrat	N/N	Riversidean and coastal sage scrub, chaparral and nonnative grasslands. Shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
Nolina cismontana chaparral nolina	N / N	Grows primarily on sand- stone and shale and occasionally gabbro substrates in chaparral and coastal scrub habitats between 140 and 1,275 meters.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Numenius americanus long-billed curlew	N/N	Coastal estuaries, upland herbaceous areas, croplands, wet areas, open fields, shores of open water.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Nyctinomops Macrotis big free-tailed bat	N/N	Desert habitats. Roosts in rock crevices in cliffs.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Nyctinomops Femorosaccus pocketed free-tailed bat	N/N	Desert habitats. Roosts in rock crevices in cliffs.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Otus flammeolus *Flammulated Owl*	N/N	This species is generally associated with montane forested habitats often with brushy understory. This owl may also occur in forests with mixes of oak, Douglas Fir, white fir, incense cedar, or sugar pine.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Passerella iliaca *Fox Sparrow*	N/N	Fox sparrows commonly breed in coniferous or mixed forests, which have dense undergrowth and shrub. They also breed in woodland thickets, scrub, chaparral, and riparian woodland. During the winter months, fox sparrows are commonly found in forests, forest edges, woodlots, and other woodland habitats that have dense undergrowth	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur..
Perognathus longimembris brevinasus Los Angeles pocket mouse	N/N	Inhabits open ground of fine sandy composition. Probably prefers sparsely vegetated habitats.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Phalacrocorax auritus double-crested cormorant	N/N	Lakes, fresh, salt, and estuarine waters	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
Picoides albolarvatus ***White headed woodpecker***	**N/N**	**Found on mountaintops of the San Gabriel Mountains to San Diego County**	**No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.**

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
Picoides nuttalli ***Nuttall's Woodpecker***	**N/N**	**Preferred habitat is arid to mesic woodlands. In particular, these woodpeckers prefer oak woodlands, although they also occur in riparian sites and chaparral in the most southern parts of its range because of the decrease in oak abundance.**	**No suitable habitat for this species occurs on the site. Probability of occurrence adjacent to the APE is very low.**
Plegadis chihi (rookery site) white-faced ibis	N/N	Freshwater marshes and brackish areas.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
Pipilo chlorurus Green-tailed Towhee	N/N	Breeding range covers most of the interior Western United States, with a winter range in Mexico and the southern edge of the Southwestern United States.	The site is outside the known range of this species and there are no suitable soils within the APE. Therefore the probability occurrence is zero
Polioptila californica californica **Coastal California gnatcatcher**	**T / N**	**Inhabits various successional stages of the sage scrub communities characterized by Artemisia californica, Eriogonum fasciculatum, Encelia farinosa, Salvia spp., and Opuntia spp. CAGN will also utilize chaparral, grassland, and riparian plant communities where they occur adjacent to or intermixed with sage scrub.**	**The site is not within proposed or designated critical habitat for this species. Focused Protocol Survey was conducted for CAGN. The result of this survey it there CAGN is absent from the site.**
Rhaphiomidas terminatus abdominalis Delhi Sands flower- loving fly.	E/N	Wholly or partially consolidated dunes (Delhi soils series), open sand. Fine, sandy soils with sparse vegetation cover of California buckwheat, croton, deerweed, and evening primrose	No Suitable habitat occurs within the Project APE. Therefore the probability of occurrence is zero
Rana muscosa ***Mountain Yellow-legged frog***	**E/E**	**The frog occurs in mountain creeks, lakes and lakeshores, streams, and pools, preferring sunny areas. It rarely strays far from water. The tadpoles require a permanent water habitat for at least two years while they develop. The frog has been noted at elevations of between about 1,214 and 7,546 feet (370 and 2,300 meters) in Southern California**	**No suitable habitat for this species occurs on the site. Therefore there is no potential for this species to occur.**
Sidalcea neomexicana Salt Spring Checkerbloom	N / N	Grows in alkali springs and marshes in alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest and Mojavean desert scrub between 0-1500 meters in elevation.	No Suitable habitat occurs within the Project APE. Therefore the probability of occurrence is zero

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
Spea [Scaphiopus] hammondi western spadefoot toad	N/N	Seasonal pools in coastal sage scrub, chaparral, and grasslands.	Marginally suitable habitat occurs within the APE. Therefore the probability of occurrence is low.
Sphyrapicus thyroideus *Williamson's Sapsucker*	N/N	Breeding habitat is open forested areas with conifers, mainly ponderosa pine, douglas fir, and grand fir. Subalpine fir and western larch may also be important components of good habitat for these birds.[2] Partially migratory, they breed in western North America from northern Mexico as far north as British Columbia	No Suitable habitat occurs within the Project APE. Therefore the probability of occurrence is zero
Spizella atrogularis Black-chinned Sparrow	N/N	Common in open chaparral in the mountain and foothills of Los Angeles and Santa Barbara Counties. Transient in San Bernardino County.	The APE is outside the typical range for this species. Probability of occurrence is very low.
Spizella breweri Brewer's Sparrow	N/N	This species breeds on sagebrush flats and other open scrubby areas. It winters from just south of the breeding range in south-western USA to central Mexico	The APE is outside the typical range for this species. Probability of occurrence is very low.
Stellula calliope Calliope Hummingbird	N/N	The breeding habitat of calliope hummingbird is varied among open shrub habitats and altitudes. Nesting usually occurs at higher altitudes in the Rocky Mountains. Nests have been observed from as low as 300 m (980 ft) in Washington elevation to the tree line at over 3,000 m (9,800 ft). In Montana, the minimum elevation observed for breeding is 1,200 m (3,900 ft).[4][5] Open montane forest, mountain meadows, and willow and alder thickets may variously serve as breeding grounds. During migration and winter, they also occur in chaparral, lowland brushy areas, deserts and semi-desert regions	The APE is outside the typical range for this species. Probability of occurrence is very low.

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
Strix occidentalis occidentalis California Spotted Owl	Review/N	California spotted owls occur in hardwood, coniferous, and coniferous-hardwood forests. Occupied coniferous habitats include mixed coniferous forests. California red fir and eastside pine forests which are composed of ponderosa pine and/or Jeffrey pine (Pinus jeffreyi). Redwood/California bay (Umbellularia californica), ponderosa pine/hardwood,[20] and live oak-bigcone Douglas-fir (Quercus chrysolepis or Q. agrifolia-Pseudotsuga macrocarpa) are hardwood-mixed coniferous forests used by California spotted owls. They also occur in hardwood habitats including riparian and oak (Quercus sp.) woodlands. For example, in the Tehachapi Mountains of southern California they occurred in stands dominated by canyon live oak (Q. chrysolepis).[	No suitable habitat for this species occurs on the site. Therefore there is no potential for this species to occur.
Toxostoma lecontei Le Conte's Thrasher	N/N	The typical desert habitat consists of dunes, alluvial fans, and flat to gently rolling hills with shallow washes with sparse vegetation. The vegetation that it may utilize includes low vegetation such as saltbush, creosote, cholla cacti, and Mojave yucca. The range of altitude spans as low as 80 m below sea level (in Death Valley) to as high as 1,600 m, although 500 m above sea level is the average	No suitable habitat for this species occurs on the site. Therefore there is no potential for this species to occur.
Vireo bellii pusillus **least Bell's vireo**	**E / E**	**Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite. In low riparian, in vicinity of water or in dry river bottoms below 2000 ft.**	**No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.**

Bold Indicates the species occurs on the U.S. Fish and Wildlife Service's List

4.0 RESULTS

The purpose of this report is to assess the biological resources and the potential impacts associated with the Inland Empire Utility Agencies (IEUA) proposed RP5 Liquids Expansion Projects. The Area of Potential Effect (APE) is delineated to encompass the maximum extent of ground disturbance or construction areas required for the proposed projects.

The proposed project occurs entirely within the developed facility, and on a completely disturbed parcel (i.e., closed wastewater treatment plant sites, roads, and pumpstations). The project area no longer supports native plant communities, and the site does not provide suitable habitat for any of the sensitive plant and wildlife species identified in the state and federal data bases as having potential to occur in the general vicinity of the proposed project site. Further, based on habitat requirements for sensitive species identified in these database searches; and the availability and quality of habitats needed by each of the identified sensitive plant and wildlife species; it is determined that the project site does not provide suitable habitat that would support any of the listed species.

The biological analysis for this site included in this section is based on a field reconnaissance visit conducted by Tom Dodson and a (Jacobs) biologist, Lisa Patterson, conducted on September 18, 2023 between 0800 and 1000.

A preliminary jurisdictional delineation was assessed using the Sackett Guideline in order to determine what areas on the project sites will likely be subject to jurisdiction under Sections 404 and 401 of the Clean Water Act. The U.S. Army Corps of Engineers has authority in conjunction with EPA to determine jurisdiction. Additionally, a Jurisdictional Assessment was conducted to determine if project areas would be subject to a Section 1600 Agreement of the Fish and Game Code. The result of this preliminary determination is that there are features withing the project APE that would be subject to the Clean Water Act, and State Lakes and Streambed program.

A list of sensitive species which occur within the USGS – El Prado quadrangle per the California Natural Diversity Data Base (CNDDB), the U.S. Fish and Wildlife and the Service IPaC report. This table includes a discussion of the probability to occur within the project area, and a discussion of their occurrence potential is provided in Appendix B

5.0 CONCLUSIONS AND RECOMMENDATIONS

According to protocol and standard practices, the results of this survey will remain valid for the period of one year, or until October 2024, after which time, if the site has not been disturbed in the interim, another survey may be required to determine the persisting absence the above referenced species. Regardless of survey results and conclusions given herein, these species are protected by applicable State and/or federal laws, including but not exclusive to the California Endangered Species Act and Federal Endangered Species Act. As such, if a one is subsequently found on-site or at the time of construction, all activities likely to affect the animal(s) should cease immediately and regulatory agencies should be contacted to determine appropriate management actions. Importantly, nothing given in this report, including recommended mitigation measures, is intended to authorize the incidental take of any listed species during project construction. Such authorization must come from the appropriate regulatory agencies, including CDFG (i.e., authorization under section 2081 of the Fish and Game Code) and USFWS.

Due to either the lack of suitable habitat, or the absence of observations during any of the field surveys, none of the special-status species reported from the CNDDB or the IPAC will be adversely affected by the proposed project.

Finally, there are no streams or drainage features within the project APE that would be subject to Clean Water act or the California Fish & Game Code.

6.0 PROPOSED AVOIDANCE AND MINIMIZATION MEASURES

6.1 Nesting Birds

The State of California prohibits the “take” of active bird nests. To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal should be conducted outside of the State identified nesting season (nesting season is February 15 through September 1). Alternatively, the site can be evaluated by a qualified biologist prior to initiation of ground disturbance to determine the presence or absence of nesting birds. Active bird nests MUST be avoided during the nesting season. If an active nest is located in the project construction area it will be flagged and a 300-foot buffer placed around it. No activity will occur within the 300 foot buffer until the young have fledged the nest.

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California Fish and Game Code 3503 and 3503.5 state:

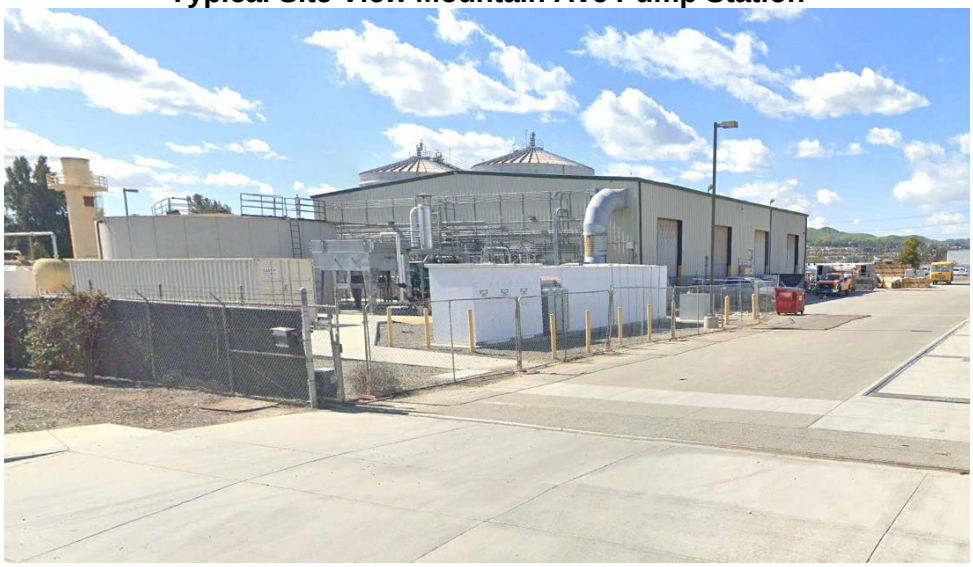
3503: *It is unlawful to take, possess or needlessly destroy the nest or eggs of any bird except as otherwise provided by this code or any regulation made pursuant thereto.*

3503.5: *It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.*

SITE PHOTOGRAPHS

SITE PHOTOGRAPHS

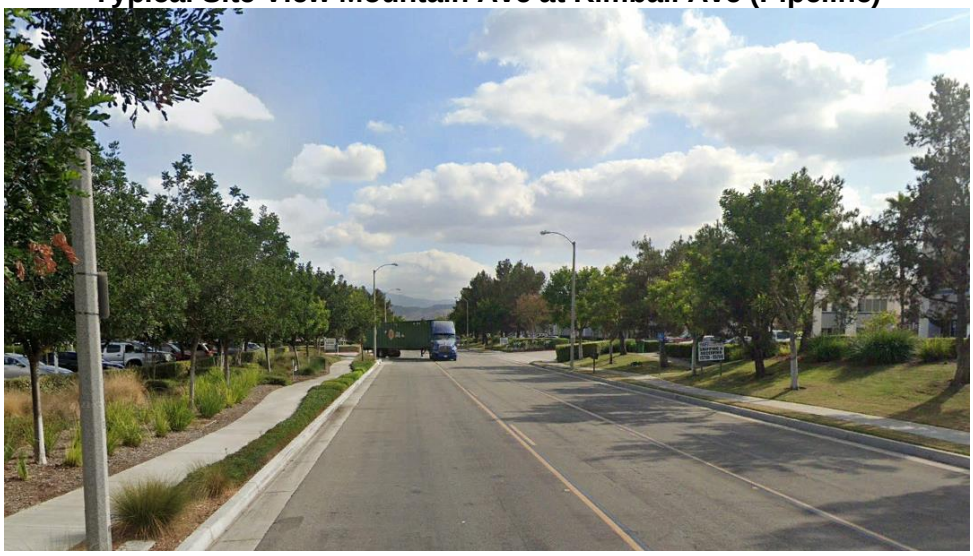
Typical Site View Mountain Ave Pump Station



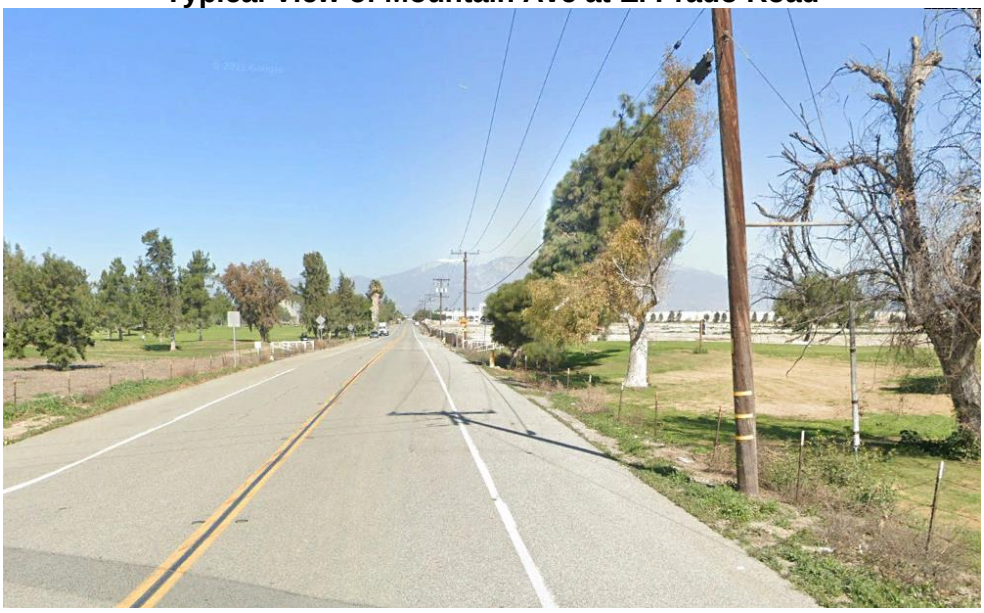
View of RP#2 Facility

SITE PHOTOGRAPHS

Typical Site View Mountain Ave at Kimball Ave (Pipeline)



Typical View of Mountain Ave at El Prado Road



APPENDIX A

SPECIES LIST

APPENDIX A
SPECIES LIST

ANIMAL SPECIES LIST

AvesBirds

Columbidae	
Columba fasciata	Pigeon
Zenaida macroura	Mourning Dove
Corvidae	
Corvus brachyrhynchos	Crow
Emberizidae	Sparrow, Warblers, Tanangers
Melospiza melodia	Song sparrow
Fringillidae	
Carpodacus mexicanus	House Finch
Mimidae	
Mimus polyglottos	Mockingbird
Mammals:	
Canis lupis familarus	Dog
Otospermopholus beacheyi	California Ground Squirrel

APPENDIX B

CNDDB and IPaC Reports

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Prado Dam (3311786))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abronia villosa var. aurita chaparral sand-verbena	PDNYC010P1	None	None	G5T2?	S2	1B.1
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S4	WL
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Asio otus long-eared owl	ABNSB13010	None	None	G5	S3?	SSC
Aspidoscelis hyperythra orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Atriplex coulteri Coulter's saltbush	PDCHE040E0	None	None	G3	S1S2	1B.2
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus weedii var. intermedius intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T3	S3	1B.2
Calystegia felix lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	ABPBG02095	None	None	G5T3Q	S2	SSC
Catostomus santaanae Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	
Centromadia pungens ssp. laevis smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S2	SSC
Crotalus ruber red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S3	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eriastrum densifolium ssp. sanctorum Santa Ana River woollystar	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S4	SSC
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
Monardella australis ssp. jokerstii Jokerst's monardella	PDLAM18112	None	None	G4T1?	S1?	1B.1
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	AFCHA0209J	Endangered	Candidate Endangered	G5T1Q	S1	
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Sidalcea neomexicana salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
Southern California Arroyo Chub/Santa Ana Sucker Stream Southern California Arroyo Chub/Santa Ana Sucker Stream	CARE2330CA	None	None	GNR	SNR	
Southern Cottonwood Willow Riparian Forest Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Southern Willow Scrub	CTT63320CA	None	None	G3	S2.1	
Southern Willow Scrub						
Spea hammondii	AAABF02020	None	None	G2G3	S3S4	SSC
western spadefoot						
Symphyotrichum defoliatum	PDASTE80C0	None	None	G2	S2	1B.2
San Bernardino aster						
Vireo bellii pusillus	ABPBW01114	Endangered	Endangered	G5T2	S3	
least Bell's vireo						

Record Count: 45

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

San Bernardino County, California

Local office

Carlsbad Fish And Wildlife Office

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

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

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
Coastal California Gnatcatcher *Polioptila californica californica* Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Fishes

NAME	STATUS
Santa Ana Sucker *Catostomus santaanae* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3785	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
San Diego Ambrosia Ambrosia pumila Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8287	Endangered
Slender-horned Spineflower Dodecahema leptoceras Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4007	Endangered
Thread-leaved Brodiaea Brodiaea filifolia Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6087	Threatened

Critical habitats

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

This location overlaps the critical habitat for the following species:

NAME	TYPE
Least Bell's Vireo Vireo bellii pusillus https://ecos.fws.gov/ecp/species/5945#crithab	Final
Southwestern Willow Flycatcher Empidonax traillii extimus https://ecos.fws.gov/ecp/species/6749#crithab	Final

Bald & Golden Eagles

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

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are bald and/or golden eagles in your project area.

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

Bald Eagle Haliaeetus leucocephalus
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds Jan 1 to Aug 31

Golden Eagle Aquila chrysaetos
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Breeds Jan 1 to Aug 31

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.

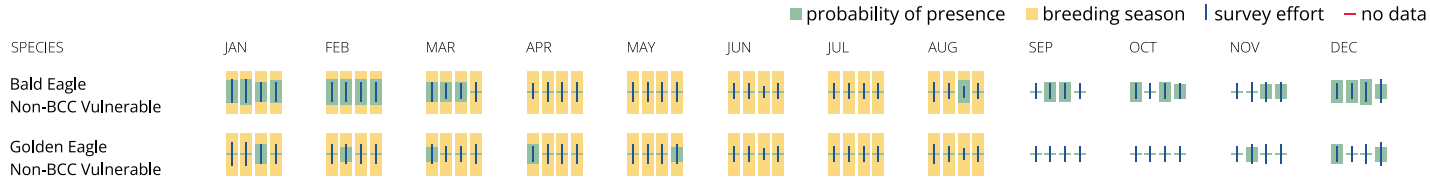
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

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.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence 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). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles 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 Rapid Avian Information Locator (RAIL) Tool.

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. Please contact your local Fish and Wildlife Service Field Office if you have questions.

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[3] 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:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/ documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

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
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi 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/8	Breeds Apr 1 to Aug 15
Black Skimmer Rynchops niger This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15

Black Tern *Chlidonias niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20
Bullock's Oriole *Icterus bullockii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher *Toxostoma redivivum* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Clark's Grebe *Aechmophorus clarkii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat *Geothlypis trichas sinuosa* 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/2084	Breeds May 20 to Jul 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
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
Nuttall's Woodpecker *Picoides nuttallii* 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/9410	Breeds Apr 1 to Jul 20
Oak Titmouse *Baeolophus inornatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Western Grebe *aechmophorus occidentalis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Wrentit *Chamaea fasciata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

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.

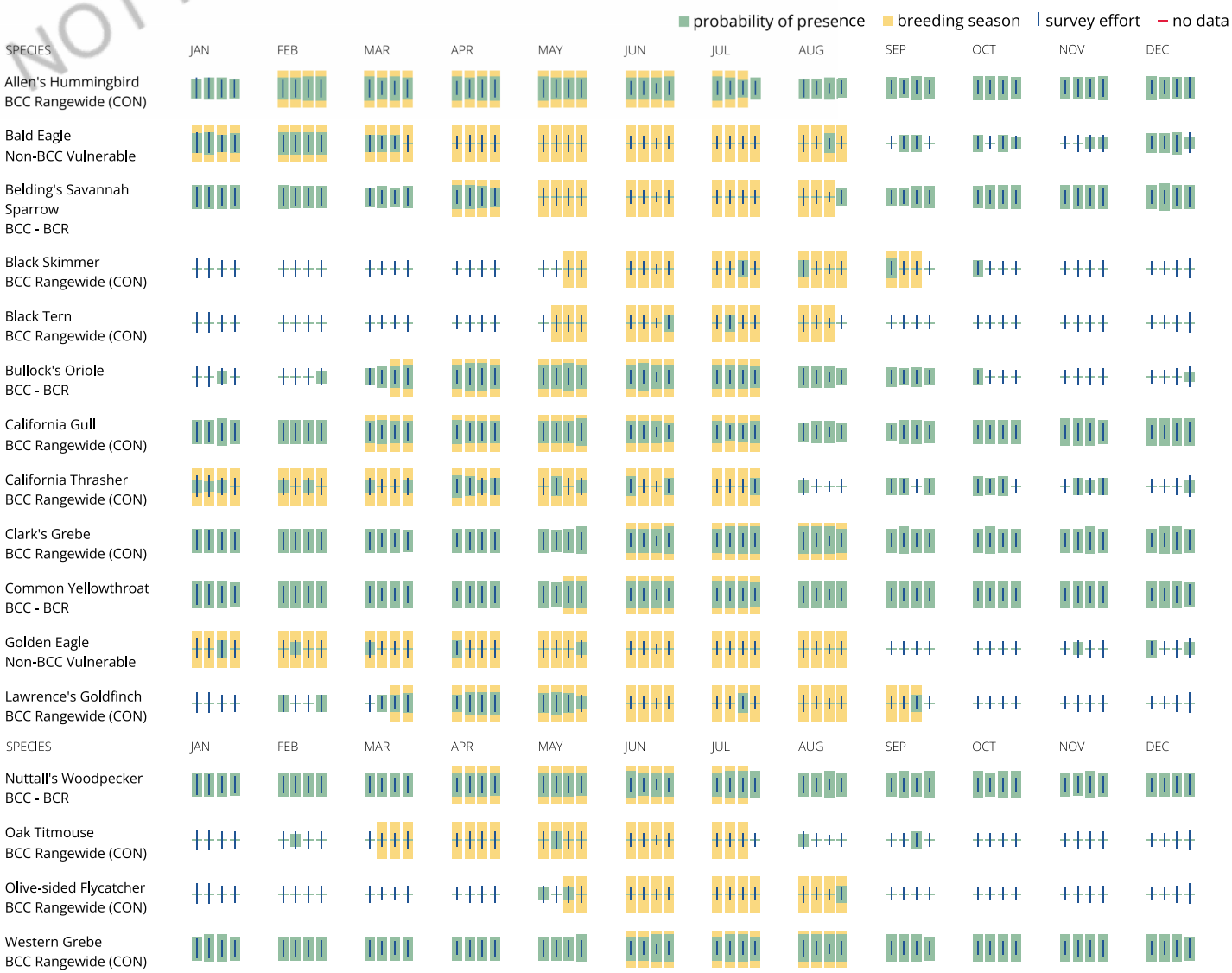
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

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.



Wrentit
BCC Rangewide (CON)

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 list of migratory birds that potentially occur 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 Rapid Avian Information Locator (RAIL) 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 or migrating in my 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 query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. 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 (NWI)

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.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

- PEM1/SSCh
- PEM1Ah
- PEM1A
- PEM1Ax
- PEM1Cx
- PEM1Ch

FRESHWATER FORESTED/SHRUB WETLAND

- PFOCh
- PFOC
- PFO/SSCh
- PSSCx
- PSSC
- PFOCx
- PFOAx

FRESHWATER POND

- PUBKx
- PUBFx
- PUBHx
- PUSCx
- PUSAx
- PUS/EM1Ax
- PUSCr
- PUBHr

RIVERINE

- R2UBHx

R4SBAx
R4SBA
R4SBCx
R4SBJ

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

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.