

**Appendix C:
Anaheim Legacy Biological Resources Constraints Analysis**

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Memorandum

Date: February 22, 2021

To: Andy Uk, Associate Planner, City of Anaheim

From: Alec Villanueva, Staff Biologist

Subject: Biological Resources Constraints Analysis Memorandum for the Legacy Anaheim Residential Project, Anaheim, California

FirstCarbon Solutions (FCS) conducted a biological resources due diligence-level assessment for the Legacy Anaheim Residential Project (proposed project). This Biological Resources Constraints Analysis Memorandum documents the existing project site conditions and provides regulatory compliance information for the City of Anaheim and other applicable State and federal regulations pertaining to biological resources. This memorandum documents any biological resource constraints that were identified and recommends measures as appropriate to avoid or minimize potential project impacts on sensitive and protected biological resources.

A literature review was conducted to assist in determining the existence or potential occurrence of special-status plant and animal species within the study area and in the project vicinity, followed by a reconnaissance-level field survey.

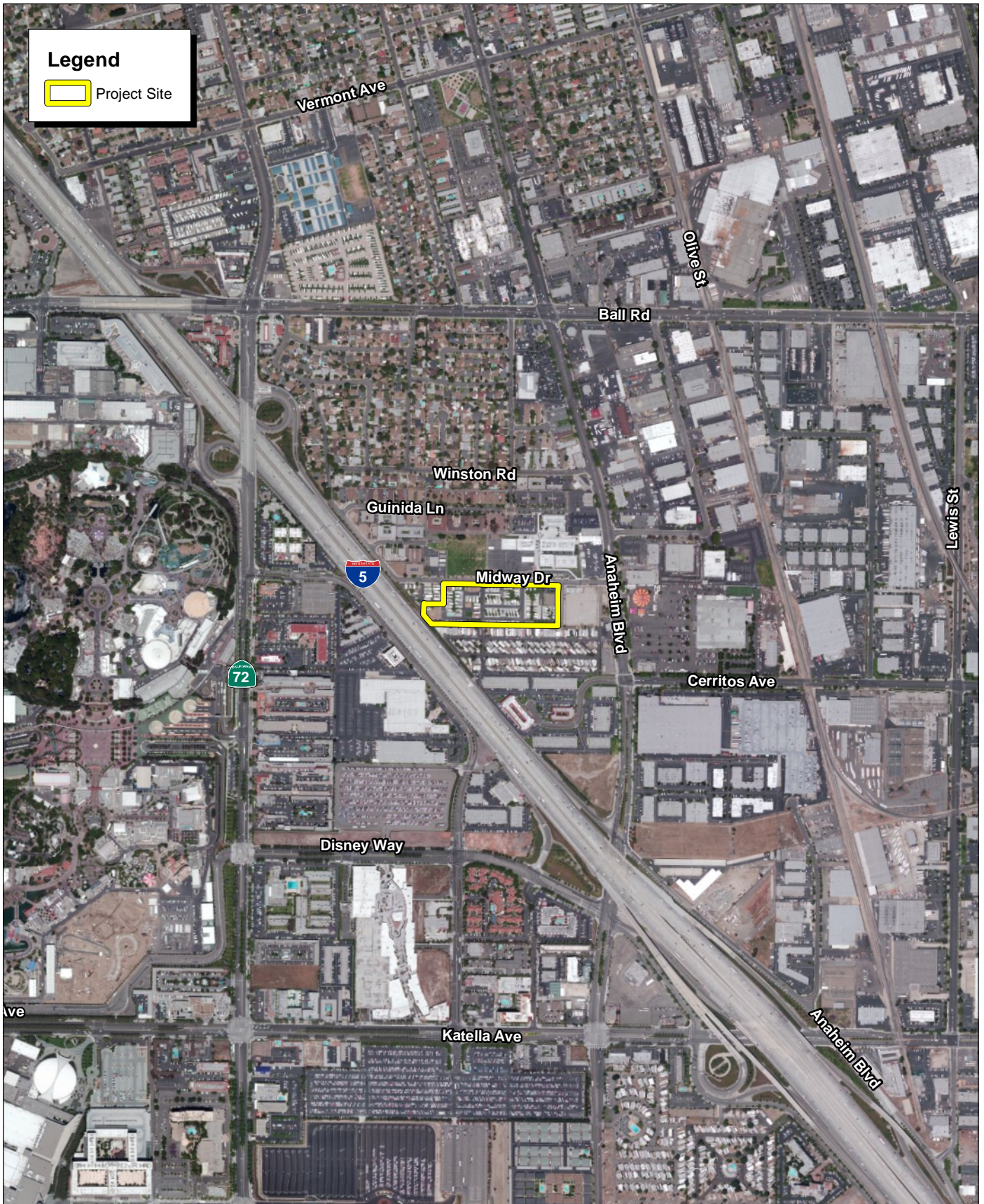
PROJECT LOCATION

The proposed project is located at 200 West Midway Drive, in the City of Anaheim, in Orange County, California (Exhibit 1). The 6.4-acre project site consists of Assessor's Parcel Numbers (APNs) 082-185-26 through -31, 082-185-39, 082-185-40, 082-185-041, 082-185-58, 082-185-51, and 082-185-35. The project site is located approximately 0.25 mile east of Interstate 5 (I-5), and 300 feet west of South Anaheim Boulevard (Exhibit 2). The project site is located within the *Anaheim, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle.

PROJECT DESCRIPTION

The project site is currently occupied by the former Anaheim Resort Recreational Vehicle (RV) Park, which consists of asphalt and paved areas, concrete parking slabs, an office and café, swimming pool, restrooms and showers, landscaping, private roadways, and a private parking area. The Anaheim Resort RV Park permanently closed on September 1, 2020.

The proposed project would include the development of 156 residential townhomes, associated private and common recreational areas, and 45,456 square feet of common open space at the project site (Exhibit 3). Open space areas would include recreational amenities and courtyards, outdoor dining areas, fire pit, and barbecue areas.



Legend

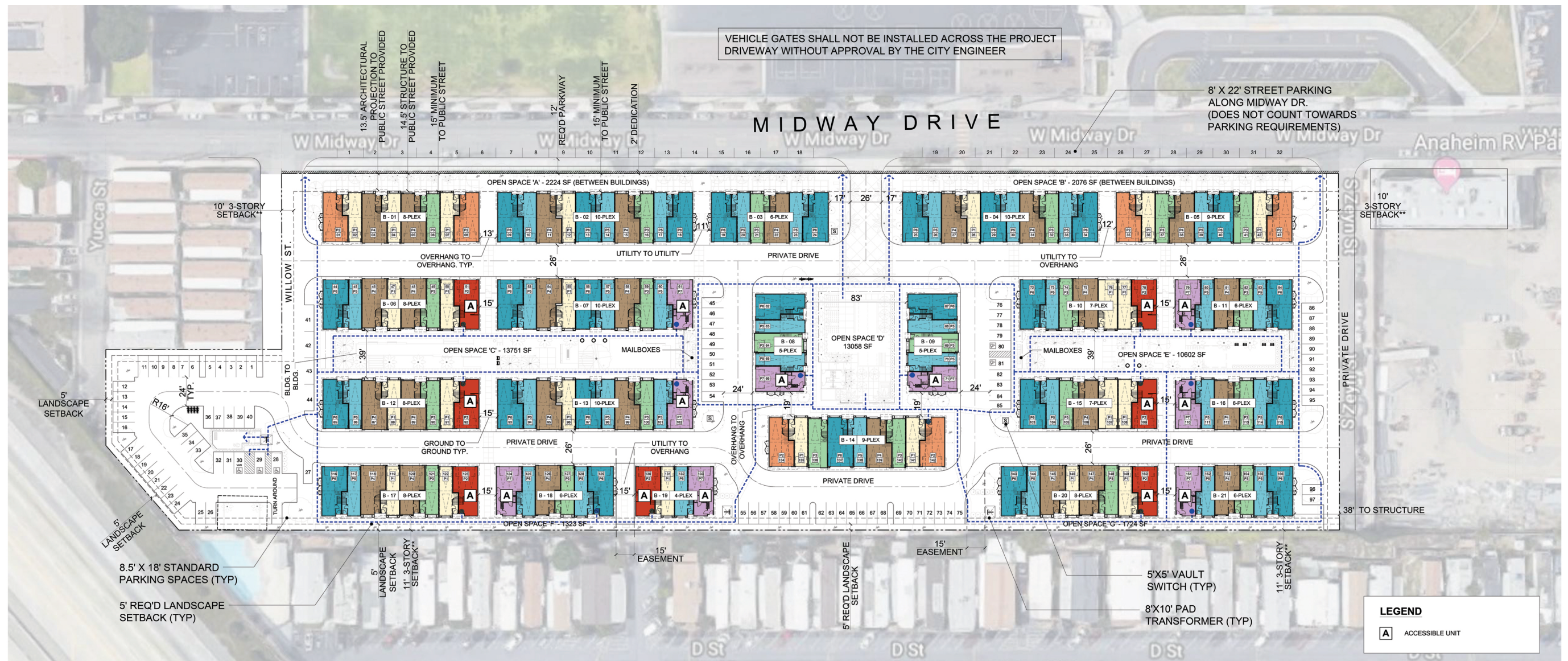
Project Site

Source: ESRI Aerial Imagery.

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Exhibit 2
Local Vicinity Map
Aerial Base



SITE SUMMARY

SITE AREA: ±6.4 ACRES (±279,951 SF)
 REQUIRED ZONING: RM-4
 HEIGHT: 40 FEET OR 3-STORIES MAYBE INCREASED TO 4-STORIES BY CONDITIONAL USE PERMIT. NO MORE THAN 8- FEET OF PROJECTION PER 18.40.030 DENSITY: 24.0 DU/AC
 BUILDING COVERAGE: ±38%
 3-STORY BUILDING SEPARATIONS: 18.06.090.050

	REQUIRED	PROPOSED	DIFFERENCE
PRIMARY-PRIMARY:	40'	30'	10'
PRIMARY-SECONDARY:	25'	20'	5'
SECONDARY-SECONDARY:	15'	12'	3'
SECONDARY-BLANK:	15'	12'	3'
BLANK-BLANK:	15'	11'	4'

STRUCTURAL SETBACKS: 18.06.090.030

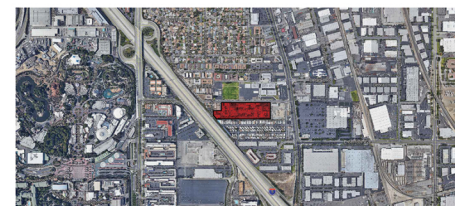
	REQUIRED	PROPOSED	DIFFERENCE
1-STORY:	10'	10'	0'
3-STORY:	20'	10'	10'

LANDSCAPE SETBACKS:

	REQUIRED	PROPOSED	DIFFERENCE
FRONT:	15'	15'	0'
INTERIOR PROPERTY LINE	5'	5'	0'

NOTES**

PRIMARY: BUILDING WALLS THAT CONTAIN ENTRANCES AND EXITS AND/OR WINDOWS OPENING INTO LIVING SPACES WHERE MOST ACTIVITY OCCURS, SUCH AS DINING ROOMS, LIVING ROOMS, FAMILY ROOMS, KITCHENS AND BEDROOMS. BUILDING WALLS WITH BALCONIES ARE ALSO INCLUDED.
 SECONDARY: BUILDING WALLS THAT CONTAIN WINDOWS OPENING INTO BATHROOMS, CLOSETS, STAIRWELLS AND CORRIDORS.
 BLANK: BUILDING WALLS WITH NO WINDOW OPENINGS OR POINTS OF ACCESS.
 **MIN. 15' SETBACK ABUTTING INTERIOR PL FOR SECONDARY OR BLANK WALL
 **MIN. 20' SETBACK ABUTTING INTERIOR PL FOR PRIMARY WALL



VICINITY MAP
SCALE: NTS

UNITS

P1	24 UNITS - (3 BD) - 2-CAR TANDEM GARAGE
P2	6 UNITS - (3 BD) - 3-CAR GARAGE
P2-ACCESSIBLE	7 UNITS - (3 BD) - 2-CAR GARAGE SIDE BY SIDE
P3	22 UNITS - (3 BD) - 2-CAR TANDEM GARAGE
P4	27 UNITS - (3 BD) - 3-CAR GARAGE
P5	35 UNITS - (3 BD) - 2-CAR TANDEM
P6	26 UNITS - (3 BD) - 3-CAR GARAGE
P7-ACCESSIBLE	9 UNITS - (3 BD) - 2-CAR GARAGE SIDE BY SIDE
	156 UNITS: TOTAL

STORAGE: 100 CUBIC FT

COMPOSITE TYPES

	QTY
4-PLEX-ACCESSIBLE	1
5-PLEX-ACCESSIBLE	2
6-PLEX	1
6-PLEX-ACCESSIBLE	4
7-PLEX-ACCESSIBLE	2
8-PLEX	4
8-PLEX-ACCESSIBLE	4
9-PLEX	2
10-PLEX	2
10-PLEX-ACCESSIBLE	2
TOTAL	21

PARKING

1BD: 2 SP/UNIT
 2 BD: 2.25 SP/UNIT
 3 BD: 3 SP/UNIT
 4 BD: 3.5 SP/UNIT
 (REQUIREMENT INCLUDES GUEST WHICH ACCOUNT FOR 25% OF REQUIRED SPACES)
 PARKING REQUIRED:
 3 BD UNITS: 156 UNITS X 3 SP/UNIT = 468 SPACES REQ'D
 PARKING PROVIDED:
 371 SPACES - GARAGE
 97 SPACES - OPEN PARKING
 468 SPACES - TOTAL PROVIDED
 PARKING DIMENSION:
 90 DEGREES: 8.5' X 18' MINIMUM
 PARALLEL: 8' X 22' MINIMUM
 COVERED PARKING: 10' X 20' MINIMUM
 NOTE:
 1. MIDWAY DR. PARALLEL SPACES DO NOT COUNT TOWARDS REQUIRED PARKING
 2. ALL ON-SITE OPEN PARKING SPACES AVAILABLE AS GUEST SPACES

OPEN SPACE

PRIVATE RECREATIONAL-LEISURE AREA REQUIRED:
 100 SF/ PATIO ON GROUND (8 FT MIN. DIMENSION)
 70 SF/ UNIT ABOVE GROUND (7 FT MIN. DIMENSION)
 COMMON RECREATIONAL-LEISURE AREA REQUIRED:
 10 FT MIN. DIMENSION
 OPEN SPACE REQUIRED:
 156 UNITS X 200 SF/UNIT = 31,200SF REQUIRED
 OPEN SPACE PROVIDED:
 COMMON OPEN SPACE PROVIDED: 45,456SF (±291 SF/UNIT)
 PRIVATE DECKS: ±500SF/UNIT
 TOTAL OS PROVIDED (COMMON + PRIVATE): ±791 SF/UNIT
 RECREATION-LEISURE AREAS:
 200SF/UNIT (PRIVATE OR COMMON)

OPEN SPACE 'A'	2224 SF
OPEN SPACE 'B'	2076 SF
OPEN SPACE 'C'	13751 SF
OPEN SPACE 'D'	13058 SF
OPEN SPACE 'E'	10602 SF
OPEN SPACE 'F'	1323 SF
OPEN SPACE 'G'	1724 SF
	43206 SF



Source: KTG Architecture & Planning, 10/11/2020.

METHODOLOGY

Literature Review

Topographic Maps and Aerial Photographs

Current topographic maps and aerial photographs were reviewed during the preliminary analysis of the existing conditions within the project site and immediate vicinity. Information obtained from the review of the topographic maps included elevation range, general watershed information, and potential drainage feature locations.¹ Aerial photographs (Google Earth) were reviewed to provide a perspective of recent and historical site conditions relative to on-site and off-site land uses, preliminary plant community locations, and potential locations of wildlife movement corridors.²

Soil Surveys

The Natural Resources Conservation Service (NRCS) Web Soil Survey was queried to determine soil series (i.e., group of soils with similar profiles) and soil mapping units occurring at the project site.³ Habitat requirements pertaining to soils and substrates for special-status species were evaluated to determine whether on-site conditions are suitable for occurrence of special-status plant and wildlife species.

Special-status Species Database Search

A records search of the following databases was conducted: the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB), the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system, and the California Native Plant Society Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California database for the *Anaheim, California* USGS 7.5-minute topography quadrangle map and its eight neighboring quads.^{4,5,6}

Jurisdictional Waters and Wetlands

The Environmental Protection Agency (EPA) WATERS database and aerial photography was queried to identify potential natural drainage features and water bodies.⁷ In general, all surface drainage features identified as blue-line streams on USGS maps and linear patches of vegetation are expected to exhibit

¹ United States Environmental Protection Agency (EPA). 2020. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed January 6, 2021.

² Google Earth. 2021. 200 W. Midway Dr. Anaheim, CA 92805. Website: <https://www.google.com/earth/>. Accessed January 6, 2021.

³ Natural Resources Conservation Service (NRCS). 2020. Web Soil Survey. United States Department of Agriculture (USDA). Website: <http://www.nrcs.usda.gov/>. Accessed January 6, 2021.

⁴ California Department of Fish and Wildlife (CDFW). 2021. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed January 6, 2021.

⁵ United States Fish and Wildlife Service (USFWS). 2021. Information for Planning and Consultation (IPaC). Website: <https://ecos.fws.gov/ipac/>. Accessed January 6, 2021.

⁶ California Native Plant Society (CNPS). 2020. California Native Plant Society Rare and Endangered Plant Inventory (CNPSEI). Website: <http://www.rareplants.cnps.org/>. Accessed January 6, 2021.

⁷ United States Environmental Protection Agency (EPA). 2021. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed January 6, 2021.

evidence of flows and considered potentially subject to State and federal regulatory authority as waters of the United States and/or State.

Protected Trees

Any applicable City and County ordinances pertaining to tree preservation and protective measures and their tree replacement conditions or permits required were reviewed.

Habitat Conservation Plan

As part of the literature review, FCS also took into consideration whether the proposed project lies within the boundaries of any adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State HCP and whether any such plan would be applicable to the proposed project.

Reconnaissance-Level Field Survey

A reconnaissance-level field survey was conducted on January 12, 2021, by FCS Biologist Alec Villanueva. Weather conditions during the field survey were sunny and clear, with an approximate temperature of 65°F (degrees Fahrenheit). Wind speeds averaged 2 miles per hour (mph). Notes were taken on general site conditions, vegetation, and suitability of habitat for various special-status elements. Site photographs are provided in Attachment A. A preliminary assessment was conducted to determine the location of any existing drainages and the limits of project-related grading activities, to aid in determining whether a formal delineation of waters of the United States or State is necessary.

RESULTS

Existing Conditions

The project site consists of a former RV park. The project site consists of an office, café, swimming pool, restrooms and showers, landscaping, private roadways, and a private parking area. Much of the site consists of asphalt paved areas, concrete parking slabs and a grass lawn. Several abandoned trailers can be found at near the southeastern corner of the project site. At the time of the January 12 field survey, nearly all trees once present on-site had been cut down. The remaining vegetation present on-site consist of ornamental hedges and a few small trees, as well as weeds and other ruderal plants.

Soils and Topography

The topography of the site and the surrounding area is generally flat and lies at an elevation between 140 and 145 feet above sea level.

Soils on the site are mapped by the Natural Resource Conservation Service (NRCS) as Metz loamy sand and San Emigdio fine sandy loam.⁸ However, little of the native soils cover remains exposed due to the

⁸ Natural Resources Conservation Service (NRCS). 2020. Soil Survey Official Soil Series Descriptions. United States Department of Agriculture (USDA). Website: <http://www.nrcs.usda.gov/>. Accessed January 6, 2021.

developed state of the project site, which predominantly consists of hardscape and imported fill (e.g., gravel).

Vegetation Communities and Land Cover

Urban/Developed—6.4 Acres

Developed land is characterized by permanent or semi-permanent structures, pavement, or hardscape, and landscaped areas that often require irrigation. The urban/developed vegetation community includes land that has been constructed upon or otherwise covered with a permanent man-made surface. Areas where no natural land is evident, or because large amounts of debris or other materials have been placed upon it, may also be considered. Vegetation within the urban/developed land consists of ornamental landscape vegetation with little to no native species observed.

The majority of the project site has been developed and almost entirely covered by hardscape such as concrete and asphalt (Exhibit 2, Attachment A). A small grass lawn can be found bordering Midway Drive. The project site also contains several small bathroom and laundry buildings.

The project site contains remnant ornamental vegetation with most of the original trees having already been cut down, apparent by the dozens of stumps left behind. The remaining vegetation consists of ornamental hedges, as well as five Mexican fan palm trees (*Washingtonia robusta*) several small lemon trees (*Citrus × limon*) and two magnolia (*Magnolia* sp.) trees. Several ruderal species such as dandelion (*Taraxacum* sp.), cheeseweed (*Malva neglecta*), and Bermuda grass (*Cynodon dactylon*) can be found growing in the gaps in between the hardscape.

Wildlife

The site may provide habitat for generalist and opportunistic wildlife species that are able to tolerate high levels of habitat disturbance and human modified environments. Wildlife activity during the field survey was low and consisted almost exclusively of avian species. Species observed on-site during the field survey included, house finch (*Haemorhous mexicanus*), Anna's hummingbird (*Calypte anna*), Say's phoebe (*Sayornis saya*), black phoebe (*Sayornis nigricans*), bushtit (*Psaltiriparus minimus*) and western fence lizard (*Sceloporus occidentalis*). Several mourning dove (*Zenaida macroura*) and a California gull (*Larus californicus*) were observed flying overhead as well. An American kestrel (*Falco sparverius*) also was observed foraging on-site (presumably for lizards).

The ornamental trees present on the project site as well as on the adjacent properties could provide suitable habitat for nesting birds. No signs of bat roosts were observed during the field survey. The few buildings remaining on-site contain openings and crevices where bats could potentially enter and form roosts.

Special-status Species

The CNDDDB and CNPS Inventory results included 43 special-status plant species and 45 special-status animal species that have been recorded within the vicinity of the project site (Attachment B). The

likelihood and rationale for these species to occur are discussed in the paragraphs below. No special-status plants or animal species were observed during the field survey.

Special-status Plants

Forty-three special-status plant species have been recorded in the vicinity of the project site, including chaparral sand-verbena (*Abronia villosa* var. *aurita*), Horn's milk-vetch (*Astragalus hornii* var. *hornii*), Gambel's water cress (*Nasturtium gambelii*), and salt spring checkerbloom (*Sidalcea neomexicana*). The recorded species require specific habitat conditions associated with certain vegetation communities, including coastal sage scrub, chaparral, cismontane woodlands, or wetland habitats. None of these habitat types are present. Therefore, no special-status plants are expected to occur on the project site. The developed state of the project does not provide suitable habitat any special-status species recorded in the CNDDDB or CNPS searches due the lack of natural vegetation communities and lack of suitable natural substrate.

Special-status Wildlife

The database results included 45 species-status wildlife species that are known to occur within the vicinity of the project site (Attachment B). The overwhelming majority of these species are not expected to occur due to the lack of suitable habitat on the project site, the project site being situated outside of their known geographic range or have been have locally extirpated due to extensive urbanization and habitat modification of the surrounding area.

Many species recorded in the vicinity of the project including Swainson's hawk (*Buteo swainsoni*), western, yellow-billed cuckoo (*Coccyzus americanus occidentalis*), steelhead (*Oncorhynchus mykiss irideus*), quino checkerspot butterfly (*Euphydryas editha quino*), Southern California legless lizard (*Anniella stebbinsi*), and coast horned lizard (*Phrynosoma blainvillii*) are all believe to be locally extirpated due to extensive urbanization of the surrounding area.

Many bird special-status bird species such California black rail (*Laterallus jamaicensis coturniculus*) and California least tern (*Sternula antillarum browni*) are uncommon in the region and unlikely to occur on-site due the lack of suitable nesting and foraging habitat in the form of coastal wetlands.

The project site contains little suitable for any special-status bird species as it contains few trees of sufficient size to provide suitable nesting locations for migratory or resident nesting birds. Additionally, smaller birds could nest within the eaves of the existing buildings or on top of the several light posts found on-site. Suitable nesting trees are present on properties immediately adjacent project site as well. As a result, there is still potential, albeit very low potential, that special-status birds may choose to nest on-site or within its immediate vicinity.

Jurisdictional Waters and Wetlands

No wetlands or other hydrological features that meet criteria as waters of the United States or waters of the State were observed within the proposed project site during the reconnaissance-level survey.

Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Urbanization and the resulting fragmentation of open space areas create isolated “islands” of wildlife habitat, forming separated populations. Corridors act as an effective link between populations.

The project site was evaluated for evidence of wildlife movement corridors during the field survey. However, the scope of the survey did not include a formal wildlife movement corridor study utilizing track plates, camera stations, scent stations, or snares. The project site is entirely developed and is surrounded on all sides by urban development and roadways and other man-made structures that serve as barriers to wildlife movement.

Protected Trees

FCS reviewed the Anaheim Municipal Code regarding any applicable ordinances regarding tree preservation.⁹ The project is not located within one of several “Overlay Zones” within the city of Anaheim where additional tree preservation ordinances would apply.¹⁰ The project site does not contain any “Landmark Trees” as defined by the Municipal Code. As discussed earlier, most of the trees originally present on-site have been cut down. However, a single magnolia tree is present within the planting strip between the sidewalk and Midway Drive along the northern boundary of the project site. This tree could meet the City’s definition as a “Street Tree” and be subject to the City’s Street Tree Ordinance.¹¹

Orange County Transportation Authority NCCP/HCP

The project site is located within the boundaries of the Orange County Transportation Authority NCCP/HCP; however, the NCCP/HCP only covers discrete linear or energy projects within its boundaries.¹² The proposed project does not fall into either of these categories. Therefore, the proposed project is not subject to this plan.

BIOLOGICAL CONSTRAINTS

Our biological constraints analysis determined:

- The project site does not contain suitable habitat for any special-status plants.

⁹ Anaheim Municipal Code. 2021. City of Anaheim. Website: <https://codelibrary.amlegal.com/codes/anaheim/latest/overview>. Accessed January 6, 2021.

¹⁰ City of Anaheim. 2021. Zoning Map. Website: <https://www.anaheim.net/DocumentCenter/View/1871/Zoning-Map?bidId=>. Accessed January 14, 2021.

¹¹ Anaheim Municipal Code. 2021. Chapter 13.12 STREET TREES*. City of Anaheim. Website: <https://codelibrary.amlegal.com/codes/anaheim/latest/overview>. Accessed January 14, 2021.

¹² California Department of Fish and Wildlife (CDFW). 2020. NCCP Plan Summaries. Website: <https://wildlife.ca.gov/conservation/planning/nccp/plans>. Accessed January 6, 2021.

- The project site does not contain suitable habitat for any special-status wildlife species, aside from nesting birds.
- The project site does not contain potentially jurisdictional wetlands or waters of the United States or waters of the State.
- The proposed project will not significantly impact any known wildlife corridors.
- The proposed project has the potential to impact at least one street tree regulated under the Anaheim Municipal Code.
- The proposed project is not subject to any adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan.

The following section recommends measures that would result in avoidance or minimization of potential project-related impacts to regulated biological resources on-site, including potential project design features, conditions of approval, or Best Management Practices (BMPs):

Pre-construction Surveys for Nesting Birds

Several native migratory or resident birds that are protected under the Migratory Bird Treaty Act (MBTA) and/or Fish and Game Code could nest in the few trees, hedges and buildings that are found on the project site or within its immediate vicinity. During nesting season, the development of the proposed project has the potential to impact protected bird nests due to the removal of this vegetation or indirectly harm birds through the generation of noise, lights, and other man-made disturbances that could result in the abandonment of eggs or young. Out of an abundance of caution if work takes place during nesting season, we recommended that the project implement the following measures to avoid potential impacts to nesting birds out, including:

- Limit tree and vegetation removal to outside the nesting season (generally February 1 to August 15).
- During nesting season, conduct pre-construction surveys for nesting birds prior to the start of construction.
- Establish construction exclusion (buffer) zones around occupied nests, including those present on adjacent properties.

Tree Removal and Replacement

A single magnolia tree is present within the planting strip along Midway Drive. This tree could meet the City's definition as a "Street Tree" and be subject to the City's Street Tree Ordinance. Should the Applicant deem the trimming or removal of this tree necessary to accommodate the proposed project,

we recommend the following actions, in accordance with Chapter 13.12 of the Anaheim Municipal Code:¹³

- The Applicant shall secure written permission from the Director of Community Services or his or her designee.
- Any person obtaining written permission to cut, trim or prune a street tree shall do so in accordance with the standards adopted by the International Society of Arboriculture. Any private business performing cutting, trimming or pruning operations on street trees shall employ an ISA certified Arborist on staff and shall perform all work on street trees in accordance with the standards adopted by the International Society of Arboriculture.
- Any street tree removed shall be replaced if a replacement is deemed possible. The replacement specie shall be selected in accordance with the Official Tree Species List and Tree Master Plan.

REGULATORY SETTING

This section provides an overview of the laws and regulations that are applicable to the proposed project.

Federal Regulations

Endangered Species Act

The USFWS has jurisdiction over species listed as threatened or endangered under the Federal Endangered Species Act (FESA). Section 9 of FESA protects listed species from “take,” which is broadly defined as actions taken to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” FESA protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process.

Migratory Bird Treaty Act

The MBTA implements international treaties between the United States and other nations devised to protect migratory birds, 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. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the Fish and Game Code. All raptors and their nests are protected from take or disturbance under the MBTA (16 United States Code [USC] § 703, *et seq.*) and California statute (Fish and Game Code [FGC] § 3503.5).

¹³ Anaheim Municipal Code. 2021. Chapter 13.12 STREET TREES*. City of Anaheim. Website: <https://codelibrary.amlegal.com/codes/anaheim/latest/overview>. Accessed January 14, 2021.

Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are also afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, *et seq.*) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

State Regulations

CEQA Guidelines

The following California Environmental Quality Act (CEQA) Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a proposed project on biological resources. Impacts are considered significant if a project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan.

California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species if there are reasonable and prudent alternatives available (FGC § 2080). CESA directs agencies to consult with the CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether jeopardy would occur, and allows the CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows the CDFW to authorize exceptions to the State’s prohibition against

take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

California Fish and Game Code

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050 through 2098 outline the protection provided to California’s rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under the CESA. Fish and Game Code Section 2081 established an incidental take permit program for state-listed species. The CDFW maintains a list of “candidate species,” which it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq.*) prohibits the taking, possessing, or sale within the State of any plants with a State designation of rare, threatened, or endangered (as defined by the CDFW). An exception to this prohibition in the NPPA allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from “take” prohibition “the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way.” Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

In addition to formal listing under FESA and CESA, some species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are those listed as a “Species of Special Concern.” The CDFW maintains lists of “Species of Special Concern” that serve as species “watch lists.” Species with this status may have limited distributions or limited populations, and/or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and specific protection measures may be warranted. In addition to Species of Special Concern, the CDFW Special Animals List identifies animals that are tracked by the CNDDDB and may be potentially vulnerable but warrant no federal interest and no legal protection.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society (CNPS) List ranked 1A, 1B, and 2 would typically require evaluation under CEQA.

Fish and Game Code Sections 3500 to 5500 outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of *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. To comply with the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project study area and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under Fish and Game Code Section 206.591. Authorization from the CDFW would be in the form of an Incidental Take Permit.

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that "may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake" or "deposit debris, waste, or other materials that could pass into any river, stream, or lake." "River, stream, or lake" includes waters that are episodic and perennial and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water.

California Native Plant Society

The CNPS maintains a rank of plant species that are native to California and that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Following are the definitions of the CNPS ranks:

- **Rank 1A:** Plants presumed Extinct in California
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere
- **Rank 2:** Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere
- **Rank 3:** Plants about which we need more information—A Review List
- **Rank 4:** Plants of limited distribution—A Watch List

Potential impacts to populations of CNPS ranked plants receive consideration under CEQA review. All plants appearing as CNPS Rank 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered

species, potential impacts to these species or their habitats should be analyzed during the preparation of environmental documents pursuant to CEQA, as they may meet the definition of Rare or Endangered under the CEQA Guidelines Section 15380 criteria. Local Regulations

City of Anaheim

Anaheim Municipal Code

Chapter 11.12 DESIGNATION OF LANDMARK TREES

11.12.020 REMOVAL OF LANDMARK TREES PROHIBITED.

No landmark tree shall be removed without prior approval of the City Council, which approval shall be based upon one or more of the following findings:

- .010 The landmark tree poses a threat to the public health or safety due to its general condition, the potential of the tree falling, the tree's proximity to existing or proposed structures, the tree's interference with utility services, and/or the tree's status as a host for parasitic plants, pests or diseases endangering other species of trees or plants with infection or infestations;
- .020 Removal is necessary to allow construction of improvements or otherwise allow economic or other reasonable enjoyment of adjoining property;
- .030 The landmark tree has or will have an adverse effect on soil retention, water retention, and/or diversion or increased surface water;
- .040 Removal of the landmark tree will not have an adverse effect on shade areas, air pollution, historic values, scenic beauty and the general welfare of the City as a whole given the number, species, size and location of existing trees in the area of the landmark tree; and
- .050 Removal of the landmark tree is consistent with good forestry practices such as, but not limited to, consideration of the number of healthy trees a given parcel of land will support.

Chapter 13.12 STREET TREES*

13.12.060 STREET TREE REPLACEMENT PLAN.

Any street tree removed shall be replaced if a replacement is deemed possible. The replacement specie shall be selected in accordance with the Official Tree Species List and Tree Master Plan. In addition to replacing all removed street trees whenever possible, it is the responsibility of the Director of Community Services to ensure all vacant street tree locations are planted within the City of Anaheim. These vacancies are to be planted in accordance with the Official Tree Species List and Tree Master Plan.

13.12.080 INTERFERENCE WITH STREET TREES—PERMISSION REQUIRED.

- .010** No person shall top or in any other manner injure or damage any street tree. For purposes of this section, the term "top" shall mean to damage a tree by the practice of severely cutting back large diameter branches and/or the trunk of a tree which results in substantially reducing the overall size of the tree and/or destroying the symmetrical appearance or structural shape of the tree.
- .020** No person shall cut, trim, prune, plant, remove, spray, or in any other manner interfere with any street tree within the City of Anaheim without first having secured written permission from the Director of Community Services or his or her designee.
- .030** Any person obtaining written permission to cut, trim or prune a street tree shall do so in accordance with the standards adopted by the International Society of Arboriculture. Any private business performing cutting, trimming or pruning operations on street trees shall employ an ISA certified arborist on staff and shall perform all work on street trees in accordance with the standards adopted by the International Society of Arboriculture.

**Attachment A:
Site Photographs**



Photograph 1: Looking north from southern project boundary.



Photograph 2: Looking northwest from southern project boundary.



Photograph 3: Looking northeast from southern project boundary.



Photograph 4: Looking east from western boundary of the project site.



Photograph 5: Looking west from eastern project boundary.



Photograph 6: Looking south from northern boundary of the project site.



Photograph 7: Looking southwest from northern boundary of the project site.



Photograph 8: Looking southeast from northern boundary of the project site.

**Attachment B:
Database Search Results**



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Anaheim (3311778) OR Whittier (3311881) OR La Habra (3311788) OR Yorba Linda (3311787) OR Los Alamitos (3311871) OR Orange (3311777) OR Seal Beach (3311861) OR Newport Beach (3311768) OR Tustin (3311767))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Abronia villosa var. aurita</i> chaparral sand-verbena	PDNYC010P1	None	None	G5T2?	S2	1B.1
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
<i>Ammodramus savannarum</i> grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
<i>Anniella stebbinsi</i> Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
<i>Aphanisma blitoides</i> aphanisma	PDCHE02010	None	None	G3G4	S2	1B.2
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Asio otus</i> long-eared owl	ABNSB13010	None	None	G5	S3?	SSC
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
<i>Astragalus hornii var. hornii</i> Horn's milk-vetch	PDFAB0F421	None	None	GUT1	S1	1B.1
<i>Astragalus pycnostachyus var. lanosissimus</i> Ventura Marsh milk-vetch	PDFAB0F7B1	Endangered	Endangered	G2T1	S1	1B.1
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Atriplex coulteri</i> Coulter's saltbush	PDCHE040E0	None	None	G3	S1S2	1B.2
<i>Atriplex pacifica</i> south coast saltscale	PDCHE041C0	None	None	G4	S2	1B.2
<i>Atriplex parishii</i> Parish's brittle scale	PDCHE041D0	None	None	G1G2	S1	1B.1
<i>Atriplex serenana var. davidsonii</i> Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Branchinecta sandiegonensis</i> San Diego fairy shrimp	ICBRA03060	Endangered	None	G2	S2	
<i>Buteo regalis</i> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>California Walnut Woodland</i> California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
<i>Calochortus plummerae</i> Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
<i>Calochortus weedii var. intermedius</i> intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T2	S2	1B.2
<i>Calystegia felix</i> lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
<i>Campylorhynchus brunneicapillus sandiegonensis</i> coastal cactus wren	ABPBG02095	None	None	G5T3Q	S3	SSC
<i>Catostomus santaanae</i> Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	
<i>Centromadia parryi ssp. australis</i> southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
<i>Charadrius alexandrinus nivosus</i> western snowy plover	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
<i>Chelonia mydas</i> green turtle	ARAAA02010	Threatened	None	G3	S4	
<i>Chloropyron maritimum ssp. maritimum</i> salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
<i>Choeronycteris mexicana</i> Mexican long-tongued bat	AMACB02010	None	None	G4	S1	SSC
<i>Cicindela hirticollis gravida</i> sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
<i>Cicindela latesignata latesignata</i> western beach tiger beetle	IICOL02113	None	None	G2G4T1T2	S1	
<i>Cicindela senilis frosti</i> senile tiger beetle	IICOL02121	None	None	G2G3T1T3	S1	
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Coelus globosus</i> globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
<i>Coturnicops noveboracensis</i> yellow rail	ABNME01010	None	None	G4	S1S2	SSC
<i>Crotalus ruber</i> red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Danaus plexippus pop. 1</i> monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
<i>Dudleya multicaulis</i> many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eremophila alpestris actia</i> California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
<i>Eriastrum densifolium ssp. sanctorum</i> Santa Ana River woollystar	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
<i>Eryngium aristulatum var. parishii</i> San Diego button-celery	PDAPI0Z042	Endangered	Endangered	G5T1	S1	1B.1
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
<i>Euphydryas editha quino</i> quino checkerspot butterfly	IILEPK405L	Endangered	None	G5T1T2	S1S2	
<i>Falco peregrinus anatum</i> American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
<i>Glyptostoma gabrielse</i> San Gabriel chestnut	IMGASB1010	None	None	G2	S2	
<i>Habroscelimorpha gabbii</i> western tidal-flat tiger beetle	IICOL02080	None	None	G2G4	S1	
<i>Helianthus nuttallii ssp. parishii</i> Los Angeles sunflower	PDAST4N102	None	None	G5TX	SX	1A
<i>Icteria virens</i> yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
<i>Isocoma menziesii var. decumbens</i> decumbent goldenbush	PDAST57091	None	None	G3G5T2T3	S2	1B.2
<i>Lasionycteris noctivagans</i> silver-haired bat	AMACC02010	None	None	G5	S3S4	
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Lasiurus xanthinus</i> western yellow bat	AMACC05070	None	None	G5	S3	SSC
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
<i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
<i>Lepidium virginicum var. robinsonii</i> Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Microtus californicus stephensi</i> south coast marsh vole	AMAFF11035	None	None	G5T1T2	S1S2	SSC
<i>Myotis yumanensis</i> Yuma myotis	AMACC01020	None	None	G5	S4	
<i>Nama stenocarpa</i> mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
<i>Nasturtium gambelii</i> Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.2
<i>Nemacaulis denudata var. denudata</i> coast woolly-heads	PDPGN0G011	None	None	G3G4T2	S2	1B.2
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	AMACD04010	None	None	G4	S3	SSC
<i>Nyctinomops macrotis</i> big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
<i>Oncorhynchus mykiss irideus pop. 10</i> steelhead - southern California DPS	AFCHA0209J	Endangered	None	G5T1Q	S1	
<i>Orcuttia californica</i> California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
<i>Pandion haliaetus</i> osprey	ABNKC01010	None	None	G5	S4	WL
<i>Panoquina errans</i> wandering (=saltmarsh) skipper	IILEP84030	None	None	G4G5	S2	
<i>Passerculus sandwichensis beldingi</i> Belding's savannah sparrow	ABPBX99015	None	Endangered	G5T3	S3	
<i>Pentachaeta aurea ssp. allenii</i> Allen's pentachaeta	PDAST6X021	None	None	G4T1	S1	1B.1
<i>Perognathus longimembris pacificus</i> Pacific pocket mouse	AMAFD01042	Endangered	None	G5T1	S1	SSC
<i>Phacelia stellaris</i> Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
<i>Phrynosoma blainvillii</i> coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
<i>Poliophtila californica californica</i> coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T2Q	S2	SSC
<i>Rallus obsoletus levipes</i> light-footed Ridgway's rail	ABNME05014	Endangered	Endangered	G5T1T2	S1	FP
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2	
<i>Rynchops niger</i> black skimmer	ABNNM14010	None	None	G5	S2	SSC



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Salvadora hexalepis virgultea</i> coast patch-nosed snake	ARADB30033	None	None	G5T4	S2S3	SSC
<i>Senecio aphanactis</i> chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
<i>Setophaga petechia</i> yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC
<i>Sidalcea neomexicana</i> salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
<i>Sorex ornatus salicornicus</i> southern California saltmarsh shrew	AMABA01104	None	None	G5T1?	S1	SSC
<i>Southern California Arroyo Chub/Santa Ana Sucker Stream</i> Southern California Arroyo Chub/Santa Ana Sucker Stream	CARE2330CA	None	None	GNR	SNR	
<i>Southern Coast Live Oak Riparian Forest</i> Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
<i>Southern Coastal Salt Marsh</i> Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
<i>Southern Cottonwood Willow Riparian Forest</i> Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
<i>Southern Dune Scrub</i> Southern Dune Scrub	CTT21330CA	None	None	G1	S1.1	
<i>Southern Foredunes</i> Southern Foredunes	CTT21230CA	None	None	G2	S2.1	
<i>Southern Sycamore Alder Riparian Woodland</i> Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
<i>Southern Willow Scrub</i> Southern Willow Scrub	CTT63320CA	None	None	G3	S2.1	
<i>Spea hammondi</i> western spadefoot	AAABF02020	None	None	G3	S3	SSC
<i>Sternula antillarum browni</i> California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S1S2	
<i>Suaeda esteroa</i> estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
<i>Symphotrichum defoliatum</i> San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Trigonoscuta dorothea dorothea</i> Dorothy's El Segundo Dune weevil	IICOL51021	None	None	G1T1	S1	
<i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	

Record Count: 104

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

Orange County, California



Local office

Carlsbad Fish And Wildlife Office

☎ (760) 431-9440

📅 (760) 431-5901

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

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

Endangered species

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

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

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

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

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

Listed species¹ 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 Fisheries²).

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* Threatened

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/8178>

Flowering Plants

NAME

STATUS

Ventura Marsh Milk-vetch *Astragalus pycnostachyus* var.

Endangered

lanosissimus

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/1160>

Critical habitats

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

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

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

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

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

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

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

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
<p>Allen's Hummingbird <i>Selasphorus sasin</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637</p>	Breeds Feb 1 to Jul 15
<p>Black Skimmer <i>Rynchops niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234</p>	Breeds May 20 to Sep 15
<p>Clark's Grebe <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jan 1 to Dec 31
<p>Common Yellowthroat <i>Geothlypis trichas sinuosa</i> 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</p>	Breeds May 20 to Jul 31

- Costa's Hummingbird** *Calypte costae* Breeds Jan 15 to Jun 10
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
<https://ecos.fws.gov/ecp/species/9470>
- Golden Eagle** *Aquila chrysaetos* Breeds Jan 1 to Aug 31
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>
- Marbled Godwit** *Limosa fedoa* Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/9481>
- Nuttall's Woodpecker** *Picoides nuttallii* Breeds Apr 1 to Jul 20
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>
- Oak Titmouse** *Baeolophus inornatus* Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/9656>
- Rufous Hummingbird** *Selasphorus rufus* Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/8002>
- Short-billed Dowitcher** *Limnodromus griseus* Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/9480>
- Song Sparrow** *Melospiza melodia* Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
- Spotted Towhee** *Pipilo maculatus clementae* Breeds Apr 15 to Jul 20
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/4243>

Willet *Tringa semipalmata*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

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

Probability of Presence (■)

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

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

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

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

Breeding Season (■)

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

Survey Effort (|)

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

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

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

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

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

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

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

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

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

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

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

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

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

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

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

What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

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

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

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

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

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

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

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

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

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

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters.

Some deepwater reef communities (coral or tubercid 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.

NOT FOR CONSULTATION



*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

Plant List

43 matches found. [Click on scientific name for details](#)

Search Criteria

Found in Quads 3311881, 3311788, 3311787, 3311871, 3311778, 3311777, 3311861 3311768 and 3311767;

[Modify Search Criteria](#)
[Export to Excel](#)
[Modify Columns](#)
[Modify Sort](#)
[Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Federal Listing Status	State Listing Status	CA Rare Plant Rank	Habitats	Lowest Elevation	Highest Elevation	Blooming Period
Abronia maritima	red sand-verbena	Nyctaginaceae	perennial herb			4.2	• Coastal dunes	0 m	100 m	Feb-Nov
Abronia villosa var. aurita	chaparral sand-verbena	Nyctaginaceae	annual herb			1B.1	• Chaparral • Coastal scrub • Desert dunes	75 m	1600 m	(Jan)Mar-Sep
Aphanisma blitoides	aphanisma	Chenopodiaceae	annual herb			1B.2	• Coastal bluff scrub • Coastal dunes • Coastal scrub	1 m	305 m	Feb-Jun
Astragalus pycnostachyus var. lanosissimus	Ventura marsh milk-vetch	Fabaceae	perennial herb	FE	CE	1B.1	• Coastal dunes • Coastal scrub • Marshes and swamps (edges, coastal salt or brackish)	1 m	35 m	(Jun)Aug-Oct
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	perennial herb			1B.2	• Coastal bluff scrub • Coastal dunes • Coastal scrub • Valley and foothill grassland	3 m	460 m	Mar-Oct
Atriplex pacifica	South Coast saltscale	Chenopodiaceae	annual herb			1B.2	• Coastal bluff scrub • Coastal dunes • Coastal	0 m	140 m	Mar-Oct

<u>Atriplex parishii</u>	Parish's brittlescale	Chenopodiaceae	annual herb	1B.1	scrub • Playas • Chenopod scrub • Playas • Vernal pools	25 m	1900 m	Jun-Oct
<u>Atriplex serenana var. davidsonii</u>	Davidson's saltscale	Chenopodiaceae	annual herb	1B.2	• Coastal bluff scrub • Coastal scrub • Chaparral •	10 m	200 m	Apr-Oct
<u>Calochortus catalinae</u>	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	4.2	Cismontane woodland • Coastal scrub • Valley and foothill grassland • Chaparral •	15 m	700 m	(Feb)Mar-Jun
<u>Calochortus plummerae</u>	Plummer's mariposa lily	Liliaceae	perennial bulbiferous herb	4.2	Cismontane woodland • Coastal scrub • Lower montane coniferous forest • Valley and foothill grassland • Chaparral •	100 m	1700 m	May-Jul
<u>Calochortus weedii var. intermedius</u>	intermediate mariposa lily	Liliaceae	perennial bulbiferous herb	1B.2	• Coastal scrub • Valley and foothill grassland • Meadows and seeps (sometimes alkaline) • Riparian scrub (alluvial) • Coastal bluff scrub •	105 m	855 m	May-Jul
<u>Calystegia felix</u>	lucky morning-glory	Convolvulaceae	annual rhizomatous herb	1B.1	Cismontane woodland • Coastal dunes • Coastal scrub • Valley and foothill grassland	30 m	215 m	Mar-Sep
<u>Camissoniopsis lewisii</u>	Lewis' evening-primrose	Onagraceae	annual herb	3	• Marshes and swamps (margins) • Valley and foothill grassland (vernally mesic)	0 m	300 m	Mar-May(Jun)
<u>Centromadia parryi ssp. australis</u>	southern tarplant	Asteraceae	annual herb	1B.1	• Marshes and swamps (margins) • Valley and foothill grassland (vernally mesic)	0 m	480 m	May-Nov

<u>Chloropyron maritimum ssp. maritimum</u>	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	FE	CE	1B.2	<ul style="list-style-type: none"> • Vernal pools • Coastal dunes • Marshes and swamps (coastal salt) 	0 m	30 m	May-Oct(Nov)
<u>Chorizanthe parryi var. fernandina</u>	San Fernando Valley spineflower	Polygonaceae	annual herb	FC	CE	1B.1	<ul style="list-style-type: none"> • Coastal scrub (sandy) • Valley and foothill grassland 	150 m	1220 m	Apr-Jul
<u>Convolvulus simulans</u>	small-flowered morning-glory	Convolvulaceae	annual herb			4.2	<ul style="list-style-type: none"> • Chaparral (openings) • Coastal scrub • Valley and foothill grassland 	30 m	740 m	Mar-Jul
<u>Deinandra paniculata</u>	paniculate tarplant	Asteraceae	annual herb			4.2	<ul style="list-style-type: none"> • Coastal scrub • Valley and foothill grassland • Vernal pools 	25 m	940 m	(Mar)Apr-Nov(Dec)
<u>Dudleya multicaulis</u>	many-stemmed dudleya	Crassulaceae	perennial herb			1B.2	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Valley and foothill grassland 	15 m	790 m	Apr-Jul
<u>Dudleya stolonifera</u>	Laguna Beach dudleya	Crassulaceae	perennial stoloniferous herb	FT	CT	1B.1	<ul style="list-style-type: none"> • Cismontane woodland • Coastal scrub • Valley and foothill grassland 	10 m	260 m	May-Jul
<u>Eryngium aristulatum var. parishii</u>	San Diego button-celery	Apiaceae	annual / perennial herb	FE	CE	1B.1	<ul style="list-style-type: none"> • Coastal scrub • Valley and foothill grassland • Vernal pools 	20 m	620 m	Apr-Jun
<u>Helianthus nuttallii ssp. parishii</u>	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb			1A	<ul style="list-style-type: none"> • Marshes and swamps (coastal salt and freshwater) 	10 m	1525 m	Aug-Oct
<u>Hordeum intercedens</u>	vernal barley	Poaceae	annual herb			3.2	<ul style="list-style-type: none"> • Coastal dunes • Coastal scrub • Valley and foothill grassland (saline flats and depressions) 	5 m	1000 m	Mar-Jun

<u>Juglans californica</u>	Southern California black walnut	Juglandaceae	perennial deciduous tree			4.2	<ul style="list-style-type: none"> • Vernal pools • Chaparral • Cismontane woodland • Coastal scrub • Riparian woodland 	50 m	900 m	Mar-Aug
<u>Juncus acutus ssp. leopoldii</u>	southwestern spiny rush	Juncaceae	perennial rhizomatous herb			4.2	<ul style="list-style-type: none"> • Coastal dunes (mesic) • Meadows and seeps (alkaline seeps) • Marshes and swamps (coastal salt) 	3 m	900 m	(Mar)May-Jun
<u>Lasthenia glabrata ssp. coulteri</u>	Coulter's goldfields	Asteraceae	annual herb			1B.1	<ul style="list-style-type: none"> • Marshes and swamps (coastal salt) • Playas • Vernal pools 	1 m	1220 m	Feb-Jun
<u>Lepidium virginicum var. robinsonii</u>	Robinson's pepper-grass	Brassicaceae	annual herb			4.3	<ul style="list-style-type: none"> • Chaparral • Coastal scrub 	1 m	885 m	Jan-Jul
<u>Nama stenocarpa</u>	mud nama	Namaceae	annual / perennial herb			2B.2	<ul style="list-style-type: none"> • Marshes and swamps (lake margins, riverbanks) 	5 m	500 m	Jan-Jul
<u>Nasturtium gambelii</u>	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	FE	CT	1B.1	<ul style="list-style-type: none"> • Marshes and swamps (freshwater or brackish) • Coastal scrub • Meadows and seeps 	5 m	330 m	Apr-Oct
<u>Navarretia prostrata</u>	prostrate vernal pool navarretia	Polemoniaceae	annual herb			1B.1	<ul style="list-style-type: none"> • Valley and foothill grassland (alkaline) • Vernal pools 	3 m	1210 m	Apr-Jul
<u>Nemacaulis denudata var. denudata</u>	coast woolly-heads	Polygonaceae	annual herb			1B.2	<ul style="list-style-type: none"> • Coastal dunes 	0 m	100 m	Apr-Sep
<u>Orcuttia californica</u>	California Orcutt grass	Poaceae	annual herb	FE	CE	1B.1	<ul style="list-style-type: none"> • Vernal pools 	15 m	660 m	Apr-Aug
<u>Phacelia hubbyi</u>	Hubby's phacelia	Hydrophyllaceae	annual herb			4.2	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Valley and foothill grassland 	0 m	1000 m	Apr-Jul
<u>Phacelia ramosissima var. australitoralis</u>	south coast branching phacelia	Hydrophyllaceae	perennial herb			3.2	<ul style="list-style-type: none"> • Chaparral • Coastal dunes • Coastal 	5 m	300 m	Mar-Aug

<u>Phacelia stellaris</u>	Brand's star phacelia	Hydrophyllaceae	annual herb	1B.1	scrub • Marshes and swamps (coastal salt) • Coastal dunes • Coastal scrub • Chaparral •	1 m	400 m	Mar-Jun
<u>Quercus engelmannii</u>	Engelmann oak	Fagaceae	perennial deciduous tree	4.2	Cismontane woodland • Riparian woodland • Valley and foothill grassland	50 m	1300 m	Mar-Jun
<u>Ribes divaricatum var. parishii</u>	Parish's gooseberry	Grossulariaceae	perennial deciduous shrub	1A	• Riparian woodland	65 m	300 m	Feb-Apr
<u>Romneya coulteri</u>	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	4.2	• Chaparral • Coastal scrub	20 m	1200 m	Mar-Jul(Aug)
<u>Sagittaria sanfordii</u>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	1B.2	• Marshes and swamps (assorted shallow freshwater) • Chaparral •	0 m	650 m	May-Oct(Nov)
<u>Senecio aphanactis</u>	chaparral ragwort	Asteraceae	annual herb	2B.2	Cismontane woodland • Coastal scrub • Chaparral • Coastal scrub • Lower	15 m	800 m	Jan-Apr(May)
<u>Sidalcea neomexicana</u>	salt spring checkerbloom	Malvaceae	perennial herb	2B.2	montane coniferous forest • Mojavean desert scrub • Playas	15 m	1530 m	Mar-Jun
<u>Suaeda esteroa</u>	estuary seablite	Chenopodiaceae	perennial herb	1B.2	• Marshes and swamps (coastal salt)	0 m	5 m	(May)Jul-Oct(Jan)
<u>Symphotrichum defoliatum</u>	San Bernardino aster	Asteraceae	perennial rhizomatous herb	1B.2	• Cismontane woodland • Coastal scrub • Lower montane coniferous forest • Meadows and seeps • Marshes and swamps • Valley and foothill grassland (vernally mesic)	2 m	2040 m	Jul-Nov(Dec)

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