

Appendix C: Biological Resources Supporting Information

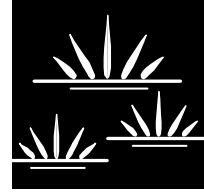
THIS PAGE INTENTIONALLY LEFT BLANK

C.1 - Biological Resources Assessment

THIS PAGE INTENTIONALLY LEFT BLANK

GLENN LUKOS ASSOCIATES

Regulatory Services



February 16, 2016

TA Grabel
Oxbow Partners
2855 Pacific Coast Highway, Suite 227
Corona Del Mar, California 92625

SUBJECT: Results of a Biological/Regulatory Overview for the Approximately 105-Acre Mountain View Golf Course Redevelopment Project in the City of Corona and Unincorporated Riverside County, California.

Dear Mr. Grabel:

Glenn Lukos Associates, Inc. (GLA) visited the above-mentioned property on December 18, 2015 to determine the presence of potential development constraints¹. For the purpose of this report, constraints are considered sensitive biological and jurisdictional resources that may 1) require partial or complete avoidance of resources; 2) require permits from one or more regulatory agencies; 3) require mitigation to offset impacts to resources; 4) result in a seasonal delay to development; and/or 5) require additional focused surveys.

Sensitive resources considered for this analysis include special-status species (e.g., threatened and endangered, species of concern, etc.), special-status habitats, nesting birds, waters of the United States (including wetlands) subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps) and the Regional Water Quality Control Board (Regional Board), and waters of the State (including riparian vegetation) subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW). Impacts to special-status species and habitats must be addressed during project review under the California Environmental Quality Act (CEQA). In addition, federally listed species (threatened or endangered) are regulated by the U.S. Fish and Wildlife Service (USFWS) pursuant to the Federal Endangered Species Act (ESA). Species listed as threatened or endangered by the State of California are regulated by CDFW pursuant to the State ESA. Wildlife that are assigned other designations by CDFW (i.e., species of concern, fully-protected species, etc.), and plants given special status by the California Native Plant Society (CNPS) are not granted additional protection, except that impacts to these species may need to be evaluated pursuant to CEQA.

¹ Please note, the biological constraints analysis will alert the client to potential constraints in development of the property. Additional analysis may be necessary to support any permitting that may be required and/or to satisfy local or lead agency requirements under CEQA. Separate and more detailed surveys may be required for the permitting/approval process, if needed.

The Project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). However, since the site consists of a previously-developed golf course, the site is excluded from MSHCP survey areas, including the Narrow Endemic Plant Species Survey Area (NEPSSA), Criteria Area Species Survey Area (CAPSSA), and the burrowing owl survey area. As such, assessments are not required for these species pursuant to the MSHCP. However, the MSHCP policies pertaining to riparian/riverine areas apply to all properties located within the MSHCP. As such, the subject property must be assessed for riparian/riverine areas, including the potential for suitable habitat for riparian birds with project-specific survey requirements.

1.0 SITE LOCATION AND DESCRIPTION

The majority of the approximately 105-acre property is located in unincorporated Riverside County, California, with a smaller portion located within the City of Corona [Exhibit 1 – Regional Map]. The property is located south of the 91 Freeway, and generally west of Avenida del Vista and east of Serfas Club Drive, and is depicted on the U.S. Geological Survey (USGS) topographic maps Corona North and Corona South, California (dated 1967 and photorevised in 1981 and 1988, respectively) at Township 3 South, Range 7 West [Exhibit 2 – Vicinity Map].

The former golf course is surrounded by residential development. Exhibit 3 provides an aerial image of the site, including the property boundary.

2.0 METHODOLOGY

GLA biologist Jeff Ahrens visited the property on December 18, 2015 to conduct a site review. Site reconnaissance was conducted in such a manner as to allow inspection of the entire site by direct observation, including the use of binoculars. The property was walked following transects spaced appropriately in order to provide complete coverage of the site. The property was inspected to determine whether any special-status species, habitats, or potential jurisdictional areas are present at the property.

In addition to site reconnaissance, evaluation of the property included a review of the California Natural Diversity Database (CNDDB) for the Corona North and Corona South quadrangles and surrounding quadrangles², a review of the 2010 California Native Plant Society (CNPS) on-line

² California Department of Fish and Wildlife. January 2016. Natural Diversity Database: RareFind 5.

inventory³, and soil map review.

3.0 RESULTS

3.1 Existing Conditions

The property consists of the former Mountain View Golf Course, which is no longer operational. The property contains the remnant fairways, pathways, clubhouse, and other golf course features, including former golf course ponds. The majority of the site exhibits evidence of recent mechanical disturbance, including mowing. Representative photographs are provided as Exhibit 4.

The dominant vegetation at the property consists of remnant turf grass and trees that were planted as part of the golf course landscaping, as well as weedy species that have expanded throughout the golf course footprint. The trees include Peruvian pepper tree (*Schinus molle*), gum tree (*Eucalyptus* sp.), pines (*Pinus* sp.), Brazilian pepper tree (*Schinus terebinthifolius*), Acacia sp. (*Acacia* sp.), shamel ash (*Fraxinus uhdei*), white alder (*Alnus rhombifolia*), saltcedar (*Tamarix ramosissima*), Mexican fan palm (*Washingtonia robusta*), Canary Island palm (*Phoenix canariensis*), European olive (*Olea europaea*), numerous other ornamental varieties, and a few coast live oak trees (*Quercus agrifolia*). Non-native grasses and other invasive species include London rocket (*Sisymbrium irio*), Bermuda grass (*Cynodon dactylon*), Russian thistle (*Salsola tragus*), horehound (*Marrubium vulgare*), Lamb's quarters (*Chenopodium album*), cheeseweed (*Malva parviflora*), slender wild oat (*Avena barbata*), shortpod mustard (*Hirschfeldia incana*), giant reed (*Arundo donax*), curly dock (*Rumex crispus*), Mediterranean grass (*Schismus barbatus*), foxtail chess (*Bromus madritensis* ssp. *rubens*), prostrate pigweed (*Amaranthus albus*), cultivated radish (*Rhaphanus sativus*), milkvetch (*Astragalus* sp.), English ivy (*Hedera helix*), and smilo grass (*Stipa miliacea* var. *miliacea*).

The former golf course ponds contain non-native tree and shrub species, but also include native trees and shrubs associated with riparian areas, including black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), and mulefat (*Baccharis salicifolia*).

The property contains a natural drainage feature located in southern portion of the property. The banks of the drainage feature are vegetated primarily with non-native grasses and ruderal vegetation, but also contain patches of sage scrub vegetation, including California goldenbush (*Ericameria ericoides*), California buckwheat (*Eriogonum fasciculatum*), and coastal sagebrush

³ California Native Plant Society. 2010. On-Line Inventory of Rare and Endangered Plants of California (Eighth Edition).

(*Artemisia californica*). The bottom of the drainage feature contains both native and non-native trees and shrubs, including riparian species such as mulefat and willow.

3.2 Special-Status Plants

The subject property is not expected to support any special-status plants due to the lack of suitable habitat and the level of disturbance. As noted above, the site is not located within MSHCP plant survey areas, and so there are no MSHCP survey/conservation requirements pertaining to special-status plants. Table 3-1 provides a summary of all plants considered for this analysis. Species were considered based on a number of factors, including: 1) species identified by the January 2016 CNDDDB as occurring (either currently or historically) on or in the vicinity of the property; and 2) any other species that are known to occur within the vicinity of the property, or for which potentially suitable habitat occurs on site.

Table 3-1. Special-Status Plants Evaluated for the Property.

Federal

FE – Federally Endangered
FT – Federally Threatened

State

SE – State Endangered
ST – State Threatened

CNPS Rare Plant Rank

Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.
Rank 2 – Plants rare, threatened, or endangered in California, but more common elsewhere.
Rank 3 – Plants about which more information is needed.
Rank 4 – Plants of limited distribution (a watch list).

CNPS Threat Rank Extensions

.1 – Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

Species Name	Status	Habitat Requirements	Potential for Occurrence
Allen's pentachaeta <i>Pentachaeta aurea ssp. allenii</i>	Federal: None State: None CNPS: Rank 1B.1	Openings in coastal sage scrub, and valley and foothill grasslands.	Does not occur due to a lack of suitable habitat.
Brand's star phacelia <i>Phacelia stellaris</i>	Federal: None State: None CNPS: Rank 1B.1	Coastal dunes and coastal sage scrub.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Braunton's milk-vetch <i>Astragalus brauntonii</i>	Federal: FE State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral, coastal sage scrub, valley and foothill grassland. Usually carbonate soils. Recent burn or disturbed areas.	Does not occur due to a lack of suitable habitat.
Brewer's calandrinia <i>Calandrinia breweri</i>	Federal: None State: None CNPS: Rank 4.2	Sandy or loamy soils in disturbed sites and burns. Chaparral, coastal scrub.	Does not occur due to a lack of suitable habitat.
California beardtongue <i>Penstemon californicus</i>	Federal: None State: None CNPS: Rank 1B.2	Sandy soils in chaparral, lower montane coniferous forest, and pinyon and juniper woodland.	Does not occur due to a lack of suitable habitat.
California muhly <i>Muhlenbergia californica</i>	Federal: None State: None CNPS: Rank 4.3	Mesic habitats, including seeps and streambanks, in chaparral, coastal scrub, lower montane coniferous forest, and meadows.	Does not occur due to a lack of suitable habitat.
California saw-grass <i>Cladium californicum</i>	Federal: None State: None CNPS: Rank 2B.2	Meadows and seeps, and alkaline or freshwater marshes and swamps.	Does not occur due to a lack of suitable habitat.
California screw moss <i>Tortula californica</i>	Federal: None State: None CNPS: Rank 1B.2	Sandy soil in chenopod scrub, and valley and foothill grassland.	Does not occur due to a lack of suitable habitat.
Catalina mariposa lily <i>Calochortus catalinae</i>	Federal: None State: None CNPS: Rank 4.2	Chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland.	Does not occur due to a lack of suitable habitat.
Chaparral nolina <i>Nolina cismontana</i>	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub. Occurring on sandstone or gabbro substrates.	Does not occur due to a lack of suitable habitat.
Chaparral ragwort <i>Senecio aphanactis</i>	Federal: None State: None CNPS: Rank 2B.2	Chaparral, cismontane woodland, coastal scrub. Sometimes associated with alkaline soils.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Chaparral rein orchid <i>Piperia cooperi</i>	Federal: None State: None CNPS: Rank 4.2	Chaparral, cismontane woodland, valley and foothill grassland.	Does not occur due to a lack of suitable habitat.
Chaparral sand-verbena <i>Abronia villosa</i> var. <i>aurita</i>	Federal: None State: None CNPS: Rank 1B.1	Sandy soils in chaparral, coastal sage scrub.	Does not occur due to a lack of suitable habitat.
Cleveland's bush monkeyflower <i>Mimulus clevelandii</i>	Federal: None State: None CNPS: Rank 4.2	Gabbroic soils, often in disturbed areas, openings, rocky. Chaparral, cismontane woodland, lower montane coniferous forest.	Does not occur due to a lack of suitable habitat.
Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Federal: None State: None CNPS: Rank 1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Does not occur due to a lack of suitable habitat.
Coulter's matilija poppy <i>Romneya coulteri</i>	Federal: None State: None CNPS: Rank 4.2	Often in burns in chaparral and coastal scrub.	Does not occur due to a lack of suitable habitat.
Coulter's saltbush <i>Atriplex coulteri</i>	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.	Does not occur due to a lack of suitable habitat.
Felt-leaved monardella <i>Monardella hypoleuca</i> ssp. <i>lanata</i>	Federal: None State: None CNPS: Rank 1B.2	Chaparral and cismontane woodland	Does not occur due to a lack of suitable habitat.
Fish's milkwort <i>Polygala cornuta</i> var. <i>fishae</i>	Federal: None State: None CNPS: Rank 4.3	Chaparral, cismontane woodland, riparian woodland.	Does not occur due to a lack of suitable habitat.
Hall's monardella <i>Monardella macrantha</i> ssp. <i>hallii</i>	Federal: None State: None CNPS: Rank 1B.3	Occurs on dry slopes and ridges within openings in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grassland.	Does not occur due to a lack of suitable habitat.
Heart-leaved pitcher sage <i>Lepechinia cardiophylla</i>	Federal: None State: None CNPS: Rank 1B.2	Closed-cone coniferous forest, chaparral, and cismontane woodland.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Intermediate mariposa-lily <i>Calochortus weedii</i> var. <i>intermedius</i>	Federal: None State: None CNPS: Rank 1B.2	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Does not occur due to a lack of suitable habitat.
Intermediate monardella <i>Monardella hypoleuca</i> ssp. <i>intermedia</i>	Federal: None State: None CNPS: Rank 1B.3	Usually in the understory of chaparral, cismontane woodland, and lower montane coniferous forest (sometimes)	Does not occur due to a lack of suitable habitat.
Jokerst's monardella <i>Monardella australis</i> ssp. <i>jokerstii</i>	Federal: None State: None CNPS: Rank 1B.1	Steep scree or talus slopes between breccia, secondary alluvial benches along drainages and washes. Chaparral, lower montane coniferous forest.	Does not occur due to a lack of suitable habitat.
Lewis' evening-primrose <i>Camissoniopsis lewisii</i>	Federal: None State: None CNPS: Rank 3	Sandy or clay soils in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland.	Does not occur due to a lack of suitable habitat.
Long-spined spineflower <i>Chorizanthe polygonoides</i> var. <i>longispina</i>	Federal: None State: None CNPS: Rank 1B.2	Clay soils in chaparral, coastal sage scrub, meadows and seeps, and valley and foothill grasslands	Does not occur due to a lack of suitable habitat.
Lucky morning-glory <i>Calystegia felix</i>	Federal: None State: None CNPS: Rank 3.1	Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline soils. Meadows and seeps (sometimes alkaline), riparian scrub (alluvial).	Does not occur due to a lack of suitable habitat.
Malibu baccharis <i>Baccharis malibuensis</i>	Federal: None State: None CNPS: Rank 1B.1	Chaparral, cismontane woodland, coastal sage scrub.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Many-stemmed dudleya <i>Dudleya multicaulis</i>	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Does not occur due to a lack of suitable habitat.
Marsh sandwort <i>Arenaria paludicola</i>	Federal: FE State: SE CNPS: Rank 1B.1	Bogs and fens, freshwater marshes and swamps.	Does not occur due to a lack of suitable habitat.
Mesa horkelia <i>Horkelia cuneata</i> var. <i>puberula</i>	Federal: None State: None CNPS: Rank 1B.1	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.	Does not occur due to a lack of suitable habitat.
Mud nama <i>Nama stenocarpum</i>	Federal: None State: None CNPS: Rank 2B.2	Marshes and swamps	Does not occur due to a lack of suitable habitat.
Munz's onion <i>Allium munzii</i>	Federal: FE State: ST CNPS: Rank 1B.1	Clay soils in chaparral, coastal sage scrub, and valley and foothill grasslands	Does not occur due to a lack of suitable habitat.
Ocellated humboldt lily <i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	Federal: None State: None CNPS: Rank 4.2	Chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, riparian woodland. Occurring in openings.	Does not occur due to a lack of suitable habitat.
Narrow-petaled rein orchid <i>Piperia leptopetala</i>	Federal: None State: None CNPS: Rank 4.3	Cismontane woodland, lower montane coniferous forest, upper montane coniferous forest.	Does not occur due to a lack of suitable habitat.
Palmer's grapplinghook <i>Harpagonella palmeri</i>	Federal: None State: None CNPS: Rank 4.2	Chaparral, coastal sage scrub, valley and foothill grassland. Occurring in clay soils.	Does not occur due to a lack of suitable habitat.
Palomar monkeyflower <i>Mimulus diffusus</i>	Federal: None State: None CNPS: Rank 4.3	Sandy or gravelly soils in chaparral, lower montane coniferous forest.	Does not occur due to a lack of suitable habitat.
Paniculate tarplant <i>Deinandra paniculata</i>	Federal: None State: None CNPS: Rank 4.2	Usually in vernal mesic, sometimes sandy soils in coastal scrub, valley and foothill grassland, and vernal pools.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Parish's desert-thorn <i>Lycium parishii</i>	Federal: None State: None CNPS: Rank 2B.3	Coastal sage scrub, Sonoran desert scrub	Does not occur due to a lack of suitable habitat.
Parry's spineflower <i>Chorizanthe parryi</i> var. <i>parryi</i>	Federal: None State: None CNPS: Rank 1B.1	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Does not occur due to a lack of suitable habitat.
Payson's jewelflower <i>Caulanthus simulans</i>	Federal: None State: None CNPS: Rank 4.2	Sandy or granitic soils in chaparral and coastal scrub.	Does not occur due to a lack of suitable habitat.
Peninsular spineflower <i>Chorizanthe leptotheca</i>	Federal: None State: None CNPS: Rank 4.2	Alluvial fan, granitic. Chaparral, coastal scrub, lower montane coniferous forest.	Does not occur due to a lack of suitable habitat.
Plummer's mariposa lily <i>Calochortus plummerae</i>	Federal: None State: None CNPS: Rank 4.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Does not occur due to a lack of suitable habitat.
Pringle's monardella <i>Monardella pringlei</i>	Federal: None State: None CNPS: Rank 1A	Sandy soils in coastal sage scrub.	Does not occur due to a lack of suitable habitat.
Prairie wedge grass <i>Sphenopholis obtusata</i>	Federal: None State: None CNPS: Rank 2B.2	Mesic soils in cismontane woodland, meadows and seeps.	Does not occur due to a lack of suitable habitat.
Prostrate vernal pool navarretia <i>Navarretia prostrata</i>	Federal: None State: None CNPS: Rank 1B.1	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	Does not occur due to a lack of suitable habitat.
Rigid fringepod <i>Thysanocarpus rigidus</i>	Federal: None State: None CNPS: Rank 1B.2	Dry rocky slopes in pinyon and juniper woodland.	Does not occur due to a lack of suitable habitat.
Robinson's pepper grass <i>Lepidium virginicum</i> var. <i>robinsonii</i>	Federal: None State: None CNPS: Rank 4.3	Chaparral, coastal sage scrub	Does not occur due to a lack of suitable habitat.
Round-leaved filaree <i>California macrophylla</i>	Federal: None State: None CNPS: Rank 1B.1	Clay soils in cismontane woodland, valley and foothill grassland	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Salt marsh bird's-beak <i>Chloropyron maritimum ssp. maritimum</i>	Federal: FE State: SE CNPS: Rank 1B.2	Coastal dune, coastal salt marshes and swamps.	Does not occur due to a lack of suitable habitat.
Salt Spring checkerbloom <i>Sidalcea neomexicana</i>	Federal: None State: None CNPS: Rank 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Does not occur due to a lack of suitable habitat.
San Bernardino aster <i>Symphotrichum defoliatum</i>	Federal: None State: None CNPS: Rank 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Does not occur due to a lack of suitable habitat.
San Diego ambrosia <i>Ambrosia pumila</i>	Federal: FE State: None CNPS: Rank 1B.1	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. Often in disturbed habitats.	Does not occur due to a lack of suitable habitat.
San Fernando Valley spineflower <i>Chorizanthe parryi var. fernandina</i>	Federal: Candidate State: SE CNPS: Rank 1B.1	Coastal sage scrub, occurring on sandy soils.	Does not occur due to a lack of suitable habitat.
San Miguel savory <i>Clinopodium chandleri</i>	Federal: None State: None CNPS: Rank 1B.2	Rocky, gabbroic, or metavolcanic soils in chaparral, cismontane woodland, coastal sage scrub, riparian woodland, valley and foothill grassland.	Does not occur due to a lack of suitable habitat.
Santa Ana River woolly star <i>Eriastrum densifolium ssp. sanctorum</i>	Federal: FE State: SE CNPS: Rank 1B.1	Alluvial fan sage scrub, chaparral. Occurring on sandy or rocky soils.	Does not occur due to a lack of suitable habitat.
Santa Monica dudleya <i>Dudleya cymosa ssp. ovatifolia</i>	Federal: FT State: None CNPS: Rank 1B.1	Chaparral, coastal sage scrub. Occurring on volcanic soils.	Does not occur due to a lack of suitable habitat.
Santiago Peak phacelia <i>Phacelia keckii</i>	Federal: None State: None CNPS: Rank 1B.3	Closed-cone coniferous forest, chaparral	Does not occur due to a lack of suitable habitat.
Slender-horned spineflower <i>Dodecahema leptoceras</i>	Federal: FE State: SE CNPS: Rank 1B.1	Sandy soils in alluvial scrub, chaparral, cismontane woodland.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Small-flowered microseris <i>Microseris douglasii</i> ssp. <i>platycarpa</i>	Federal: None State: None CNPS: Rank 4.2	Cismontane woodland, coastal sage scrub, valley and foothill grassland, vernal pools. Occurring on clay soils.	Does not occur due to a lack of suitable habitat.
Small-flowered morning-glory <i>Convolvulus simulans</i>	Federal: None State: None CNPS: Rank 4.2	Chaparral (openings), coastal sage scrub, valley and foothill grassland. Occurring on clay soils and serpentinite seeps.	Does not occur due to a lack of suitable habitat.
Smooth tarplant <i>Centromadia pungens</i> ssp. <i>laevis</i>	Federal: None State: None CNPS: Rank 1B.1	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Does not occur due to a lack of suitable habitat.
Southern California black walnut <i>Juglans californica</i>	Federal: None State: None CNPS: Rank 4.2	Chaparral, cismontane woodland, coastal sage scrub, alluvial surfaces.	Does not occur due to a lack of suitable habitat.
Summer holly <i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	Federal: None State: None CNPS: Rank 1B.2	Chaparral.	Does not occur due to a lack of suitable habitat.
Tecate cypress <i>Hesperocyparis forbesii</i>	Federal: None State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral.	Does not occur due to a lack of suitable habitat.
Thread-leaved brodiaea <i>Brodiaea filifolia</i>	Federal: FT State: SE CNPS: Rank 1B.1	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Does not occur due to a lack of suitable habitat.
Vernal barley <i>Hordeum intercedens</i>	Federal: None State: None CNPS: Rank 3.2	Coastal dunes, coastal sage scrub, valley and foothill grassland (saline flats and depressions), vernal pools.	Does not occur due to a lack of suitable habitat.
Western spleenwort <i>Asplenium vespertinum</i>	Federal: None State: None CNPS: Rank 4.2	Rocky soils in chaparral, cismontane woodland, and coastal scrub.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
White-bracted spineflower <i>Chorizanthe xanti</i> var. <i>leucotheca</i>	Federal: None State: None CNPS: Rank 1B.2	Sandy or gravelly soils in Mojavean desert scrub and pinyon and juniper woodland.	Does not occur due to a lack of suitable habitat.
White rabbit-tobacco <i>Pseudognaphalium leucocephalum</i>	Federal: None State: None CNPS: Rank 2B.2	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland.	Does not occur due to a lack of suitable habitat.
Woolly chaparral-pea <i>Pickeringia montana</i> var. <i>tomentosa</i>	Federal: None State: None CNPS: Rank 4.3	Gabbroic, granitic, and clay soils in chaparral.	Does not occur due to a lack of suitable habitat.

3.3 Special-Status Animals

No special-status animals were observed onsite during the general survey. Some special-status animals have the potential to occur oot the property based on the presence of potentially suitable habitat. Species with specific survey requirements and/or that may represent a constraint to developing the property are discussed below.

Table 3-2 provides a summary of all species considered for the constraints analysis. Species were considered based on a number of factors, including: 1) species identified by the January 2016 CNDDb as occurring (either currently or historically) on or in the vicinity of the property; and 2) any other special-status species that are known to occur within the vicinity of the property, or for which potentially suitable habitat occurs on site.

Table 3-2. Special-Status Animals Evaluated for the Property.

Federal	State
FE – Federally Endangered	SE – State Endangered
FT – Federally Threatened	ST – State Threatened
FPT – Federally Proposed Threatened	SSC – California Species of Special Concern
BCC – Birds of Conservation Concern	CFP – California Fully-Protected Species

Species Name	Status	Habitat Requirements	Potential for Occurrence
Invertebrates			
Delhi-sands flower-loving fly <i>Raphiomidas terminatus abdominalis</i>	Federal: FE State: None	Fine, sandy soils, often associated with wholly or partially consolidated dunes referred to as the “Delhi” series. Vegetation consists of a sparse cover, including Californica buckwheat, California croton, deerweed, and evening primrose.	Does not occur due to a lack of suitable habitat.
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	Federal: FE State: None	Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.	Does not occur due to a lack of suitable habitat.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Federal: FT State: None	Seasonal vernal pools	Does not occur due to a lack of suitable habitat.
Fish			
Arroyo chub <i>Gila orcutti</i>	Federal: None State: SSC	Slow-moving or backwater sections of warm to cool streams with substrates of sand or mud.	Does not occur due to a lack of suitable habitat.
Santa Ana speckled dace <i>Rhinichthys osculus ssp. 3</i>	Federal: None State: SSC	Occurs in the headwaters of the Santa Ana and San Gabriel Rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temperatures of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Santa Ana sucker <i>Catostomus santaanae</i>	Federal: FT State: SSC	Small, shallow streams, less than 7 meters in width, with currents ranging from swift in the canyons to sluggish in the bottom lands. Preferred substrates are generally coarse and consist of gravel, rubble, and boulders with growths of filamentous algae, but occasionally they are found on sand/mud substrates.	Does not occur due to a lack of suitable habitat.
Amphibians			
Arroyo toad <i>Anaxyrus californicus</i>	Federal: FE State: SSC	Breed, forage, and/or aestivate in aquatic habitats, riparian, coastal sage scrub, oak, and chaparral habitats. Breeding pools must be open and shallow with minimal current, and with a sand or pea gravel substrate overlain with sand or flocculent silt. Adjacent banks with sandy or gravelly terraces and very little herbaceous cover for adult and juvenile foraging areas, within a moderate riparian canopy of cottonwood, willow, or oak.	Does not occur due to a lack of suitable habitat.
Coast Range newt <i>Taricha torosa</i>	Federal: None State: SSC	Found in wet forests, oak forests, chaparral, and rolling grasslands. In southern California, drier chaparral, oak woodland, and grasslands are used.	Does not occur due to a lack of suitable habitat.
Western spadefoot <i>Spea hammondi</i>	Federal: None State: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Reptiles			
California mountain kingsnake (San Diego population) <i>Lampropeltis zonata (pulchra)</i>	Federal: None State: SSC	A habitat generalist, found in diverse habitats including coniferous forest, oak-pine woodlands, riparian woodland, chaparral, manzanita, and coastal sage scrub.	Low potential to occur in habitat located within adjoining the natural drainage feature.
Coast horned lizard <i>Phrynosoma blainvillii</i>	Federal: None State: SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Low potential to occur in habitat located within adjoining the natural drainage feature.
Coast patch-nosed snake <i>Salvadora hexalepis virgultea</i>	Federal: None State: SSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	Low potential to occur in habitat located within adjoining the natural drainage feature.
Orangethroat whiptail <i>Aspidoscelis hyperythra</i>	Federal: None State: SSC	Coastal sage scrub, chaparral, non-native grassland, oak woodland, and juniper woodland.	Low potential to occur in habitat located within adjoining the natural drainage feature.
Red-diamond rattlesnake <i>Crotalus ruber</i>	Federal: None State: SSC	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Low potential to occur in habitat located within adjoining the natural drainage feature.
Silvery legless lizard <i>Anniella pulchra pulchra</i>	Federal: None State: SSC	Occurs primarily in areas with sandy or loose organic soil, or where there is plenty of leaf litter. Associated with coastal sage scrub, chaparral, coastal dunes, valley/foothill grasslands, oak woodlands, and pine forests.	Low potential to occur in habitat located within adjoining the natural drainage feature.
Two-striped garter snake <i>Thamnophis hammondi</i>	Federal: None State: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Western pond turtle <i>Emys marmorata</i>	Federal: None State: SSC	Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks.	Low to moderate potential to occur within the perennial pond located southeast of Paseo Grande.
Birds			
Bald eagle (nesting & wintering) <i>Haliaeetus leucocephalus</i>	Federal: Delisted State: SE, FP	Primarily in or near seacoasts, rivers, swamps, and large lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.	Not expected to occur on site due to a lack of suitable habitat.
Burrowing owl (burrow sites & some wintering sites) <i>Athene cunicularia</i>	Federal: BCC State: SSC	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Not detected during site reconnaissance. Moderate to high potential to occur on site due to the presence of suitable habitat, including suitable burrows.
Coastal cactus wren (San Diego & Orange County only) <i>Campylorhynchus brunneicapillus sandiegensis</i>	Federal: BCC State: SSC	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	Low potential to occur based on presence of scattered cactus patches.
Coastal California gnatcatcher <i>Poliophtila californica californica</i>	Federal: FT State: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	Low potential to occur within sage scrub vegetation adjacent to the natural drainage feature.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Golden eagle (nesting & wintering) <i>Aquila chrysaetos</i>	Federal: BCC State: WL, FP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Not expected to occur due to a lack of suitable habitat.
Grasshopper sparrow (nesting) <i>Ammodramus savannarum</i>	Federal: None State: SSC	Open grassland and prairies with patches of bare ground.	Not expected to occur due to a lack of suitable habitat.
Least Bell's vireo (nesting) <i>Vireo bellii pusillus</i>	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Low to moderate potential to occur in areas of riparian habitat, particularly at the pond southeast of Paseo Grande and within the natural drainage feature.
Long-eared owl (nesting) <i>Asio otus</i>	Federal: None State: SSC	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	Not expected to occur due to a lack of suitable habitat.
Southwestern willow flycatcher (nesting) <i>Empidonax traillii extimus</i>	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Not expected to occur due to a lack of suitable habitat.
Swainson's hawk (nesting) <i>Buteo swainsoni</i>	Federal: BCC State: ST	Summer in wide open spaces of the American West. Nest in grasslands, but can use sage flats and agricultural lands. Nests are placed in lone trees.	Not expected to occur due to a lack of suitable habitat.
Tricolored blackbird (nesting colony) <i>Agelaius tricolor</i>	Federal: BCC State: Candidate Endangered	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Low potential to occur near the pond southeast of Paseo Grande.
Western yellow-billed cuckoo (nesting) <i>Coccyzus americanus occidentalis</i>	Federal: FT, BCC State: SE	Dense, wide riparian woodlands with well-developed understories.	Not expected to occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
White-tailed kite (nesting) <i>Elanus leucurus</i>	Federal: None State: FP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Low potential to occur at the site.
Yellow-breasted chat (nesting) <i>Icteria virens</i>	Federal: None State: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Low to moderate potential to occur at the site.
Yellow warbler (nesting) <i>Setophaga petechia</i>	Federal: BCC State: SSC	Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats.	Moderate potential to occur at the site.
Mammals			
Big free-tailed bat <i>Nyctinomops macrotis</i>	Federal: None State: SSC	Roost mainly in crevices and rocks in cliff situations; also utilize buildings, caves, and tree cavities.	Low potential to occur.
Los Angeles pocket mouse <i>Perognathus longimembris brevinasus</i>	Federal: None State: SSC	Fine, sandy soils in coastal sage scrub and grasslands.	Not expected to occur due to a lack of suitable habitat.
Northwestern San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	Federal: None State: SSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Low to moderate potential to occur within the limited areas of coastal sage scrub on site.
Pallid bat <i>Antrozous pallidus</i>	Federal: None State: SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Low potential to occur.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	Federal: None State: SSC	Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	Not expected to occur due to a lack of suitable habitat.
San Bernardino kangaroo rat <i>Dipodomys merriami parvus</i>	Federal: FE State: SSC	Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.	Not expected to occur due to a lack of suitable habitat.
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	Federal: None State: SSC	Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub, but needs open habitats.	Not expected to occur due to a lack of suitable habitat.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	Federal: None State: SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Low to medium potential to occur.
Stephens' kangaroo rat <i>Dipodomys stephensi</i>	Federal: FE State: ST	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Low potential to occur.
Western mastiff bat <i>Eumops perotis californicus</i>	Federal: None State: SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Low potential to occur.
Western yellow bat <i>Lasiurus xanthinus</i>	Federal: None State: SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Low potential to occur.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Yuma Myotis <i>Myotis yumanensis</i>	Federal: None State: None	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	Low potential to occur.

The subject property has the potential to support a number of special-status animal species, though the majority would not be considered as a constraint to development, if present. The majority of potential species occurrences would be associated with the natural drainage feature located in the southern portion of the property, with some potential occurrences within riparian habitat associated with the pond located near Paseo Grande and potentially within the other remnant ponds.

Portions of the property have the potential to support federally and/or state listed species, including the coastal California gnatcatcher (CAGN), least Bell's vireo (LBV), southwestern willow flycatcher (SWWF), and Stephens' kangaroo rat (SKR). Impacts to the CAGN and SKR are covered under the MSHCP (CAGN) and the SKR Habitat Conservation Plan, and do not have any survey requirements pursuant to those plans.

Impacts to LBV and SWWF are covered under the MSHCP provided that certain conditions are met. Within areas of suitable habitat that cannot be avoided by a development project, focused surveys would be required pursuant to the MSHCP for both LBV and SWWF following accepted protocols. The LBV survey protocol requires eight survey visits conducted between April 10th and July 31st. The SWWF protocol requires five survey visits conducted over three survey periods between May 15th and July 17th. Areas with some potential to support both species include riparian habitat within the natural drainage feature in southern portion of the property, and adjacent to the pond located near Paseo Grande. If either species is detected within the property then the species requires 90 percent avoidance of the occupied habitat. If the habitat cannot be avoided, then the impacts must be mitigated and a Determination of Biologically Equivalent or Superior Preservation must be approved by CDFW and USFWS.

In addition to the listed species, the property has some potential to support a number of non-listed, special-status species. Of the non-listed species, only the burrowing owl would represent a potential (seasonal) constraint to development. The property is not located within the MSHCP burrowing owl survey area, and therefore focused surveys/conservation would not be required by the MSHCP for the burrowing owl. However, since the burrowing owl still has the potential to

occur at the property, the owl would represent a seasonal constraint to development since burrowing owls would need to be relocated from the property following accepted protocols. If the site were to support nesting owls, then areas supporting nesting owls would have to be avoided until the completion of the nesting season (approximately August 31st). A pre-construction burrowing owl survey is recommended no more than 30 days prior to grading to confirm the presence/absence of owls.

3.4 Special-Status Habitats

A review of the January 2016 CNDDDB identified the following special-status habitats as occurring within the vicinity or the property: California Walnut Woodland, Riversidean Alluvial Fan Sage Scrub, Southern California Arroyo Chub/Santa Ana Sucker Stream, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Interior Cypress Forest, Southern Riparian Forest, Southern Riparian Scrub, Southern Sycamore Alder Riparian Woodland, and Southern Willow Scrub. Portions of the property support riparian scrub habitats, specifically within the natural drainage feature and in/around the golf course ponds. However, no other special-status habitats occur at the site.

3.5 Nesting Birds

The property contains vegetation (trees, shrubs, and herbaceous vegetation) with the potential to support nesting birds. Impacts to nesting birds are prohibited under the Migratory Bird Treaty Act and California Fish and Game Code.⁴ The presence of vegetation with the potential to support nesting birds may represent a seasonal constraint to development if not removed at appropriate time of the year. If vegetation must be removed during the nesting season (February 1 through August 31, January 1 for raptors), a nesting bird survey should be conducted prior to any removals to prevent any impacts to active nests. If active nests are identified onsite, then adequate buffers should be provided around the nests, as determined by a qualified biologist, until the nests are no longer active.

⁴ The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

3.6 Jurisdictional Waters

The property contains potential waters subject to the jurisdictions of the Corps, Regional Board, and CDFW. Specifically, a natural drainage feature is located in the southern portion of the property [Exhibit 4 – Potential Jurisdictional Waters]. The acreages discussed in this section are just estimates based on the single reconnaissance visit. A formal jurisdictional delineation would be required to document the extent of jurisdictional waters at the property. Approximately 0.20 acre of potential Corps/Regional Board jurisdiction is associated with the drainage feature, none of which appears to support jurisdictional wetlands. The channel is approximately five feet wide on average and approximately 1,500 linear feet in length. Impacts to the drainage feature would require a Clean Water Act (CWA) Section 404 permit from the Corps and a Section 401 Water Quality Certification from the Regional Board. Mitigation would also be required to compensate the loss of Corps/Regional Board jurisdiction.

Approximately 0.25 acre of potential CDFW jurisdiction is associated with the drainage feature, including riparian vegetation. Impacts to CDFW jurisdiction would require a Section 1602 Streambed Alteration Agreement from CDFW. As with the Corps/Regional Board impacts, mitigation would be required to compensate the loss of CDFW jurisdiction.

The natural drainage feature is also considered as riparian/riverine area as defined by the MSHCP. Pursuant to *Volume I, Section 6.1.2* of the MSHCP, avoidance alternatives must first be considered for riparian/riverine areas. If 100 percent avoidance is infeasible, then mitigation must be provided subject to the approval of a DBESP. The approximate amount of MSHCP riparian/riverine areas associated with the drainage feature is expected to be the same as that of CDFW jurisdiction (approximately 0.25 acre). Mapping of MSHCP riparian/riverine areas would be required at part of biological studies performed for the property.

Besides the natural drainage feature, the golf course property contains at least three pond features that support riparian vegetation, including one feature that is actively ponded, and two that are dry but that still support remnant trees and shrubs. However, due to their artificial nature, the ponds would not be considered jurisdictional waters or MSHCP riparian/riverine areas.

Finally, the overall golf course property generally drains to the north/northwest, with culverts under the roads that bisect the golf course fairways, and a culvert under the 91 Freeway. During rainfall events, water sheet flows through portions of the golf course property generally to the north/northwest. As a result, there are areas where flows have created small, incised erosional segments that provide evidence of such flows. Since these golf course areas do not contain defined, created channels, these erosional features should not be considered as jurisdictional waters or MSHCP riverine areas. However, the extent of flows should be documented in a formal delineation of the property, and it is recommended that the regulatory agencies verify the

lack of jurisdiction in these areas, particularly if permits will be required to impact the natural drainage feature located in the southern portion of the property.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The Mountain View Golf Course property contains several potential constraints to development, some of which would only represent a seasonal constraint to development. Potential constraints include potential jurisdictional waters and MSHCP riparian/riverine areas; potential habitat for least Bell's vireo, southwestern willow flycatcher, and burrowing owl; and nesting bird habitat.

As noted above, the property contains potential jurisdictional waters, including MSHCP riparian/riverine areas. A formal delineation would be required to document the full extent of jurisdictional waters at the property. Impacts to waters of the U.S. (i.e. Corps jurisdiction) would require a CWA Section 404 permit from the Corps and a Section 401 Water Quality Certification from the Regional Board. Impacts to CDFW jurisdiction would require a Section 1602 Streambed Alteration Agreement from CDFW. Unavoidable impacts to MSHCP riparian/riverine areas would require the approval of a DBESP by the wildlife agencies (USFWS and CDFW). Mitigation would be required to compensate the loss of jurisdictional waters and MSHCP riparian/riverine areas.

The property contains habitat with some potential to support the least Bell's vireo (LBV) and the southwestern willow flycatcher (SWWF). Pursuant to MSHCP requirements, if potential habitat cannot be avoided, then focused surveys must be performed pursuant to accepted protocols. If LBV and/or SWWF were determined to be present, and that habitat could not be sufficiently avoided, then the unavoidable impacts must be approved pursuant to the DBESP process, and mitigation would be required as part of the DBESP.

The property contains habitat with the potential to support burrowing owls. Since the property is not located within the MSHCP burrowing owl survey area, focused surveys and conservation would not be required per the MSHCP for the burrowing owl. However, if present at the property, burrowing owls must be properly relocated following accepted protocols prior to grading or other activities that may collapse burrows supporting owls. If burrowing owls were to nest at the property, then those portions supporting nesting owls must be avoided until the completion of the breeding season (approximately the end of August to September). Furthermore, the relocation of owls would likely require the approval of CDFW. Preconstruction burrowing owl surveys should be performed no more than 30 days prior to the initiation of grading or other activities that may impact owls. In order to avoid potential seasonal delays with owls, it is recommended to initiate construction activities during the non-breeding season (September 1 through January 31).

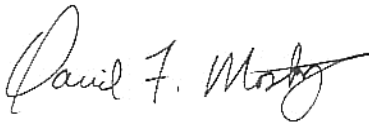
TA Grabiell
Oxbow Partners
February 16, 2016
Page 24

The property contains vegetation (trees, shrubs, and herbaceous vegetation) with the potential to support nesting birds. If vegetation must be removed during the nesting season (February 1 through August 31, January 1 for raptors), then a nesting bird survey should be conducted prior to vegetation removal in order to prevent impacts to active nests. If active nests are identified within or adjacent to the construction area, then adequate buffers should be provided around the nests, as determined by a qualified biologist, until the nests are no longer active.

If you have any questions regarding this report, please call me at (949) 837-0404, ext. 42.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

A handwritten signature in black ink, reading "David F. Moskowitz". The signature is written in a cursive, flowing style with a large initial 'D' and a stylized 'M'.

David F. Moskowitz
Senior Biologist/Regulatory Specialist

s:1205-01a.constraints.docx



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Regional Map

GLENN LUKOS ASSOCIATES

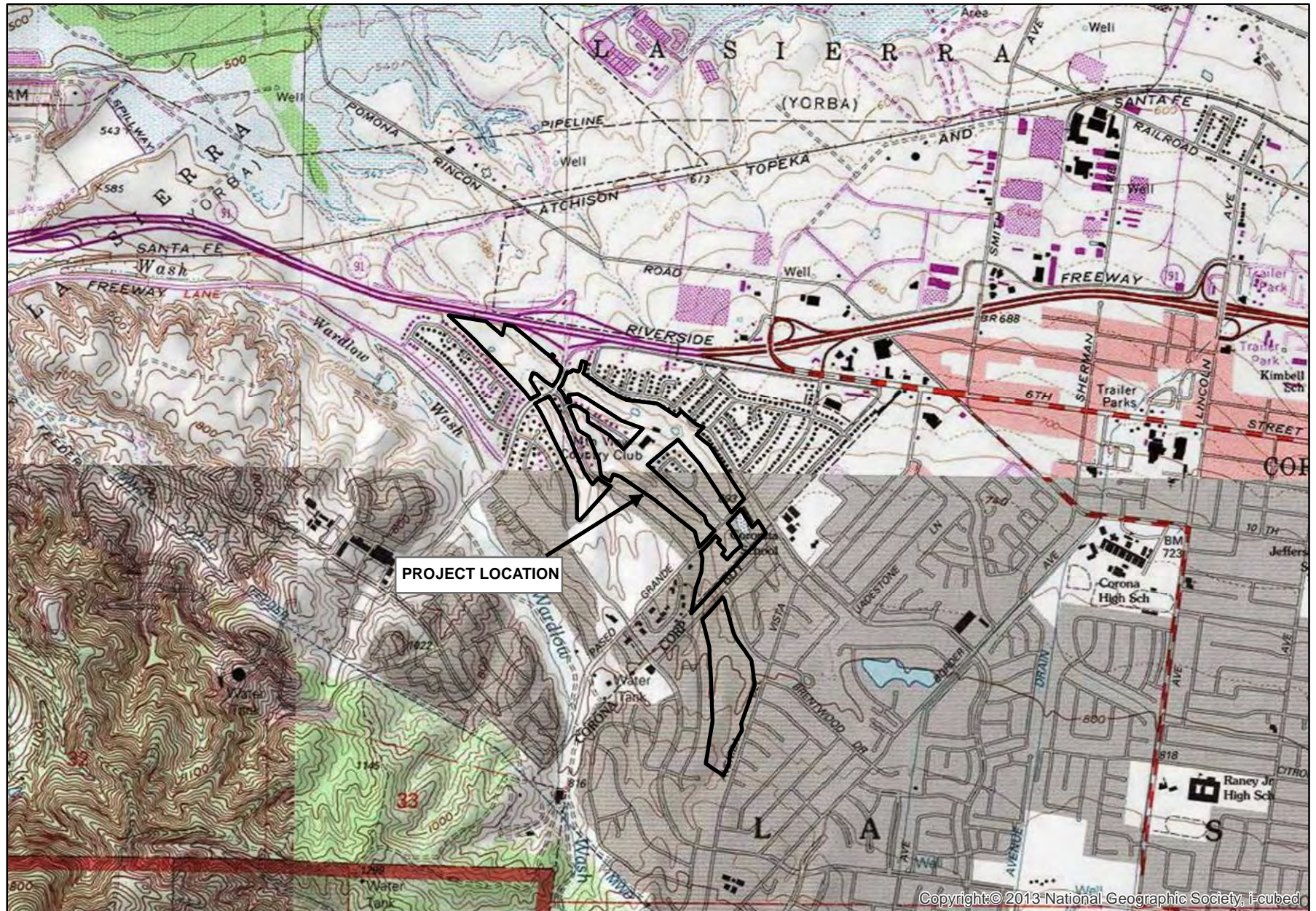
Exhibit 1



Adapted from USGS Corona North & South, CA quadrangles



0 1,000 2,000 4,000
Feet



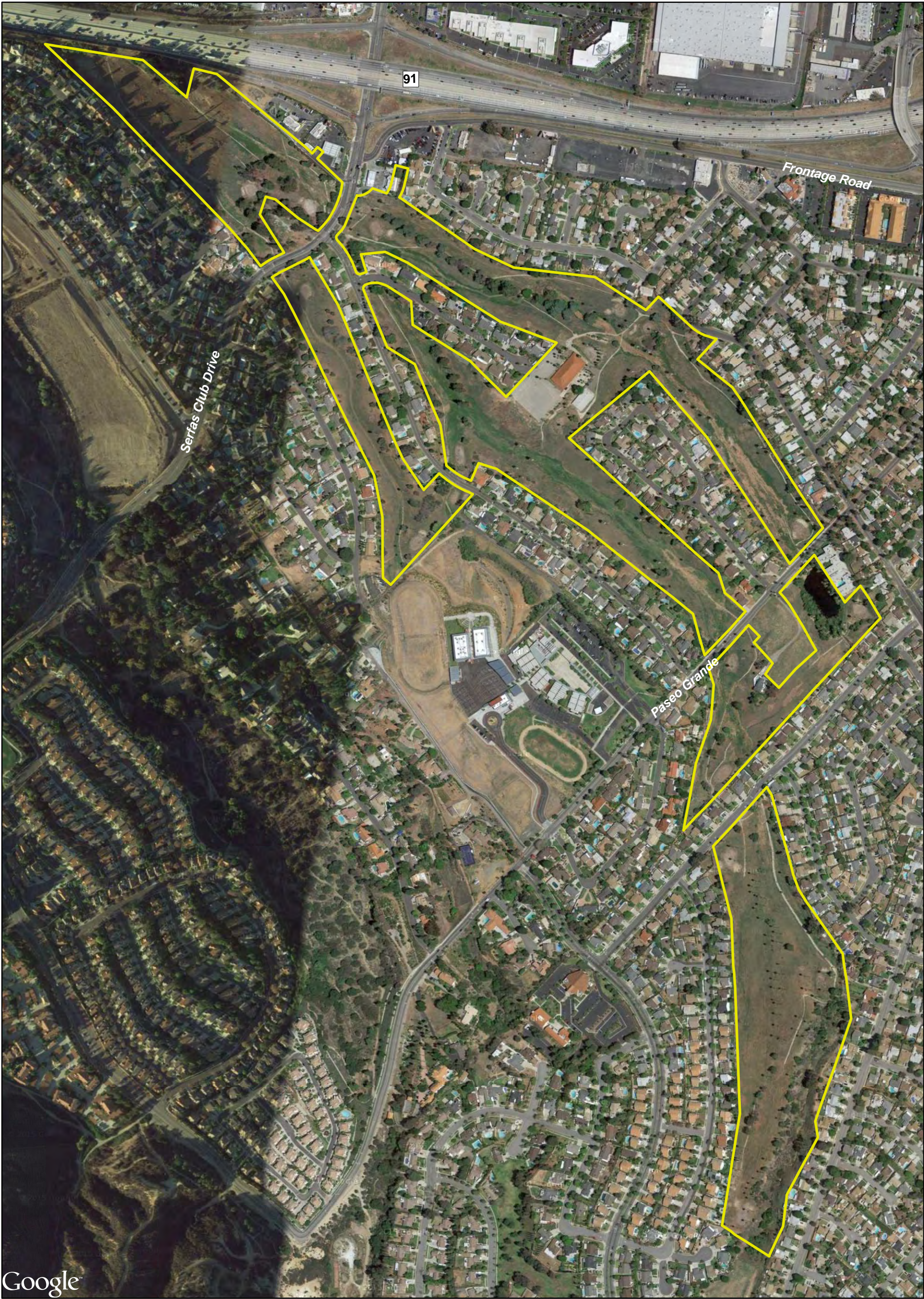
MOUNTAIN VIEW GOLF COURSE PROPERTY

Vicinity Map

GLENN LUKOS ASSOCIATES

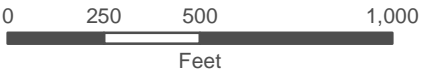
Exhibit 2





Legend

 Project Boundary



Reference Elevation Datum: State Plane 6 NAD 83
Map Prepared by: XXXXXX, GLA
Date Prepared: October 11, 2016

**MOUNTAIN VIEW GOLF
COURSE PROPERTY**

Aerial Map

GLENN LUKOS ASSOCIATES



Exhibit 3



Photograph 1: View looking west near the northern half of Area A. The 91 Freeway is depicted in the far right of the photograph.



Photograph 2: View looking at a dry pond located northeast of Area D.



Photograph 3: View looking at an erosional feature which leads into the dry pond depicted in photograph 2.



Photograph 4: View looking northeast at the southwestern extent of Area D.



GLENN LUKOS ASSOCIATES

Exhibit 4





Photograph 5: View looking at a perennial pond located near the northern extent of Area C.



Photograph 6: View looking near the southern limit of Area C. The photograph depicts an erosional swale that traverses the area.



Photograph 7: View looking north depicting the natural drainage feature located in the southernmost part of the property.



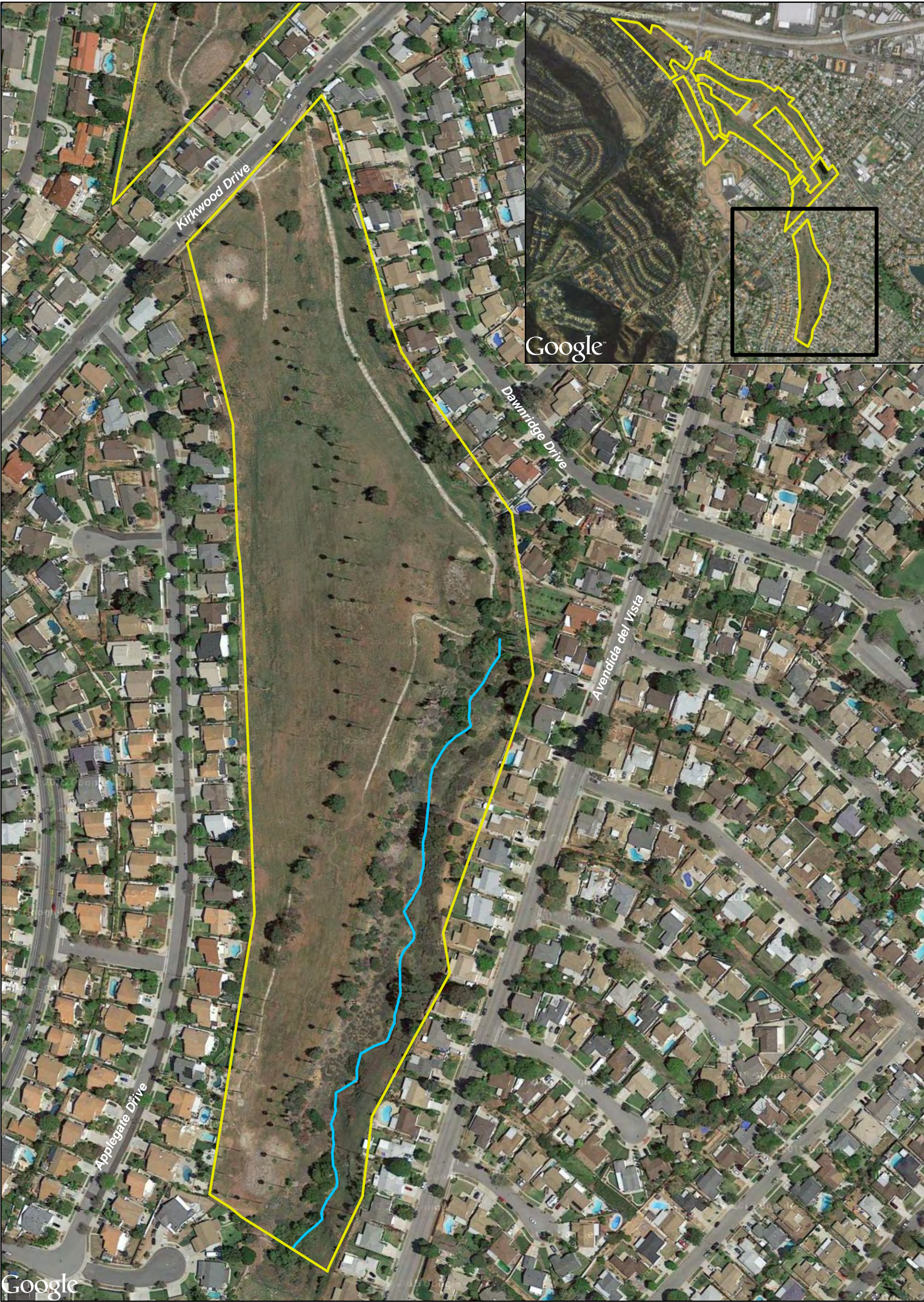
Photograph 8: View looking north from the southernmost limit of the Project site within Area A.





GLENN LUKOS ASSOCIATES

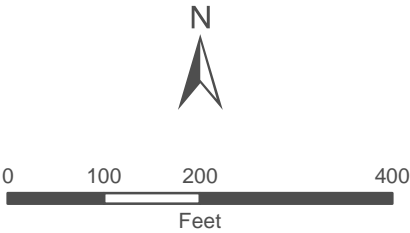
Exhibit 4

**MOUNTAIN VIEW GOLF COURSE
PROPERTY**
Site Photographs



Legend

-  Project Boundary
-  Potential Jurisdictional Feature



Reference Elevation Datum: State Plane 6 NAD 83
Map Prepared by: C. Lukos, GLA
Date Prepared: February 5, 2016

**MOUNTAIN VIEW GOLF
COURSE PROPERTY**
Potential Jurisdictional Waters Map

GLENN LUKOS ASSOCIATES



Exhibit 5

C.2 - IPaC Database Results

THIS PAGE INTENTIONALLY LEFT BLANK

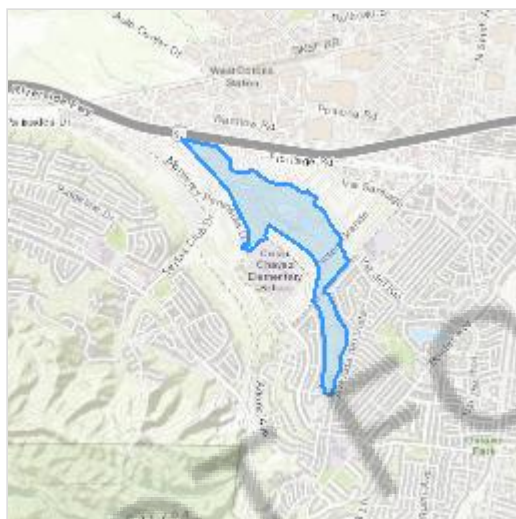
IPaC resource list

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

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

Location

Riverside County, California



Local office

Carlsbad Fish And Wildlife Office

☎ (760) 431-9440

📅 (760) 431-5901

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

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

Endangered species

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

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

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

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

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

Listed 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:

Mammals

NAME	STATUS
Stephens' Kangaroo Rat <i>Dipodomys stephensi</i> (incl. <i>D. cascus</i>) Wherever found No critical habitat has been designated for this species. http://ecos.fws.gov/ecp/species/3495	Endangered

Birds

NAME	STATUS
Coastal California Gnatcatcher <i>Polioptila californica californica</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. http://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. http://ecos.fws.gov/ecp/species/5945	Endangered

Southwestern Willow Flycatcher *Empidonax traillii extimus*

Endangered

Wherever found

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

<http://ecos.fws.gov/ecp/species/6749>

Amphibians

NAME

STATUS

Arroyo (=arroyo Southwestern) Toad *Anaxyrus californicus*

Endangered

Wherever found

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

<http://ecos.fws.gov/ecp/species/3762>

Fishes

NAME

STATUS

Santa Ana Sucker *Catostomus santaanae*

Threatened

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

<http://ecos.fws.gov/ecp/species/3785>

Insects

NAME

STATUS

Monarch Butterfly *Danaus plexippus*

Candidate

Wherever found

No critical habitat has been designated for this species.

<http://ecos.fws.gov/ecp/species/9743>

Quino Checkerspot Butterfly *Euphydryas editha quino* (=E. e. wrighti)

Endangered

Wherever found

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

<http://ecos.fws.gov/ecp/species/5900>

Flowering Plants

NAME	STATUS
San Diego Ambrosia <i>Ambrosia pumila</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. http://ecos.fws.gov/ecp/species/8287	Endangered
Santa Ana River Woolly-star <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Wherever found No critical habitat has been designated for this species. http://ecos.fws.gov/ecp/species/6575	Endangered
Santa Monica Mountains Dudleyea <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i> Wherever found No critical habitat has been designated for this species. http://ecos.fws.gov/ecp/species/2538	Threatened
Thread-leaved Brodiaea <i>Brodiaea filifolia</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. http://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.

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.)

Allen's Hummingbird *Selasphorus sasin*

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

<http://ecos.fws.gov/ecp/species/9637>

Breeds Feb 1 to Jul 15

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

Nuttall's Woodpecker *Picoides nuttallii*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<http://ecos.fws.gov/ecp/species/9410>

Breeds Apr 1 to Jul 20

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.

<http://ecos.fws.gov/ecp/species/9656>

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.

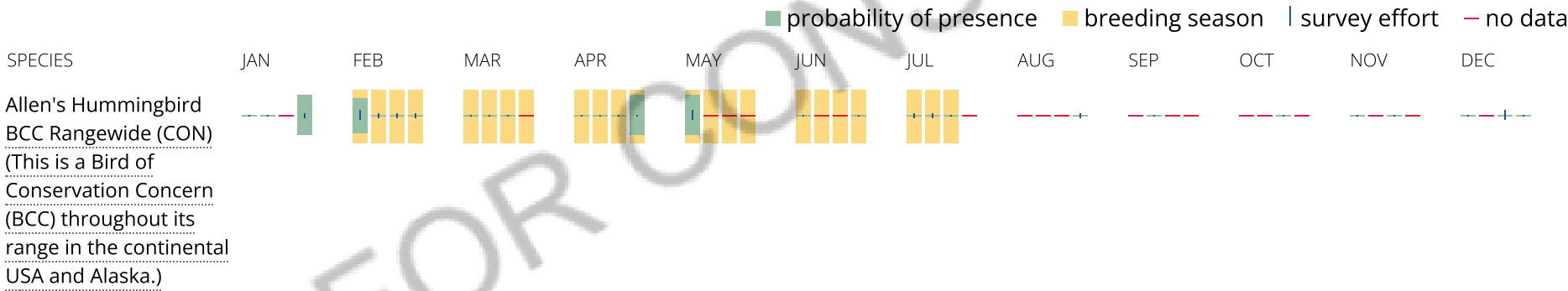
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.



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



Nuttall's Woodpecker
BCC - BCR (This is a Bird
of Conservation
Concern (BCC) only in
particular Bird
Conservation Regions
(BCRs) in the
continental USA)



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



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



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](#).

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 POND

[PUBHx](#)

[PABHx](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

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.

THIS PAGE INTENTIONALLY LEFT BLANK

C.3 - CNDDDB Topo Quad Map Results

THIS PAGE INTENTIONALLY LEFT BLANK



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad< IS (Corona South (3311775) OR Black Star Canyon (3311776) OR Prado Dam (3311786) OR Riverside West (3311784) OR Lake Mathews (3311774) OR Corona North (3311785) OR El Toro (3311766) OR Santiago Peak (3311765) OR Alberhill (3311764))

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	G1G2	S1S2	SSC
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
<i>Allium marvinii</i> Yucaipa onion	PMLIL02330	None	None	G1	S1	1B.2
<i>Allium munzii</i> Munz's onion	PMLIL022Z0	Endangered	Threatened	G1	S1	1B.1
<i>Ambrosia pumila</i> San Diego ambrosia	PDAST0C0M0	Endangered	None	G1	S1	1B.1
<i>Ammodramus savannarum</i> grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
<i>Anaxyrus californicus</i> arroyo toad	AAABB01230	Endangered	None	G2G3	S2S3	SSC
<i>Anniella stebbinsi</i> Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G4	S3	SSC
<i>Aquila chrysaetos</i> golden eagle	ABNKC22010	None	None	G5	S3	FP
<i>Arizona elegans occidentalis</i> California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
<i>Artemisiospiza belli belli</i> Bell's sage sparrow	ABPBX97021	None	None	G5T2T3	S3	WL
<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 brauntonii</i> Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1



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>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>Baccharis malibuensis</i> Malibu baccharis	PDAST0W0W0	None	None	G1	S1	1B.1
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
<i>Branchinecta sandiegonensis</i> San Diego fairy shrimp	ICBRA03060	Endangered	None	G2	S2	
<i>Brodiaea filifolia</i> thread-leaved brodiaea	PMLIL0C050	Threatened	Endangered	G2	S2	1B.1
<i>Buteo regalis</i> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
California Walnut Woodland 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</i> var. <i>intermedius</i> intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T2	S3	1B.2
<i>Calystegia felix</i> lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
<i>Campylorhynchus brunneicapillus sandiegensis</i> coastal cactus wren	ABPBG02095	None	None	G5T3Q	S3	SSC
Canyon Live Oak Ravine Forest Canyon Live Oak Ravine Forest	CTT61350CA	None	None	G3	S3.3	
<i>Catostomus santaanae</i> Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	
<i>Centromadia pungens</i> ssp. <i>laevis</i> smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
<i>Ceratochrysis longimala</i> Desert cuckoo wasp	IIHYM71040	None	None	G1	S1	
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	AMAFD05031	None	None	G5T3T4	S3S4	SSC
<i>Charadrius nivosus nivosus</i> western snowy plover	ABNNB03031	Threatened	None	G3T3	S2	SSC
<i>Chorizanthe parryi</i> var. <i>fernandina</i> San Fernando Valley spineflower	PDPGN040J1	None	Endangered	G2T1	S1	1B.1
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	PDPGN040J2	None	None	G3T2	S2	1B.1



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>Chorizanthe polygonoides</i> var. <i>longispina</i> long-spined spineflower	PDPGN040K1	None	None	G5T3	S3	1B.2
<i>Circus hudsonius</i> northern harrier	ABNKC11011	None	None	G5	S3	SSC
<i>Clinopodium chandleri</i> San Miguel savory	PDLAM08030	None	None	G3	S2	1B.2
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Coleonyx variegatus abbotti</i> San Diego banded gecko	ARACD01031	None	None	G5T5	S1S2	SSC
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i> summer holly	PDERI0B011	None	None	G3T2	S2	1B.2
<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
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	AMAFD03143	Endangered	Candidate Endangered	G5T1	S1	SSC
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	AMAFD03100	Endangered	Threatened	G2	S2	
<i>Dodecahema leptoceras</i> slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
<i>Dudleya multicaulis</i> many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
<i>Dudleya viscida</i> sticky dudleya	PDCRA040T0	None	None	G2	S2	1B.2
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
<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</i> ssp. <i>sanctorum</i> Santa Ana River woollystar	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
<i>Eugnosta busckana</i> Busck's gallmoth	IILEM2X090	None	None	G1G3	SH	
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
<i>Euphydryas editha quino</i> quino checkerspot butterfly	IILEPK405L	Endangered	None	G5T1T2	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>Gila orcuttii</i> arroyo chub	AFCJB13120	None	None	G2	S2	SSC
<i>Haliaeetus leucocephalus</i> bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
<i>Harpagonella palmeri</i> Palmer's grapplinghook	PDBOR0H010	None	None	G4	S3	4.2
<i>Hesperocyparis forbesii</i> Tecate cypress	PGCUP040C0	None	None	G2	S2	1B.1
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	PDR0S0W045	None	None	G4T1	S1	1B.1
<i>Icteria virens</i> yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
<i>Lasiurus xanthinus</i> western yellow bat	AMACC05070	None	None	G4G5	S3	SSC
<i>Lasthenia glabrata</i> ssp. <i>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>Lepechinia cardiophylla</i> heart-leaved pitcher sage	PDLAM0V020	None	None	G3	S2S3	1B.2
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	AMAEB03051	None	None	G5T3T4	S3S4	SSC
<i>Monardella australis</i> ssp. <i>jokerstii</i> Jokerst's monardella	PDLAM18112	None	None	G4T1?	S1?	1B.1
<i>Monardella hypoleuca</i> ssp. <i>intermedia</i> intermediate monardella	PDLAM180A4	None	None	G4T2?	S2?	1B.3
<i>Monardella macrantha</i> ssp. <i>hallii</i> Hall's monardella	PDLAM180E1	None	None	G5T3	S3	1B.3
<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>Neolarra alba</i> white cuckoo bee	IIHYM81010	None	None	GH	SH	
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
<i>Nolina cismontana</i> chaparral nolina	PMAGA080E0	None	None	G3	S3	1B.2
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	AMACD04010	None	None	G5	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>Oncorhynchus mykiss irideus pop. 10</i> steelhead - southern California DPS	AFCHA0209J	Endangered	None	G5T1Q	S1	
<i>Onychomys torridus ramona</i> southern grasshopper mouse	AMAFF06022	None	None	G5T3	S3	SSC
<i>Pandion haliaetus</i> osprey	ABNKC01010	None	None	G5	S4	WL
<i>Penstemon californicus</i> California beardtongue	PDSCR1L110	None	None	G3	S2	1B.2
<i>Pentachaeta aurea ssp. allenii</i> Allen's pentachaeta	PDAST6X021	None	None	G4T1	S1	1B.1
<i>Phacelia keckii</i> Santiago Peak phacelia	PDHYD0C4G1	None	None	G1	S1	1B.3
<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>Plegadis chihi</i> white-faced ibis	ABNGE02020	None	None	G5	S3S4	WL
<i>Poliophtila californica californica</i> coastal California gnatcatcher	ABPB08081	Threatened	None	G4G5T3Q	S2	SSC
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
<i>Rhinichthys osculus ssp. 8</i> Santa Ana speckled dace	AFCJB3705K	None	None	G5T1	S1	SSC
<i>Riversidian Alluvial Fan Sage Scrub</i> Riversidian Alluvial Fan Sage Scrub	CTT32720CA	None	None	G1	S1.1	
<i>Salvadora hexalepis virgulata</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>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 Cottonwood Willow Riparian Forest</i> Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
<i>Southern Interior Cypress Forest</i> Southern Interior Cypress Forest	CTT83230CA	None	None	G2	S2.1	



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>Southern Riparian Forest</i> Southern Riparian Forest	CTT61300CA	None	None	G4	S4	
<i>Southern Riparian Scrub</i> Southern Riparian Scrub	CTT63300CA	None	None	G3	S3.2	
<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	G2G3	S3	SSC
<i>Spinus lawrencei</i> Lawrence's goldfinch	ABPBY06100	None	None	G3G4	S4	
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S1S2	
<i>Symphyotrichum defoliatum</i> San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
<i>Taricha torosa</i> Coast Range newt	AAAAF02032	None	None	G4	S4	SSC
<i>Thamnophis hammondi</i> two-striped gartersnake	ARADB36160	None	None	G4	S3S4	SSC
<i>Tortula californica</i> California screw moss	NBMUS7L090	None	None	G2G3	S2?	1B.2
<i>Valley Needlegrass Grassland</i> Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	

Record Count: 115

C.4 - CNPS Inventory Topo Quad Map Results

THIS PAGE INTENTIONALLY LEFT BLANK



Search Results

66 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3311775:3311786:3311785:3311774:3311784:3311776:3311766:3311765:3311764]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	FED LIST	STATE LIST	CA RARE PLANT RANK	GENERAL HABITATS	MICRO HABITATS	LOWEST ELEVATION (FT)	HIGHEST ELEVATION (FT)	BLOOMING PERIOD
Abronia villosa var. aurita	chaparral sand-verbena	Nyctaginaceae	annual herb	None	None	1B.1	Chaparral, Coastal scrub, Desert dunes	Sandy	245	5250	(Jan)Mar-Sep
Allium marvinii	Yucaipa onion	Alliaceae	perennial bulbiferous herb	None	None	1B.2	Chaparral		2495	3495	Apr-May
Allium munzii	Munz's onion	Alliaceae	perennial bulbiferous herb	FE	CT	1B.1	Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland	Clay, Mesic	975	3510	Mar-May
Ambrosia pumila	San Diego ambrosia	Asteraceae	perennial rhizomatous herb	FE	None	1B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools	Alkaline (sometimes), Clay (sometimes), Disturbed areas (often), Sandy (sometimes)	65	1360	Apr-Oct
Asplenium vespertinum	western spleenwort	Aspleniaceae	perennial rhizomatous herb	None	None	4.2	Chaparral, Cismontane woodland, Coastal scrub	Rocky	590	3280	Feb-Jun
Astragalus brauntonii	Braunton's milk-vetch	Fabaceae	perennial herb	FE	None	1B.1	Chaparral, Coastal scrub, Valley and foothill grassland		15	2100	Jan-Aug

Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	perennial herb	None	None	1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland	Alkaline (sometimes), Clay (sometimes)	10	1510	Mar-Oct
Baccharis malibuensis	Malibu baccharis	Asteraceae	perennial deciduous shrub	None	None	1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland		490	1000	Aug
Brodiaea filifolia	thread-leaved brodiaea	Themidaceae	perennial bulbiferous herb	FT	CE	1B.1	Chaparral, Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools	Clay (often)	80	3675	Mar-Jun
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	None	None	4.2	Chaparral, Coastal scrub	Burned areas, Disturbed areas, Loam (sometimes), Sandy (sometimes)	35	4005	(Jan)Mar-Jun
Calochortus catalinae	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	None	None	4.2	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland		50	2295	(Feb)Mar-Jun
Calochortus plummerae	Plummer's mariposa-lily	Liliaceae	perennial bulbiferous herb	None	None	4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland	Granitic, Rocky	330	5580	May-Jul

Calochortus weedii var. intermedius	intermediate mariposa-lily	Liliaceae	perennial bulbiferous herb	None	None	1B.2	Chaparral, Coastal scrub, Valley and foothill grassland	Rocky	345	2805	May-Jul
Calystegia felix	lucky morning-glory	Convolvulaceae	annual rhizomatous herb	None	None	1B.1	Meadows and seeps, Riparian scrub		100	705	Mar-Sep
Calystegia sepium ssp. binghamiae	Santa Barbara morning-glory	Convolvulaceae	perennial rhizomatous herb	None	None	1A	Marshes and swamps		15	15	Aug
Camissoniopsis lewisii	Lewis' evening- primrose	Onagraceae	annual herb	None	None	3	Cismontane woodland, Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland	Clay (sometimes), Sandy (sometimes)	0	985	Mar- May(Jun)
Caulanthus simulans	Payson's jewelflower	Brassicaceae	annual herb	None	None	4.2	Chaparral, Coastal scrub	Granitic, Sandy	295	7220	(Feb)Mar- May(Jun)
Centromadia pungens ssp. laevis	smooth tarplant	Asteraceae	annual herb	None	None	1B.1	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland	Alkaline	0	2100	Apr-Sep
Chorizanthe leptotheca	Peninsular spineflower	Polygonaceae	annual herb	None	None	4.2	Chaparral, Coastal scrub, Lower montane coniferous forest	Granitic	985	6235	May-Aug
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	Polygonaceae	annual herb	None	CE	1B.1	Coastal scrub, Valley and foothill grassland		490	4005	Apr-Jul

Chorizanthe parryi var. parryi	Parry's spineflower	Polygonaceae	annual herb	None	None	1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland	Openings, Rocky (sometimes), Sandy (sometimes)	900	4005	Apr-Jun
Chorizanthe polygonoides var. longispina	long-spined spineflower	Polygonaceae	annual herb	None	None	1B.2	Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools	Clay (often)	100	5020	Apr-Jul
Clinopodium chandleri	San Miguel savory	Lamiaceae	perennial shrub	None	None	1B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland		395	3525	Mar-Jul
Comarostaphylis diversifolia ssp. diversifolia	summer holly	Ericaceae	perennial evergreen shrub	None	None	1B.2	Chaparral, Cismontane woodland		100	2590	Apr-Jun
Convolvulus simulans	small- flowered morning-glory	Convolvulaceae	annual herb	None	None	4.2	Chaparral, Coastal scrub, Valley and foothill grassland		100	2430	Mar-Jul
Deinandra paniculata	paniculate tarplant	Asteraceae	annual herb	None	None	4.2	Coastal scrub, Valley and foothill grassland, Vernal pools		80	3085	(Mar)Apr- Nov
Diplacus clevelandii	Cleveland's bush monkeyflower	Phrymaceae	perennial rhizomatous herb	None	None	4.2	Chaparral, Cismontane woodland, Lower montane coniferous forest		1475	6560	Apr-Jul
Dodecahema leptoceras	slender- horned spineflower	Polygonaceae	annual herb	FE	CE	1B.1	Chaparral, Cismontane woodland, Coastal scrub		655	2495	Apr-Jun

Dudleya cymosa ssp. ovatifolia	Santa Monica dudleya	Crassulaceae	perennial herb	FT	None	1B.1	Chaparral, Coastal scrub	490	5495	Mar-Jun
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	None	None	1B.2	Chaparral, Coastal scrub, Valley and foothill grassland	50	2590	Apr-Jul
Dudleya viscida	sticky dudleya	Crassulaceae	perennial herb	None	None	1B.2	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub	35	1805	May-Jun
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	Polemoniaceae	perennial herb	FE	CE	1B.1	Chaparral, Coastal scrub	300	2000	Apr-Sep
Erythranthe diffusa	Palomar monkeyflower	Phrymaceae	annual herb	None	None	4.3	Chaparral, Lower montane coniferous forest	4005	6005	Apr-Jun
Harpagonella palmeri	Palmer's grapplinghook	Boraginaceae	annual herb	None	None	4.2	Chaparral, Coastal scrub, Valley and foothill grassland	65	3135	Mar-May
Hesperocyparis forbesii	Tecate cypress	Cupressaceae	perennial evergreen tree	None	None	1B.1	Chaparral, Closed-cone coniferous forest	260	4920	
Hesperocyparis goveniana	Gowen cypress	Cupressaceae	perennial evergreen tree	FT	None	1B.2	Chaparral, Closed-cone coniferous forest	100	985	
Hordeum intercedens	vernal barley	Poaceae	annual herb	None	None	3.2	Coastal dunes, Coastal scrub, Valley and foothill grassland, Vernal pools	15	3280	Mar-Jun
Horkelia cuneata var. puberula	mesa horkelia	Rosaceae	perennial herb	None	None	1B.1	Chaparral, Cismontane woodland, Coastal scrub	230	2660	Feb-Jul(Sep)

<i>Juglans californica</i>	Southern California black walnut	Juglandaceae	perennial deciduous tree	None	None	4.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland	165	2955	Mar-Aug
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	Asteraceae	annual herb	None	None	1B.1	Marshes and swamps, Playas, Vernal pools	5	4005	Feb-Jun
<i>Lepechinia cardiophylla</i>	heart-leaved pitcher sage	Lamiaceae	perennial shrub	None	None	1B.2	Chaparral, Cismontane woodland, Closed-cone coniferous forest	1705	4495	Apr-Jul
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	Brassicaceae	annual herb	None	None	4.3	Chaparral, Coastal scrub	5	2905	Jan-Jul
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	ocellated Humboldt lily	Liliaceae	perennial bulbiferous herb	None	None	4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland	100	5905	Mar-Jul(Aug)
<i>Microseris douglasii</i> ssp. <i>platycarpha</i>	small-flowered microseris	Asteraceae	annual herb	None	None	4.2	Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools	50	3510	Mar-May
<i>Monardella australis</i> ssp. <i>jokerstii</i>	Jokerst's monardella	Lamiaceae	perennial rhizomatous herb	None	None	1B.1	Chaparral, Lower montane coniferous forest	4430	5740	Jul-Sep
<i>Monardella hypoleuca</i> ssp. <i>intermedia</i>	intermediate monardella	Lamiaceae	perennial rhizomatous herb	None	None	1B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest	1310	4100	Apr-Sep

Monardella macrantha ssp. hallii	Hall's monardella	Lamiaceae	perennial rhizomatous herb	None	None	1B.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland	2395	7200	Jun-Oct
Nama stenocarpa	mud nama	Namaceae	annual/perennial herb	None	None	2B.2	Marshes and swamps	15	1640	Jan-Jul
Nolina cismontana	chaparral nolina	Ruscaceae	perennial evergreen shrub	None	None	1B.2	Chaparral, Coastal scrub	460	4185	(Mar)May-Jul
Penstemon californicus	California beardtongue	Plantaginaceae	perennial herb	None	None	1B.2	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland	3840	7545	May-Jun(Aug)
Pentachaeta aurea ssp. allenii	Allen's pentachaeta	Asteraceae	annual herb	None	None	1B.1	Coastal scrub, Valley and foothill grassland	245	1705	Mar-Jun
Phacelia hubbyi	Hubby's phacelia	Hydrophyllaceae	annual herb	None	None	4.2	Chaparral, Coastal scrub, Valley and foothill grassland	0	3280	Apr-Jul
Phacelia keckii	Santiago Peak phacelia	Hydrophyllaceae	annual herb	None	None	1B.3	Chaparral, Closed-cone coniferous forest	1790	5250	May-Jul
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	None	None	1B.1	Coastal dunes, Coastal scrub	5	1310	Mar-Jun
Piperia cooperi	chaparral rein orchid	Orchidaceae	perennial herb	None	None	4.2	Chaparral, Cismontane woodland, Valley and foothill grassland	50	5200	Mar-Jun

Piperia leptopetala	narrow-petaled rein orchid	Orchidaceae	perennial herb	None	None	4.3	Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest	1245	7300	May-Jul
Polygala cornuta var. fishiae	Fish's milkwort	Polygalaceae	perennial deciduous shrub	None	None	4.3	Chaparral, Cismontane woodland, Riparian woodland	330	3280	May-Aug
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	None	None	2B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland	0	6890	(Jul)Aug-Nov(Dec)
Quercus engelmannii	Engelmann oak	Fagaceae	perennial deciduous tree	None	None	4.2	Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland	165	4265	Mar-Jun
Romneya coulteri	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	None	None	4.2	Chaparral, Coastal scrub	65	3935	Mar-Jul(Aug)
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	None	None	2B.2	Chaparral, Cismontane woodland, Coastal scrub	50	2625	Jan-Apr(May)
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	None	None	2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas	50	5020	Mar-Jun

Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	None	None	1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Marshes and swamps, Meadows and seeps, Valley and foothill grassland	5	6695	Jul-Nov
Tortula californica	California screw moss	Pottiaceae	moss	None	None	1B.2	Chenopod scrub, Valley and foothill grassland	35	4790	
Viguiera laciniata	San Diego County viguiera	Asteraceae	perennial shrub	None	None	4.3	Chaparral, Coastal scrub	195	2460	Feb-Jun(Aug)
Yucca brevifolia						CBR				

Showing 1 to 66 of 66 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v9-01 1.0). Website <https://www.rareplants.cnps.org> [accessed 20 October 2021].

CONTACT US

Send questions and comments to rareplants@cnps.org.



ABOUT THIS WEBSITE

- [About the Inventory](#)
- [Release Notes](#)
- [Advanced Search](#)
- [Glossary](#)

ABOUT CNPS

- [About the Rare Plant Program](#)
- [CNPS Home Page](#)
- [About CNPS](#)
- [Join CNPS](#)

CONTRIBUTORS

- [The Calflora Database](#)
- [The California Lichen Society](#)
- [California Natural Diversity Database](#)
- [The Jepson Flora Project](#)
- [The Consortium of California Herbaria](#)
- [CalPhotos](#)

THIS PAGE INTENTIONALLY LEFT BLANK

C.5 - CNDDB BIOS Database Search Results

THIS PAGE INTENTIONALLY LEFT BLANK

Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
Spea hammondi	western spadefoot	AAABF02020	1027	B3875	116789	3311775	Corona South	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20040505	20040505	PVT	None	None	G2G3	S3		SSC	BLM_S; IUCN_NT	201	Amphibians
Spea hammondi	western spadefoot	AAABF02020	1031	B3888	116802	3311786	Prado Dam	RIV	2/5 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19660513	19660513	UNKNOWN	None	None	G2G3	S3		SSC	BLM_S; IUCN_NT	204	Amphibians
Spea hammondi	western spadefoot	AAABF02020	1032	B3889	116803	3311786	Prado Dam	RIV	2/5 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19640417	19640417	UNKNOWN	None	None	G2G3	S3		SSC	BLM_S; IUCN_NT	204	Amphibians
Spea hammondi	western spadefoot	AAABF02020	1369	B5224	118175	3311786	Prado Dam	SBD	80 meters	Presumed Extant	Natural/Native occurrence	Good	N	20010508	20010508	DPR-CHINO HILLS SP	None	None	G2G3	S3		SSC	BLM_S; IUCN_NT	201	Amphibians
Taricha torosa	Coast Range newt	AAAAF02032	1	40208	35210	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Good	Y	19990402	19990402		None	None	G4	S4		SSC		999	Amphibians
Taricha torosa	Coast Range newt	AAAAF02032	2	40209	35211	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Good	Y	19970404	19970404		None	None	G4	S4		SSC		999	Amphibians
Agelaius tricolor	tricolored blackbird	ABPBXB0020	770	99698	101245	3311785	Corona North	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20150420	19520504	RIV COUNTY	None	Threatened	G1G2	S1S2		SSC	BLM_S; IUCN_EN; NABCI_RWL; USFWS_BCC	203	Birds
Agelaius tricolor	tricolored blackbird	ABPBXB0020	365	47614	47614	3311785	Corona North	RIV	2/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20090427	19500305	UNKNOWN	None	Threatened	G1G2	S1S2		SSC	BLM_S; IUCN_EN; NABCI_RWL; USFWS_BCC	204	Birds
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	ABPBX91091	125	53089	53089	3311776	Black Star Canyon	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	199910XX	199910XX	UNKNOWN	None	None	G5T3	S3		WL		203	Birds
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	ABPBX91091	137	54746	54746	3311785	Corona North	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Fair	N	200304XX	200304XX	PVT	None	None	G5T3	S3		WL		203	Birds
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	ABPBX91091	216	A2984	104604	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20160526	20160526	PVT; CITY OF CORONA; USFS	None	None	G5T3	S3		WL		202	Birds
Aquila chrysaetos	golden eagle	ABNKC22010	125	70057	70913	3311786	Prado Dam	ORA	80 meters	Presumed Extant	Natural/Native occurrence	Excellent	Y	20070320	20070320		None	None	G5	S3		FP; WL	BLM_S; CDF_S; IUCN_LC; USFWS_BCC	999	Birds
Athene cunicularia	burrowing owl	ABNSB10010	35	3009	25475	3311785	Corona North	RIV	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19860618	19860618	CITY OF CORONA	None	None	G4	S3		SSC	BLM_S; IUCN_LC; USFWS_BCC	204	Birds
Athene cunicularia	burrowing owl	ABNSB10010	1071	71399	72297	3311785	Corona North	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Good	N	20070601	20070601	RIV COUNTY FLOOD CONTROL	None	None	G4	S3		SSC	BLM_S; IUCN_LC; USFWS_BCC	201	Birds
Athene cunicularia	burrowing owl	ABNSB10010	1072	71401	72299	3311785	Corona North	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	20070601	20070601	RIV COUNTY FLOOD CONTROL	None	None	G4	S3		SSC	BLM_S; IUCN_LC; USFWS_BCC	201	Birds
Athene cunicularia	burrowing owl	ABNSB10010	1073	71402	72301	3311785	Corona North	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Good	N	20070615	20070615	PVT; RIV COUNTY FLOOD CONTROL	None	None	G4	S3		SSC	BLM_S; IUCN_LC; USFWS_BCC	201	Birds
Athene cunicularia	burrowing owl	ABNSB10010	1076	71409	72306	3311785	Corona North	RIV	1/10 mile	Extirpated	Natural/Native occurrence	None	N	2006XXXX	20050614	PVT-LENNAR/US HOMES	None	None	G4	S3		SSC	BLM_S; IUCN_LC; USFWS_BCC	204	Birds
Athene cunicularia	burrowing owl	ABNSB10010	1775	81866	82840	3311785	Corona North	SBD	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20060630	20060630	PVT	None	None	G4	S3		SSC	BLM_S; IUCN_LC; USFWS_BCC	202	Birds
Athene cunicularia	burrowing owl	ABNSB10010	1776	81867	82841	3311786	Prado Dam	SBD	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20060523	20060523	PVT	None	None	G4	S3		SSC	BLM_S; IUCN_LC; USFWS_BCC	202	Birds
Buteo swainsoni	Swainson's hawk	ABNKC19070	2549	3004	91478	3311785	Corona North	RIV	specific area	Possibly Extirpated	Natural/Native occurrence	None	N	19190420	19190420	UNKNOWN	None	Threatened	G5	S3			BLM_S; IUCN_LC; USFWS_BCC	802	Birds
Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	36	95854	12437	3311785	Corona North	RIV	non-specific area	Possibly Extirpated	Natural/Native occurrence	None	N	2011XXXX	20010622	ORA COUNTY; RIV COUNTY; DOD	Threatened	Endangered	G5T2T3	S1			BLM_S; NABCI_RWL; USFS_S; USFWS_BCC	203	Birds
Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	37	2966	25606	3311786	Prado Dam	SBD	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19910821	19910821	SBD COUNTY	Threatened	Endangered	G5T2T3	S1			BLM_S; NABCI_RWL; USFS_S; USFWS_BCC	204	Birds
Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	215	96321	97486	3311785	Corona North	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19860814	19860814	RIV COUNTY	Threatened	Endangered	G5T2T3	S1			IUCN_LC; NABCI_RWL; USFS_S; USFWS_BCC	203	Birds
Coturnicops noveboracensis	yellow rail	ABNME01010	17	A5250	106970	3311785	Corona North	RIV	5 miles	Presumed Extant	Natural/Native occurrence	Unknown	N	19140206	19140206	UNKNOWN	None	None	G4	S1S2		SSC		204	Birds
Elanus leucurus	white-tailed kite	ABNKC06010	140	76262	77240	3311786	Prado Dam	SBD	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	2009XXXX	2009XXXX	SBD COUNTY-PRADO REGIONAL PARK	None	None	G5	S3S4		FP	BLM_S; IUCN_LC	204	Birds
Empidonax traillii extimus	southwestern willow flycatcher	ABPAE33043	34	58957	58993	3311785	Corona North	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Excellent	N	19910808	19910808	ORA COUNTY	Endangered	Endangered	G5T2	S1			NABCI_RWL	203	Birds
Empidonax traillii extimus	southwestern willow flycatcher	ABPAE33043	35	58959	58995	3311785	Corona North	RIV	1/5 mile	Presumed Extant	Natural/Native occurrence	Excellent	N	19900914	19900914	ORA COUNTY	Endangered	Endangered	G5T2	S1			NABCI_RWL	204	Birds
Empidonax traillii extimus	southwestern willow flycatcher	ABPAE33043	76	B0424	112282	3311786	Prado Dam	RIV	3/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	2005XXXX	2004XXXX	ORA COUNTY WATER DISTRICT	Endangered	Endangered	G5T2	S1			NABCI_RWL	204	Birds
Icteria virens	yellow-breasted chat	ABPBX24010	30	3004	24886	3311785	Corona North	RIV	specific area	Presumed Extant	Natural/Native occurrence	Excellent	N	20000831	20000831	ORA COUNTY; RIV COUNTY; DOD	None	None	G5	S3		SSC	IUCN_LC	802	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	182	17786	10098	3311775	Corona South	RIV	1/5 mile	Presumed Extant	Natural/Native occurrence	Fair	N	19880926	19880926	PVT	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	204	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	513	40306	35313	3311775	Corona South	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Good	N	19980709	19980709	UNKNOWN	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	201	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	554	47034	47034	3311775	Corona South	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20001122	20001122	PVT	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	201	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	604	48116	48116	3311775	Corona South	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20010819	20010819	UNKNOWN	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	201	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	603	48112	48112	3311775	Corona South	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20010916	20010916	UNKNOWN	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	201	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	907	71517	72412	3311776	Black Star Canyon	RIV	80 meters	Possibly Extirpated	Natural/Native occurrence	None	N	20030604	20030519	UNKNOWN	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	201	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	1061	B6935	120001	3311786	Prado Dam	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20190618	20190618	ORA COUNTY; UNK	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	203	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	1062	B6936	120003	3311786	Prado Dam	SBD	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20180117	20180117	UNK; DPR-CHINO HILLS SP	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	203	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	1065	B6955	120021	3311776	Black Star Canyon	ORA	80 meters	Presumed Extant	Natural/Native occurrence	Good	N	20180403	20180403	ORA COUNTY	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	201	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	1085	B7011	120072	3311776	Black Star Canyon	RIV	3/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20070615	20070615	USFS-CLEVELAND NF	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	204	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	522	71516	35510	3311776	Black Star Canyon	SBD	non-specific area	Presumed Extant	Natural/Native occurrence	Excellent	N	20200717	20200717	PVT; DPR-CHINO HILLS SP	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	203	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	1063	B6943	120004	3311786	Prado Dam	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20200529	20200529	US ARMY CORPS OF ENGINEER; DPR	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	203	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	807	53088	53088	3311786	Prado Dam	RIV	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20200610	20200610	UNKNOWN; DPR-CHINO HILLS SP	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	202	Birds
Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	448	23772	22808	3311776	Black Star Canyon	ORA	non-specific area	Presumed Extant	Natural/Native occurrence	Excellent	N	20130521	20130521	DPR-CHINO HILLS SP	Threatened	None	G4G5T3Q	S2		SSC	NABCI_YWL	203	Birds
Setophaga petechia	yellow warbler	ABPBX03010	75	44071	44071	3311785	Corona North	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Excellent	N	20160718	20160718	RIV COUNTY-PARKS; DOD-COE	None	None	G5	S3S4		SSC	USFWS_BCC	203	Birds
Vireo bellii pusillus	least Bell's vireo	ABPBW01114	259	54513	54513	3311785	Corona North	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	200307XX	200307XX	PVT	Endangered	Endangered	G5T2	S2			IUCN_NT; NABCI_YWL	203	Birds
Vireo bellii pusillus	least Bell's vireo	ABPBW01114	356	89426	90411	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20100605	20100605	UNKNOWN	Endangered	Endangered	G5T2	S2			IUCN_NT; NABCI_YWL	202	Birds
Vireo bellii pusillus	least Bell's vireo	ABPBW01114	135	2957	24955	3311786	Prado Dam	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20110822	20110822	UNKNOWN	Endangered	Endangered	G5T2	S2			IUCN_NT; NABCI_YWL	203	Birds
Vireo bellii pusillus	least Bell's vireo	ABPBW01114	144	20656	4101	3311785	Corona North	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	2010XXXX	2010XXXX	DOD; ORA COUNTY; RIV COUNTY	Endangered	Endangered	G5T2	S2			IUCN_NT; NABCI_YWL	203	Birds
Vireo bellii pusillus	least Bell's vireo	ABPBW01114	363	89688	90688	3311785	Corona North	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20110725	20110725	UNKNOWN	Endangered	Endangered	G5T2	S2			IUCN_NT; NABCI_YWL	202	Birds
Vireo bellii pusillus	least Bell's vireo	ABPBW01114	258	54512	54512	3311785	Corona North	RIV	1/10 mile	Presumed Extant	Natural/Native occurrence	Fair	N	20110725	2010XXXX	PVT	Endangered	Endangered	G5T2	S2			IUCN_NT; NABCI_YWL	204	Birds
Vireo bellii pusillus	least Bell's vireo	ABPBW01114	353	89419	90403	3311775	Corona South	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20110917	20110901	UNKNOWN	Endangered	Endangered	G5T2	S2			IUCN_NT; NABCI_YWL	203	Birds
Vireo bellii pusillus	least Bell's vireo	ABPBW01114	100	82873	8360	3311776	Black Star Canyon	ORA	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	2017XXXX	2017XXXX	UNKNOWN	Endangered	Endangered	G5T2	S2			IUCN_NT; NABCI_YWL	203	Birds
Vireo bellii pusillus	least Bell's vireo	ABPBW01114	58	3075																					

Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
Astragalus brauntonii	Braunton's milk-vetch	PDFAB0F1G0	4	2886	52	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20200726	20200726	DPR-CHINO HILLS SP	Endangered	None	G2	S2	1B.1		SB_CalBG/RSABG; SB_SBBG	102	Dicots
Calystegia felix	lucky morning-glory	PDCON040P0	1	84907	94530	3311786	Prado Dam	SBD	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19170530	19170530	UNKNOWN	None	None	G1Q	S1	1B.1			104	Dicots
Chorizanthe polygonoides var. longispina	long-spined spineflower	PDPGN040K1	61	2858	61304	3311776	Black Star Canyon	ORA	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20010529	20010529	UNKNOWN	None	None	G5T3	S3	1B.2		BLM_S; SB_CalBG/RSABG; SB_CRES	104	Dicots
Dudleya multicaulis	many-stemmed dudleya	PDCRA040H0	14	2942	19713	3311786	Prado Dam	RIV	1/5 mile	Extirpated	Natural/Native occurrence	None	N	199XXXXX	19660510	PVT	None	None	G2	S2	1B.2		SB_CalBG/RSABG; USFS_S	104	Dicots
Dudleya multicaulis	many-stemmed dudleya	PDCRA040H0	98	23537	19204	3311776	Black Star Canyon	ORA	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	19920606	19920606	USFS-CLEVELAND NF	None	None	G2	S2	1B.2		SB_CalBG/RSABG; USFS_S	101	Dicots
Dudleya multicaulis	many-stemmed dudleya	PDCRA040H0	33	2974	12669	3311776	Black Star Canyon	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	19850320	19850320	PVT	None	None	G2	S2	1B.2		SB_CalBG/RSABG; USFS_S	101	Dicots
Dudleya multicaulis	many-stemmed dudleya	PDCRA040H0	13	2936	19711	3311786	Prado Dam	SBD	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	19830721	19830721	DPR-CHINO HILLS SP	None	None	G2	S2	1B.2		SB_CalBG/RSABG; USFS_S	101	Dicots
Dudleya multicaulis	many-stemmed dudleya	PDCRA040H0	12	2943	13522	3311786	Prado Dam	SBD	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19830809	19830809	DPR-CHINO HILLS SP	None	None	G2	S2	1B.2		SB_CalBG/RSABG; USFS_S	102	Dicots
Dudleya multicaulis	many-stemmed dudleya	PDCRA040H0	38	2876	8527	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Good	N	1990XXXX	1990XXXX	DPR-CHINO HILLS SP	None	None	G2	S2	1B.2		SB_CalBG/RSABG; USFS_S	102	Dicots
Dudleya multicaulis	many-stemmed dudleya	PDCRA040H0	139	63605	63700	3311776	Black Star Canyon	ORA	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20000506	20000506	UNKNOWN	None	None	G2	S2	1B.2		SB_CalBG/RSABG; USFS_S	101	Dicots
Dudleya multicaulis	many-stemmed dudleya	PDCRA040H0	191	A8614	110404	3311776	Black Star Canyon	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20060517	20060517	USFS-CLEVELAND NF	None	None	G2	S2	1B.2		SB_CalBG/RSABG; USFS_S	102	Dicots
Lepechinia cardiophylla	heart-leaved pitcher sage	PDLAM0V0Z0	11	2981	18015	3311775	Corona South	ORA	specific area	Presumed Extant	Natural/Native occurrence	Excellent	N	19900530	19900530	USFS-CLEVELAND NF	None	None	G3	S2S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Dicots
Lepechinia cardiophylla	heart-leaved pitcher sage	PDLAM0V0Z0	17	61401	61437	3311776	Black Star Canyon	ORA	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20000405	20000405	USFS-CLEVELAND NF	None	None	G3	S2S3	1B.2		SB_CalBG/RSABG; USFS_S	101	Dicots
Lepechinia cardiophylla	heart-leaved pitcher sage	PDLAM0V0Z0	23	A1387	102961	3311776	Black Star Canyon	ORA	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19860606	19860606	UNKNOWN	None	None	G3	S2S3	1B.2		SB_CalBG/RSABG; USFS_S	104	Dicots
Lepechinia cardiophylla	heart-leaved pitcher sage	PDLAM0V0Z0	24	A1388	102962	3311776	Black Star Canyon	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20070625	20070625	USFS-CLEVELAND NF	None	None	G3	S2S3	1B.2		SB_CalBG/RSABG; USFS_S	101	Dicots
Lepechinia cardiophylla	heart-leaved pitcher sage	PDLAM0V0Z0	25	A1389	102963	3311776	Black Star Canyon	ORA	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20160802	20160802	USFS-CLEVELAND NF	None	None	G3	S2S3	1B.2		SB_CalBG/RSABG; USFS_S	101	Dicots
Lepechinia cardiophylla	heart-leaved pitcher sage	PDLAM0V0Z0	1	2893	13658	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20160313	20160313	DFG; PVT	None	None	G3	S2S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Dicots
Lepechinia cardiophylla	heart-leaved pitcher sage	PDLAM0V0Z0	9	2973	18016	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20160721	20160721	PVT?	None	None	G3	S2S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Dicots
Lepechinia cardiophylla	heart-leaved pitcher sage	PDLAM0V0Z0	2	2945	18520	3311776	Black Star Canyon	RIV	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20160802	20160802	USFS-CLEVELAND NF	None	None	G3	S2S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Dicots
Lepechinia cardiophylla	heart-leaved pitcher sage	PDLAM0V0Z0	30	A8100	109883	3311775	Corona South	ORA	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20160721	20160721	USFS-CLEVELAND NF	None	None	G3	S2S3	1B.2		SB_CalBG/RSABG; USFS_S	101	Dicots
Lepechinia cardiophylla	heart-leaved pitcher sage	PDLAM0V0Z0	12	2994	18012	3311775	Corona South	ORA	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20160721	20160721	USFS-CLEVELAND NF	None	None	G3	S2S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Dicots
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	PDBRA1M114	140	85282	86303	3311786	Prado Dam	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19260310	19260310	UNKNOWN	None	None	G5T3	S3	4.3			103	Dicots
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	PDBRA1M114	166	88691	89707	3311785	Corona North	RIV	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20100304	20100304	UNKNOWN	None	None	G5T3	S3	4.3			104	Dicots
Monardella australis ssp. jokerstii	Jokerst's monardella	PDLAM18112	1	84642	85657	3311786	Prado Dam	SBD	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19520928	19520928	UNKNOWN	None	None	G4T1?	S1?	1B.1		USFS_S	104	Dicots
Monardella hypoleuca ssp. intermedia	intermediate monardella	PDLAM180A4	30	88049	89026	3311775	Corona South	ORA	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19620630	19620630	USFS-CLEVELAND NF	None	None	G4T2?	S2?	1B.3			103	Dicots
Monardella hypoleuca ssp. intermedia	intermediate monardella	PDLAM180A4	31	88050	89027	3311776	Black Star Canyon	ORA	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19630726	19630726	UNKNOWN	None	None	G4T2?	S2?	1B.3			104	Dicots
Monardella hypoleuca ssp. intermedia	intermediate monardella	PDLAM180A4	32	88051	89028	3311776	Black Star Canyon	ORA	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19860606	19860606	UNKNOWN	None	None	G4T2?	S2?	1B.3			104	Dicots
Sidalcea neomexicana	salt spring checkerbloom	PDMAL110J0	13	A3663	48778	3311786	Prado Dam	SBD	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19170530	19170530	UNKNOWN	None	None	G4	S2	2B.2		USFS_S	103	Dicots
Catostomus santaanae	Santa Ana sucker	AFCJC02190	30	48191	48191	3311785	Corona North	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20020716	20020716	UNKNOWN	Threatened	None	G1	S1			AFS_TH; IUCN_VU	203	Fish
Catostomus santaanae	Santa Ana sucker	AFCJC02190	29	43785	43785	3311786	Prado Dam	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20020710	20000714	DPR; PVT	Threatened	None	G1	S1			AFS_TH; IUCN_VU	203	Fish
Gila orcuttii	arroyo chub	AFCJB13120	8	21950	12751	3311785	Corona North	RIV	1/5 mile	Presumed Extant	Natural/Native occurrence	Good	N	19970806	19970806	UNKNOWN	None	None	G2	S2		SSC	AFS_VU; USFS_S	204	Fish
Oncorhynchus mykiss irideus pop. 10	steelhead - southern California DPS	AFCHA0209J	18	B0498	112361	3311778	Anaheim	ORA	non-specific area	Possibly Extirpated	Natural/Native occurrence Transplant Outside of Native Hab./Range	None	N	2013XXXX	1950XXXX	UNKNOWN	Endangered	None	G5T1Q	S1			AFS_EN	203	Fish
Southern Interior Cypress Forest	Southern Interior Cypress Forest	CTT83230CA	19	2961	28704	3311776	Black Star Canyon	RIV	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19790615	19790615	USFS-CLEVELAND NF	None	None	G2	S2.1				304	Forest
Southern Interior Cypress Forest	Southern Interior Cypress Forest	CTT83230CA	21	2898	14961	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Excellent	N	20000803	20000803	PVT	None	None	G2	S2.1				302	Forest
Hesperocyparis forbesii	Tecate cypress	PGCUP040C0	24	61287	61323	3311776	Black Star Canyon	RIV	80 meters	Presumed Extant	Transplant Outside of Native Hab./Range	Good	N	20111103	20111103	USFS-CLEVELAND NF	None	None	G2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_CRES; SB_UCSC; SB_USDA; USFS_S	101	Gymnosperms
Hesperocyparis forbesii	Tecate cypress	PGCUP040C0	3	77053	14430	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20100218	20100218	DFG-COAL CANYON ER; PVT	None	None	G2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_CRES; SB_UCSC; SB_USDA; USFS_S	102	Gymnosperms
Hesperocyparis forbesii	Tecate cypress	PGCUP040C0	33	A4157	105833	3311776	Black Star Canyon	ORA	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	2009XXXX	2009XXXX	USFS-CLEVELAND NF	None	None	G2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_CRES; SB_UCSC; SB_USDA; USFS_S	101	Gymnosperms
Hesperocyparis forbesii	Tecate cypress	PGCUP040C0	34	A4158	105834	3311776	Black Star Canyon	ORA	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	2009XXXX	2009XXXX	USFS-CLEVELAND NF	None	None	G2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_CRES; SB_UCSC; SB_USDA; USFS_S	101	Gymnosperms
Hesperocyparis forbesii	Tecate cypress	PGCUP040C0	35	A4159	105835	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	2009XXXX	2009XXXX	USFS-CLEVELAND NF	None	None	G2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_CRES; SB_UCSC; SB_USDA; USFS_S	102	Gymnosperms
Southern California Arroyo Chub/Santa Ana Sucker Stream	Southern California Arroyo Chub/Santa Ana Sucker Stream	CAREZ330CA	4	25989	5026	3311785	Corona North	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	1991XXXX	1991XXXX	PVT; SANTA ANA RIVER GREENBELT	None	None	GNR	SNR				403	Inland Waters
Bombus crotchii	Crotch bumble bee	IIHYM24480	197	45058	99065	3311775	Corona South	RIV	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19330307	19330307	UNKNOWN	None	None	G3G4	S1S2				804	Insects
Euphydryas editha quino	quino checkerspot butterfly	IILEPK405L	113	B0974	112865	3311776	Black Star Canyon	ORA	1 mile	Extirpated	Natural/Native occurrence	None	N	1976XXXX	196703XX	THE WILDLANDS CONSERVANCY	Endangered	None	G5T1T2	S1S2				204	Insects
Chaetodipus fallax fallax	mouse	AMAFD05031	51	57643	57659	3311775	Corona South	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Poor	N	20011214	20011214	PVT	None	None	G5T3T4	S3S4		SSC		203	Mammals
Dipodomys stephensi	Stephens' kangaroo rat	AMAFD03100	199	38428	33435	3311785	Corona North	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Fair	N	19920204	19920204	PVT	Endangered	Threatened	G2	S2			IUCN_EN	203	Mammals
Dipodomys stephensi	Stephens' kangaroo rat	AMAFD03100	207	55482	55482	3311785	Corona North	RIV	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20030310	20030310	CITY OF NORCO	Endangered	Threatened	G2	S2			IUCN_EN	204	Mammals
Dipodomys stephensi	Stephens' kangaroo rat	AMAFD03100	219	55812	55828	3311785	Corona North	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19930722	19930722	UNKNOWN	Endangered	Threatened	G2	S2			IUCN_EN	203	Mammals
Eumops perotis californicus	western mastiff bat	AMACD02011	124	66374	66471	3311776	Black Star Canyon	ORA	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1992XXXX	1992XXXX	DPR-CHINO HILLS SP; UNKNOWN	None	None	G4G5T4	S3S4		SSC	BLM_S; WBWG_H	204	Mammals
Lasiurus xanthinus	western yellow bat	AMACC05070	23	58892	58928	3311785	Corona North	RIV	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19891004	19891004	UNKNOWN	None	None	G4G5	S3		SSC	IUCN_LC; WBWG_H	804	Mammals
Lasiurus xanthinus	western yellow bat	AMACC05070	15	45058	58912	3311775	Corona South	RIV	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19990502	19990502	UNKNOWN	None	None	G4G5	S3		SSC	IUCN_LC; WBWG_H	804	Mammals
Nyctinomops femorosaccus	pocketed free-tailed bat	AMACD04010	18	45058	68719	3311775	Corona South	RIV	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19860311	19860311	UNKNOWN	None	None	G5	S3		SSC	IUCN_LC; WBWG_M	804	Mammals
Allium marvinii	Yucaipa onion	PMLIL02330	45	B6608	119668	3311776	Black Star Canyon	ORA	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19920602	19920602	UNKNOWN	None	None	G1	S1	1B.2		BLM_S; USFS_S	103	Monocots
Calochortus plummerae	Plummer's mariposa-lily	PMLIL0D150	57	28332	29526	3311776	Black Star Canyon	ORA	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19920709	19920709	UNKNOWN	None	None	G4	S4	4.2		SB_CalBG/RSABG	104	Monocots
Calochortus weedii var. intermedius	intermediate mariposa-lily	PMLIL0D1J1	37	48183	48183	3311775	Corona South	RIV	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20000601	2000										

Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
Calochortus weedii var. intermedius	intermediate mariposa-lily	PMLIL0D1J1	116	90324	91374	3311776	Black Star Canyon	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20080617	20080617	USFS-CLEVELAND NF	None	None	G3G4T2	S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Monocots
Calochortus weedii var. intermedius	intermediate mariposa-lily	PMLIL0D1J1	60	63388	63480	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20200622	20200622	PVT; USFS-CLEVELAND NF	None	None	G3G4T2	S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Monocots
Calochortus weedii var. intermedius	intermediate mariposa-lily	PMLIL0D1J1	188	B7606	120678	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20210604	20210604	USFS-CLEVELAND NF	None	None	G3G4T2	S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Monocots
Calochortus weedii var. intermedius	intermediate mariposa-lily	PMLIL0D1J1	194	B7613	120686	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20110701	20110701	DFG-COAL CANYON ER	None	None	G3G4T2	S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Monocots
Calochortus weedii var. intermedius	intermediate mariposa-lily	PMLIL0D1J1	195	B7614	120687	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20200630	20200630	DFG-COAL CANYON ER	None	None	G3G4T2	S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Monocots
Calochortus weedii var. intermedius	intermediate mariposa-lily	PMLIL0D1J1	196	B7615	120688	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20210606	20210606	DPR-CHINO HILLS SP	None	None	G3G4T2	S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Monocots
Calochortus weedii var. intermedius	intermediate mariposa-lily	PMLIL0D1J1	12	26719	27592	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20200630	20200630	ORA COUNTY; DFG	None	None	G3G4T2	S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Monocots
Nolina cismontana	chaparral nolina	PMAGA080E0	17	54555	54555	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20140320	20140320	DPR-CHINO HILLS SP	None	None	G3	S3	1B.2		SB_CalBG/RSABG; USFS_S	102	Monocots
Nolina cismontana	chaparral nolina	PMAGA080E0	37	93297	94432	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	1990XXXX	1990XXXX	USFS-CLEVELAND NF; UNKNOWN	None	None	G3	S3	1B.2		SB_CalBG/RSABG; SB_SBBG; USFS_S	102	Monocots
Nolina cismontana	chaparral nolina	PMAGA080E0	39	93302	94437	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20140320	20140320	PVT	None	None	G3	S3	1B.2		SB_CalBG/RSABG; SB_SBBG; USFS_S	102	Monocots
Nolina cismontana	chaparral nolina	PMAGA080E0	56	A6840	108609	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Good	N	201608XX	201608XX	PVT	None	None	G3	S3	1B.2		SB_CalBG/RSABG; SB_SBBG; USFS_S	102	Monocots
Nolina cismontana	chaparral nolina	PMAGA080E0	57	A6841	108610	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20140320	20140320	DPR-CHINO HILLS SP	None	None	G3	S3	1B.2		SB_CalBG/RSABG; SB_SBBG; USFS_S	102	Monocots
Nolina cismontana	chaparral nolina	PMAGA080E0	58	A6842	108611	3311776	Black Star Canyon	ORA	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20140320	20140320	DFG-COAL CANYON ER	None	None	G3	S3	1B.2		SB_CalBG/RSABG; SB_SBBG; USFS_S	101	Monocots
Nolina cismontana	chaparral nolina	PMAGA080E0	59	A6843	108612	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20140319	20140319	DFG-COAL CANYON ER	None	None	G3	S3	1B.2		SB_CalBG/RSABG; SB_SBBG; USFS_S	102	Monocots
Aspidoscelis hyperythra	orange-throated whiptail	ARACIO2060	141	20501	9881	3311786	Prado Dam	SBD	1/5 mile	Presumed Extant	Natural/Native occurrence	Fair	N	XXXXXXX	XXXXXXX	UNKNOWN	None	None	G5	S2S3		WL	IUCN_LC; USFS_S	204	Reptiles
Aspidoscelis hyperythra	orange-throated whiptail	ARACIO2060	53	3125	27665	3311785	Corona North	RIV	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19510603	19510603	UNKNOWN	None	None	G5	S2S3		WL	IUCN_LC; USFS_S	204	Reptiles
Aspidoscelis hyperythra	orange-throated whiptail	ARACIO2060	163	20245	11997	3311776	Black Star Canyon	ORA	3/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1990XXXX	1990XXXX	UNKNOWN	None	None	G5	S2S3		WL	IUCN_LC; USFS_S	204	Reptiles
Aspidoscelis hyperythra	orange-throated whiptail	ARACIO2060	133	20505	9867	3311775	Corona South	RIV	1/5 mile	Presumed Extant	Natural/Native occurrence	Excellent	N	19900516	19900516	USFS-CLEVELAND NF	None	None	G5	S2S3		WL	IUCN_LC; USFS_S	204	Reptiles
Aspidoscelis hyperythra	orange-throated whiptail	ARACIO2060	56	58892	63551	3311785	Corona North	RIV	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19610702	19610702	UNKNOWN	None	None	G5	S2S3		WL	IUCN_LC; USFS_S	804	Reptiles
Aspidoscelis hyperythra	orange-throated whiptail	ARACIO2060	381	64284	64363	3311786	Prado Dam	ORA	1/10 mile	Presumed Extant	Natural/Native occurrence	Good	N	20050412	20050412	PVT	None	None	G5	S2S3		WL	IUCN_LC; USFS_S	804	Reptiles
Aspidoscelis hyperythra	orange-throated whiptail	ARACIO2060	413	A2987	104607	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20160627	20160627	PVT	None	None	G5	S2S3		WL	IUCN_LC; USFS_S	202	Reptiles
Aspidoscelis tigris stejnegeri	coastal whiptail	ARACIO2143	127	A2985	104605	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20160821	20160821	PVT	None	None	G5T5	S3		SSC		202	Reptiles
Crotalus ruber	red-diamond rattlesnake	ARADE02090	67	47621	47621	3311775	Corona South	RIV	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19920911	19920911	UNKNOWN	None	None	G4	S3		SSC	USFS_S	204	Reptiles
Crotalus ruber	red-diamond rattlesnake	ARADE02090	70	48117	48117	3311775	Corona South	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	19980709	19980709	UNKNOWN	None	None	G4	S3		SSC	USFS_S	201	Reptiles
Emys marmorata	western pond turtle	ARAAD02030	1072	34706	6049	3311786	Prado Dam	SBD	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19920705	19920705	DPR-CHINO HILLS SP	None	None	G3G4	S3		SSC	BLM_S; IUCN_VU; USFS_S	203	Reptiles
Emys marmorata	western pond turtle	ARAAD02030	1351	A4286	105968	3311785	Corona North	RIV	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20110216	20110216	RIV COUNTY; UNKNOWN	None	None	G3G4	S3		SSC	BLM_S; IUCN_VU; USFS_S	202	Reptiles
Phrynosoma blainvillii	coast horned lizard	ARACF12100	317	20508	9903	3311776	Black Star Canyon	ORA	80 meters	Presumed Extant	Natural/Native occurrence	Good	N	19900717	19900717	UNKNOWN	None	None	G3G4	S3S4		SSC	BLM_S; IUCN_LC	201	Reptiles
Phrynosoma blainvillii	coast horned lizard	ARACF12100	116	2885	9759	3311776	Black Star Canyon	ORA	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19860503	19860503	DPR-CHINO HILLS SP; DFG; PVT	None	None	G3G4	S3S4		SSC	BLM_S; IUCN_LC	204	Reptiles
Phrynosoma blainvillii	coast horned lizard	ARACF12100	315	17894	9866	3311775	Corona South	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	199006XX	199006XX	UNKNOWN	None	None	G3G4	S3S4		SSC	BLM_S; IUCN_LC	201	Reptiles
Phrynosoma blainvillii	coast horned lizard	ARACF12100	544	64284	70212	3311786	Prado Dam	ORA	1/10 mile	Presumed Extant	Natural/Native occurrence	Excellent	N	20050419	20050419	PVT	None	None	G3G4	S3S4		SSC	BLM_S; IUCN_LC	804	Reptiles
Phrynosoma blainvillii	coast horned lizard	ARACF12100	17	3201	28142	3311775	Corona South	RIV	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1951XXXX	1951XXXX	UNKNOWN	None	None	G3G4	S3S4		SSC	BLM_S; IUCN_LC	204	Reptiles
Phrynosoma blainvillii	coast horned lizard	ARACF12100	881	A2988	104608	3311775	Corona South	RIV	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20160528	20160528	PVT	None	None	G3G4	S3S4		SSC	BLM_S; IUCN_LC	201	Reptiles
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	CTT61310CA	145	2905	12500	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19800410	19800410	PVT	None	None	G4	S4				302	Riparian
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	CTT61310CA	146	2889	15912	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19800410	19800410	USFS-CLEVELAND NF	None	None	G4	S4				302	Riparian
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	CTT61310CA	159	3003	12496	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19800410	19800410	USFS-CLEVELAND NF	None	None	G4	S4				302	Riparian
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	CTT61310CA	160	3051	15903	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19800410	19800410	USFS-CLEVELAND NF	None	None	G4	S4				302	Riparian
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	CTT61330CA	77	2849	15775	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	19880506	19850213	PVT; ORA COUNTY	None	None	G3	S3.2				302	Riparian
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	CTT61330CA	70	2949	15782	3311786	Prado Dam	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19850213	19850213	DPR-CHINO HILLS SP; PVT	None	None	G3	S3.2				302	Riparian
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	CTT61330CA	69	3118	15783	3311784	Riverside West	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19850213	19850213	PVT; RIV COUNTY	None	None	G3	S3.2				302	Riparian
Southern Riparian Forest	Southern Riparian Forest	CTT61300CA	18	3060	16033	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19800410	19800410	USFS-CLEVELAND NF	None	None	G4	S4				302	Riparian
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	CTT62400CA	183	2937	15386	3311776	Black Star Canyon	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19800410	19800410	PVT	None	None	G4	S4				302	Riparian
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	CTT62400CA	177	2965	15391	3311776	Black Star Canyon	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19850213	19850213	PVT	None	None	G4	S4				302	Riparian
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	CTT62400CA	196	2982	15375	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19800410	19800410	USFS-CLEVELAND NF	None	None	G4	S4				302	Riparian
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	CTT62400CA	1	2863	15549	3311786	Prado Dam	SBD	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19860423	19860423	DPR-CHINO HILLS SP	None	None	G4	S4				302	Riparian
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	CTT62400CA	184	2970	15385	3311776	Black Star Canyon	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19800410	19800410	USFS-CLEVELAND NF	None	None	G4	S4				302	Riparian
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	CTT62400CA	179	2972	13376	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19850213	19850213	PVT	None	None	G4	S4				302	Riparian
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	CTT62400CA	185	2979	15383	3311776	Black Star Canyon	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19800410	19800410	PVT	None	None	G4	S4				302	Riparian
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	CTT62400CA	186	2980	15384	3311776	Black Star Canyon	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19800410	19800410	USFS-CLEVELAND NF	None	None	G4	S4				302	Riparian
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	CTT62400CA	197	3032	15374	3311775	Corona South	RIV	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19800410	19800410	USFS-CLEVELAND NF	None	None	G4	S4				302	Riparian
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	CTT32720CA	31	20544	25036	3311776	Black Star Canyon	ORA	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	19900717	19900717	PVT-COAL CANYON CO	None	None	G1	S1.1				302	Scrub

THIS PAGE INTENTIONALLY LEFT BLANK

C.6 - MSHCP Riparian-Riverine Assessment

THIS PAGE INTENTIONALLY LEFT BLANK

Western Riverside County Multiple-Species Habitat Conservation Plan Riparian/Riverine Assessment Report for the Trails at Corona Specific Plan Project City of Corona, Riverside County, California

Prepared for:

Oxbow Partners

2855 Pacific Coast Highway, Suite 227
Corona Del Mar, CA 92625

Contact: Thomas Grabiell, Principal

Prepared by:

FirstCarbon Solutions

967 Kendall Drive
#A-537
San Bernardino, CA 92407
714.508.4100

Contact: Martin Rasnick, Associate Director, Biological Services
Hannah Carney, Biologist

Date: February 28, 2024

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

Section 1: Introduction	1
Section 2: Environmental Setting	3
2.1 - Project Location.....	3
2.2 - Project Description	3
2.3 - Vegetation and Land Cover Types	14
Section 3: Regulatory Setting	23
3.1 - Western Riverside County MSHCP	23
Section 4: Methods.....	25
Section 5: Results.....	27
5.1 - Aquatic Resources	27
Section 6: Conclusion	29
6.1 - Aquatic Resources	29

Appendix A: Site Photographs

List of Tables

Table 1: Soils Present On-site	14
--------------------------------------	----

List of Exhibits

Exhibit 1: Regional Location Map	5
Exhibit 2: Local Vicinity Map, Topographic Base	7
Exhibit 3: Local Vicinity Map, Aerial Base.....	9
Exhibit 4: Project Site Plan.....	11
Exhibit 5: Soils Map	15
Exhibit 6: Vegetation and Land Cover Types.....	17
Exhibit 7: Aquatic Resources Delineation Map.....	21

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 1: INTRODUCTION

At the request of Oxbow Partners (project applicant), FirstCarbon Solutions (FCS) completed a Western Riverside County Multiple-Species Habitat Conservation Plan (MSHCP) Riparian/Riverine Assessment Report pursuant to the requirements of Section 6.1.2 of the MSHCP for the 104.80-acre Trails at Corona Development Project (proposed project) as depicted in Exhibits 1 through 3. The purpose of this report is to map and determine the limits of MSHCP jurisdiction under Section 6.1.2 of the MSHCP, and to support the project applicant's planning efforts for a proposed development project.

The site is located within the Western Riverside County MSHCP. As a result of the previously developed golf course, the site is not included in MSHCP survey areas for the following: Narrow Endemic Plant Species Survey Area, Criteria Area Species Survey Area, and the burrowing owl survey area; as such, assessments are not mandatory for these species.

As a former golf course, the property consists of remnant fairways, cart paths, a clubhouse foundation slab, and other features, including former golf course ponds which are not subject to Section 6.1.2 of the MSHCP due to their human-induced nature as constructed golf course ponds. Most of the site appears to be regularly mowed. Although the City of Corona urban limits surround the site to the north, east, south, and west, the site is also adjacent to the County of Riverside unincorporated communities of Green River and Prado Basin.

The site is surrounded by urban development. Land uses immediately to the west are predominantly residential uses as well as commercial (McDonald's restaurant and Arco gas station) and school facilities (Coronita Elementary School). Immediately north of the project site is State Route (SR) 91, further north is commercial developments (In-N-Out-Burger restaurant and Nissan and Hyundai car dealerships) and light industrial land uses. Land uses immediately to the east are predominantly residential uses as well as school facilities (Cesar Chavez Academy). Land uses immediately to the south are predominantly residential uses as well as vacant parcels.

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 2: ENVIRONMENTAL SETTING

2.1 - Project Location

The proposed project is located south of SR-91, and generally west of Avenida Del Vista, and east of Serfas Club Drive within both unincorporated Riverside County and the City of Corona (Exhibit 1).

The project area comprises approximately 104.8 acres, of which approximately 79.9 acres are within County of Riverside jurisdiction and approximately 24.9 acres are within City of Corona jurisdiction. The County of Riverside portion of the site is located within the unincorporated community of Coronita (Exhibit 2). The City of Corona surrounds the site to the north, east, south, and west; however, the site is connected to and adjacent to County of Riverside unincorporated communities of Green River and Prado Basin (Exhibit 3). The site has regional access via SR-91 (Exhibit 3).

The Assessor's Parcel Numbers (APNs) for the project area are:

County of Riverside portion

- APN 102-050-004
- APN 102-050-005
- APN 102-050-008
- APN 102-050-021
- APN 102-050-022
- APN 102-050-024
- APN 102-112-008
- APN 102-113-015
- APN 102-160-003
- APN 102 203-007
- APN 102-192-017
- APN 103-203-006
- APN 103-301-010

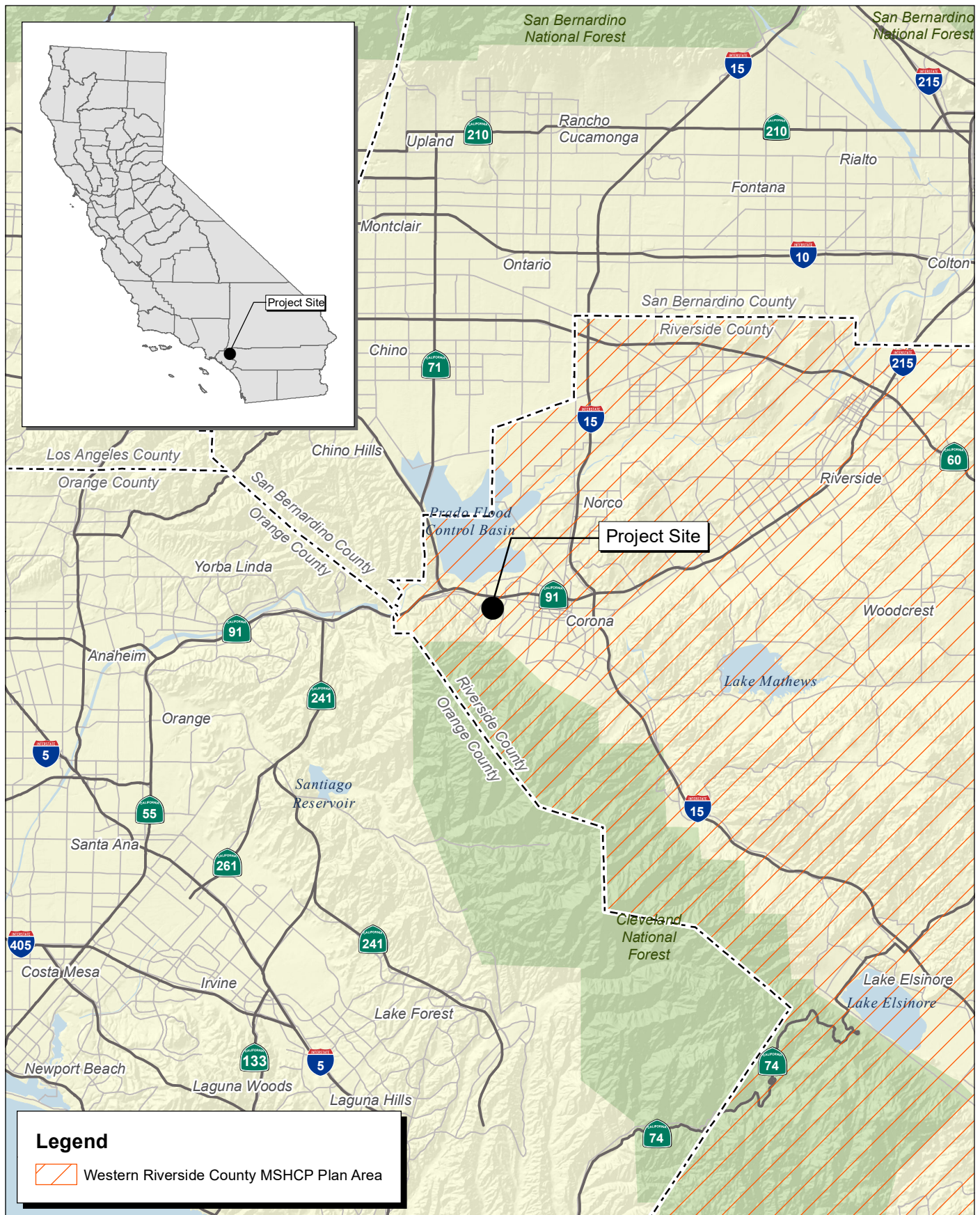
City of Corona portion

- APN 103-020-007
- APN 103-020-008
- APN 103-020-009
- APN 103-020-010
- APN 103-020-011

2.2 - Project Description

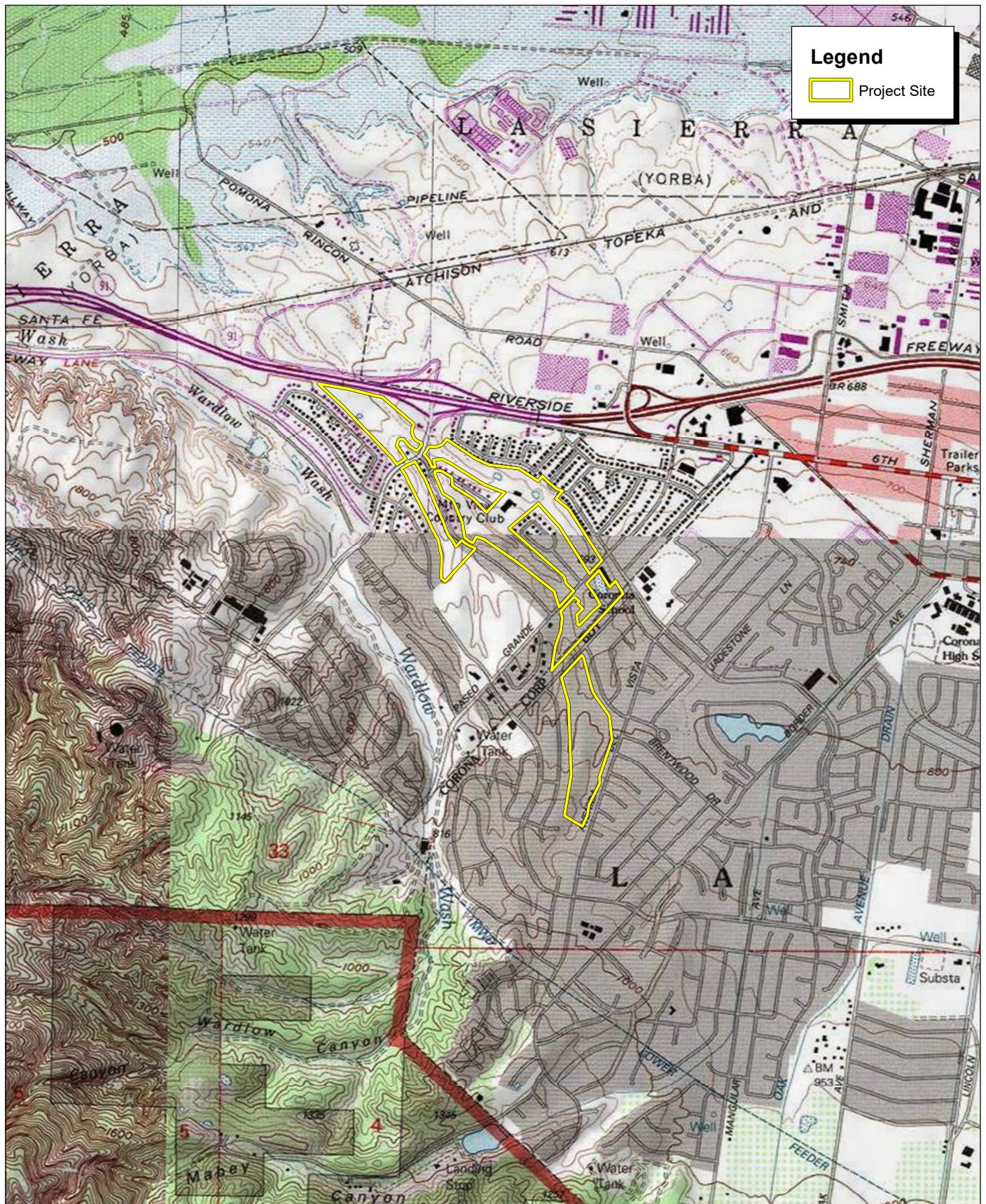
The project applicant proposes a mixed-use community, including approximately 40 acres of open space with parks and trails, 100 percent active adult and age-restricted to 60 years old and older residential areas of various densities, a retail/commercial site, and associated parking lots (Exhibit 4). The proposed project would include a total of 309 dwelling units including 116 two-family residences and 193 single-family detached residences, as well as a 0.78-acre neighborhood commercial space with approximately 10,000 square feet of quick service food retail use and a community center.

THIS PAGE INTENTIONALLY LEFT BLANK



Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

THIS PAGE INTENTIONALLY LEFT BLANK



Source: USGS Corona North & Corona South 7.5' Quadrangles / T03S,R07W,sec27,28,33,34.

FIRSTCARBON
SOLUTIONS™



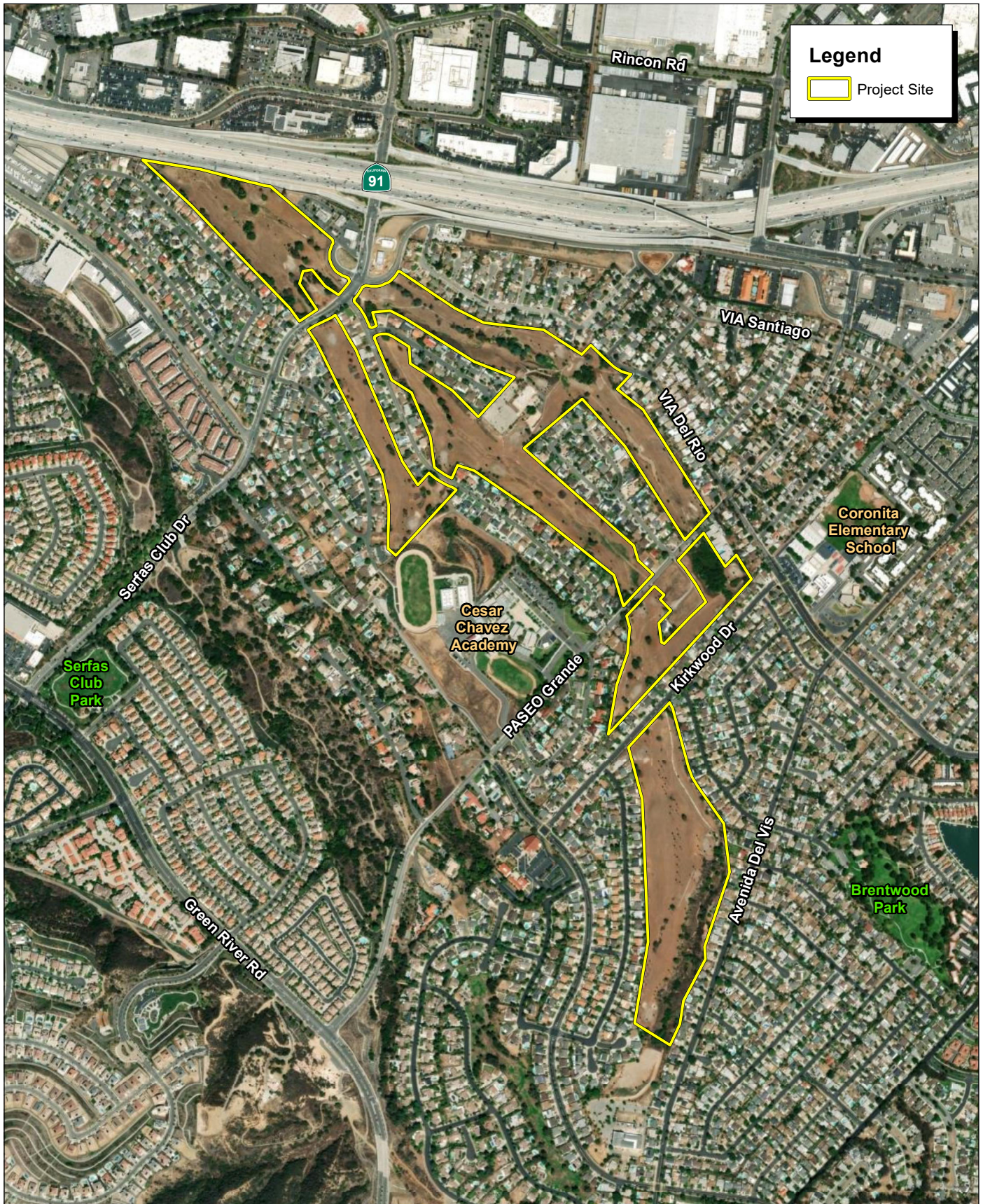
2,000 1,000 0 2,000
Feet

50820001.1 • 02/2024 | 2_local_vicinity_topo.mxd

Exhibit 2 Local Vicinity Map, Topographic Base

CITY OF CORONA
TRAILS AT CORONA SPECIFIC PLAN PROJECT
WESTERN RIVERSIDE COUNTY MSHCP RIPARIAN/RIVERINE ASSESSMENT REPORT

THIS PAGE INTENTIONALLY LEFT BLANK



Source: ESRI Aerial Imagery.

FIRSTCARBON
SOLUTIONS™



1,000 500 0 1,000
Feet

Exhibit 3 Local Vicinity Map, Aerial Base

50820001.1 • 02/2024 | 3_local_vicinity_aerial.mxd

CITY OF CORONA
TRAILS AT CORONA SPECIFIC PLAN PROJECT
WESTERN RIVERSIDE COUNTY MSHCP RIPARIAN/RIVERINE ASSESSMENT REPORT

THIS PAGE INTENTIONALLY LEFT BLANK



Source: Urban Arena, 2024.



Exhibit 4 Project Site Plan

THIS PAGE INTENTIONALLY LEFT BLANK

2.2.1 - Planning Phases

The proposed project is divided into six Planning Areas, five in the County of Riverside and one in the City of Corona; each Planning Area contains open space in the form of parks and trails open to the entire community.

The following uses are proposed in the six Planning Areas:

- Planning Area 1: 66 two-family residences
- Planning Area 2: 0.78-acre neighborhood commercial space with approximately 10,000 square feet of quick service food retail use
- Planning Area 3: 115 single-family detached residences, 50 two-family residences, and community center
- Planning Area 4: 47 single-family detached residences
- Planning Area 5: 31 single-family detached residences
- Planning Area 6 (City of Corona): No development

All 309 dwelling units would be 100 percent active adult and age-restricted to 60 years and older under the proposed project.

The proposed project would be completed in two phases. Phase I consists of Planning Areas 1, 2, and 3, Planning Area 6 would not be developed as a part of the proposed project. Phase II consists of Planning Areas 4 and 5.

2.2.2 - Open Space, Parks, and Trails

As noted above, each Planning Area contains open space in the form of parks and trails open to the public. Parks would include a combination of some of the following: walking, running, and biking trails, and tot lots, active sport courts, or dog parks. Park benches and large green spaces would also be provided for passive recreation.

The parks would serve the purpose of water quality restoration from stormwater and residential runoff, cleaning water before it percolates into the groundwater or enters the storm drain system. Additionally, some park areas would serve as detention basins, providing increased flood protection and stormwater flow control.

2.2.3 - General Setting

The proposed project is located on the former Mountain View Golf Course. The project area is currently vacant and has been so since the closing of the golf course in 2009. The project area primarily consists of developed land from former golf course operations with ruderal vegetation, native and non-native trees, and a natural drainage feature at the southern end of the property. Two remnant pond features occur on the project area as well as one pond feature with standing water that supports woody vegetation.

2.3 - Vegetation and Land Cover Types

Soil types and vegetation communities mapped and verified on the project area between 2015 and 2021 are described below (Exhibit 5 and Exhibit 6). Representative photographs of vegetation communities and land cover types on the project area are presented in Appendix A: Site Photographs.

2.3.1 - Soil Types

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey (2023), four to five types of soils are found within the project area (Exhibit 5). Each soil type present on-site is described in Table 1 below.

Table 1: Soils Present On-site

Soil Name	Slope	Acreage On-Site
Garretson very fine sandy loam	2 to 8 percent slopes	31.47 acres
Perkins loam	2 to 8 percent slopes	22.55 acres
Perkins gravelly loam	2 to 5 percent slopes	2.29 acres
	5 to 8 percent slopes	6.41 acres
Terrace escarpments	N/A	42.98 acres
Total:		105.7 acres
Source:		
1. Natural Resources Conservation Service (NRCS). 2023. Official Soil Series Descriptions. United States Department of Agriculture (USDA). Website: http://www.nrcs.usda.gov/ . Accessed February 22, 2024.		
2. Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx . Accessed February 22, 2024.		

2.3.2 - Ruderal and Developed Land

The majority of the project area (99.36 acres) consists of developed land with remnant turf and various weedy species that have since expanded throughout the former golf course (Exhibit 6). Characteristic on-site ruderal vegetation includes non-native grasses and other weedy species such as London rocket (*Sisymbrium irio*), Bermuda grass (*Cynodon dactylon*), Russian thistle (*Salsola tragus*), horehound (*Marrubium vulgare*), lamb's quarters (*Chenopodium album*), cheeseweed (*Malva parviflora*), slender wild oat (*Avena barbata*), shortpod mustard (*Hirschfeldia incana*), giant reed (*Arundo donax*), curly dock (*Rumex crispus*), Mediterranean grass (*Schismus barbatus*), foxtail chess (*Bromus madritensis ssp. rubens*), prostrate pigweed (*Amaranthus albus*), cultivated radish (*Rhaphanus sativus*), milkvetch (*Astragalus sp.*), English ivy (*Hedera helix*), and smilo grass (*Stipa miliacea var. miliacea*).



Source: ESRI Aerial Imagery. Western Riverside County Regional Conservation Authority (RCA).



THIS PAGE INTENTIONALLY LEFT BLANK



Source: ESRI Aerial Imagery.

FIRSTCARBON
SOLUTIONS™



1,000 500 0 1,000
Feet

Exhibit 6 Vegetation and Land Cover Types

THIS PAGE INTENTIONALLY LEFT BLANK

Trees

The project area contains both native and non-native planted trees scattered throughout the former golf course (Exhibit 6). The trees within the project boundaries include Peruvian pepper tree (*Schinus molle*), gum tree (*Eucalyptus sp.*), pines (*Pinus sp.*), Brazilian pepper tree (*Schinus terebinthifolius*), Acacia (*Acacia sp.*), evergreen ash (*Fraxinus uhdei*), white alder (*Alnus rhombifolia*), saltcedar (*Tamarix ramosissima*), Mexican fan palm (*Washingtonia robusta*), Canary Island palm (*Phoenix canariensis*), European olive (*Olea europaea*), coast live oaks (*Quercus agrifolia*) and California sycamore (*Platanus racemosa*).

2.3.3 - Riparian

A naturalized drainage feature located in the southern portion of the property is approximately 5 feet wide on average, and 1,500 linear feet in length for a total of 0.17 acre (Exhibit 6). The banks of the drainage feature are vegetated primarily with ruderal vegetation, with some patches of remnant sage scrub vegetation including scattered California goldenbush (*Ericameria ericoides*), California buckwheat (*Eriogonum fasciculatum*), and coastal sagebrush (*Artemisia californica*). The southern part of the drainage feature contains both native and non-native trees and shrubs, including species found in riverine habitats such as mulefat (*Baccharis salicifolia*) and willows (*Salix spp*) that cover 4.91 acres. Total riparian areas within the project are 5.08 acres.

2.3.4 - Pond

The golf course property contains three pond features, including one feature (1.42 acres) that contains standing water and supports woody vegetation that is typical of riparian areas, and two remnant ponds that are dry. Trees and shrubs include black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), and mulefat. The feature that is actively ponded is connected to a storm drain from Kirkwood Drive but has been artificially created through human intervention and is not considered to be an MSHCP Riverine or Riparian resource as it is artificial in nature despite the presence of native woody vegetation which is ancillary to this artificially created resource.

The other two ponds are remnant features that are also clearly human-induced features which do not meet the definition of a Riparian or Riverine resource under Section 6.1.2 of the MSHCP. Based on the artificial nature of these drainage features, none of the three ponds would be considered as Riparian or Riverine resources under Section 6.1.2 of the MSHCP.

2.3.5 - Jurisdictional Areas

One naturalized drainage feature, Drainage A, located in the southern portion of the property is approximately 5 feet wide on average, and 1,500 linear feet in length for a total of 0.17-acre (Exhibit 7). The banks of the drainage feature are vegetated primarily with ruderal vegetation, with some patches of remnant sage scrub vegetation including scattered California goldenbush, California buckwheat, and coastal sagebrush. The southern part of the drainage feature contains both native and non-native trees and shrubs, including species found in riverine habitats such as mulefat and willows that cover 4.91 acres. However, it should be noted that Planning Area 6, including Drainage A, would not be impacted as a part of the proposed project.

Total riverine/riparian areas within the project are 5.08 acres—4.91 Riparian habitat and 0.17-acre riverine habitat. No other drainage features that would be considered riverine or riparian are present on-site.



Source: ESRI Aerial Imagery. National Wetland Inventory Data.

FIRSTCARBON
SOLUTIONS™



825 412.5 0 825
Feet

Exhibit 7 Aquatic Resources Delineation Map

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 3: REGULATORY SETTING

3.1 - Western Riverside County MSHCP

The project site is located within the MSHCP Plan Area (Regional Conservation Authority [RCA] 2022) but is not located “within or adjacent to” a Criteria Cell (RCA 2022). The nearest Criteria Cell Group is located approximately 1 mile west of the project area and the nearest Core Area is located approximately 0.5 mile north of the project area. This project area is not located within any Linkage; the nearest Linkage is approximately 2.5 miles northeast of the project area. Because of its location outside of any Criteria Cells or Cell Groups, the proposed project is not subject to Reserve Assembly Analysis requirements under the MSHCP. Because the project area is not within or adjacent to any MSHCP Conservation Areas, the proposed project is not subject to Guidelines Pertaining to the Urban/Wildlands Interface or other requirements under the MSHCP pertaining to projects or actions implemented within or adjacent to a Conservation Area.

The project area is not located within an area slated for “Existing or Pending Conservation” (RCA 2022). The project area does not feature “Avoidance Areas,” or areas that must be protected by, or are proposed to be protected by, deed restriction. Current conditions and full development of the 160-acre project area would not provide for any contributions to “Undeveloped Areas Potentially Available for Future Conservation.”

The project site falls within the boundaries of the MSHCP. However, as the site consists of a formerly developed golf course, the site is excluded from the MSHCP survey areas, which include Narrow Endemic Plant Species Survey Area, Criteria Area Species Survey Area, and burrowing owl survey area. Consequently, assessments are not required for these species pursuant to the MSHCP. However, MSHCP policies regarding riparian/riverine areas apply to all properties located within the MSHCP and as such, the project site must be assessed for these habitat areas. Project development would be consistent with the policies set forth in the MSHCP as well as policies related to the MSHCP in the County of Riverside 2015 Multipurpose Open Space Element.

3.1.1 - Section 6.1.2 of the MSHCP

As projects are proposed within the Plan Area, an assessment of the potentially significant effects of those projects on riparian/riverine areas, and vernal pools shall be performed as currently required by the California Environmental Quality Act (CEQA) using available information augmented by project-specific mapping provided to and reviewed by the permittee's Biologist(s). Riparian/riverine areas and vernal pools are defined for this section as follows:

Riparian/Riverine Areas

Riparian/Riverine Areas are lands which contain habitat dominated by trees, shrubs, persistent emergent, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.

Vernal Pools

Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records.

Fairy Shrimp

For Riverside, vernal pool and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified Biologist.

With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.

SECTION 4: METHODS

As projects are proposed within the Plan Area, an assessment of the potentially significant effects of those projects on riparian/riverine areas, and vernal pools shall be performed as currently required by CEQA using available information augmented by project-specific mapping provided to and reviewed by the permittee's Biologist(s). Riparian/riverine areas and vernal pools are defined for this section as follows:

Riparian/Riverine Areas

Riparian/Riverine Areas are lands which contain habitat dominated by trees, shrubs, persistent emergent, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.

Vernal Pools

Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records.

Fairy Shrimp

For Riverside, vernal pool and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified biologist.

With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 5: RESULTS

The following section describes the results of both the background research and analysis and the results of the protocol-level delineation field work. Representative photographs of current site conditions are included in Appendix A.

5.1 - Aquatic Resources

A naturalized drainage feature, Drainage Feature A, is in the southern portion of the property approximately 5 feet wide on average, and 1,500 linear feet in length for a total of 0.17 acre (Exhibit 7). The banks of the drainage feature are vegetated primarily with ruderal vegetation, with some patches of remnant sage scrub vegetation including scattered California goldenbush, California buckwheat, and coastal sagebrush.

The southern part of the drainage feature contains both native and non-native trees and shrubs, including species found in riverine habitats such as mulefat and willows that cover 4.91 acres. Total riparian areas within the project are 5.08 acres.

5.1.1 - Drainage Feature A

Drainage Feature A is in the southern portion of the project area. It should be noted that Planning Area 6, including Drainage A, would not be impacted as a part of the proposed project. This drainage feature averages 5 feet in width and flows in a southeast to northwest direction for approximately 1,500 feet before dissipating along one of the former fairways of the golf course. Historical aerial imagery indicates that Drainage Feature A was filled in its former downstream end to construct a golf course whereas a majority of the drainage seems to have been left intact due to the age of the willow trees associated with the drainage. The downstream end of the drainage appears to have been legally filled between 1980 and 1985 to construct the golf course. As a result, it was not considered a jurisdictional water.

During 2023, significant precipitation occurred in the City of Corona which resulted in 200 percent of typical rainfall. This resulted in unexpected sheet flow release onto the golf course from urban sources. This release occurred during the months of January through March 2023 during the rainy season which resulted in erosion within downstream areas formerly occupied by Drainage Feature A prior to its conversion and development into a golf course.

This erosion resulted in the artificial creation of Drainage Feature A from Paseo Grande Avenue westerly to Serfas Club Drive. Since this area was legally filled and artificially recreated, it does not meet the definition of a riparian or riverine area under the MSHCP and should not require a Determination of Biologically Equivalent or Superior Preservation (DBESP) to fill a feature that was already legally filled.

5.1.2 - Drainage Feature B

Drainage Feature B is located in the northern portion of the project area. This feature is an erosional rill artificially created as a result of the 2022/2023 winter rainfall season. Historical aerial imagery indicates that Drainage Feature B was filled to construct a golf course. The feature appears to have been legally filled between 1980 and 1985 to construct the golf course. As a result, it was not considered a jurisdictional water.

During 2023, significant precipitation occurred in the City of Corona which resulted in 200 percent of typical rainfall. This resulted in unexpected sheet flow release onto the golf course from urban sources. This release occurred during the months of January through March 2023 during the rainy season which resulted in erosion within areas formerly occupied by Drainage Feature B prior to its conversion and development into a golf course.

This erosion resulted in the artificial creation of Drainage Feature B from Paseo Grande Avenue westerly to Serfas Club Drive. Since this area was legally filled and artificially recreated, it does not meet the definition of a riparian or riverine area under the MSHCP and should not require a DBESP to fill a feature that was already legally filled.

5.1.3 - Pond 1 Through Pond 3

The golf course property contains three pond features, including one feature (Pond 1 – 1.42 acres) that contains standing water and supports woody vegetation that is typical of riparian areas, and two remnant ponds that are dry (Pond 2 and Pond 3). Trees and shrubs include black willow, arroyo willow, and mulefat. The feature that is actively ponded is connected to a storm drain from Kirkwood Drive but has been artificially created through human intervention and appears to be lined for irrigation purposes. None of the three ponds would be considered as an MSHCP Riverine or Riparian resource as they were clearly constructed along with the golf course. They are artificial in nature despite the presence of native woody vegetation which is ancillary to this artificially created resource.

Based on the artificial nature of these ponds, none of the three ponds would be considered as Riparian or Riverine resources under Section 6.1.2 of the MSHCP.

SECTION 6: CONCLUSION

6.1 - Aquatic Resources

6.1.1 - Drainage Feature A

A naturalized drainage feature, Drainage Feature A, is located in the southern portion of the property approximately 5 feet wide on average, and 1,500 linear feet in length for a total of 0.17 acre. The banks of the drainage feature are vegetated primarily with ruderal vegetation, with some patches of remnant sage scrub vegetation including scattered California goldenbush, California buckwheat, and coastal sagebrush.

The southern part of the drainage feature contains both native and non-native trees and shrubs, including species found in riverine habitats such as mulefat and willows that cover 4.91 acres. Total riparian areas within the project are 5.08 acres.

This drainage feature, Drainage Feature A, is considered a riparian/riverine resource for its 5.08-acre, 1,500 linear foot length.

6.1.2 - Drainage Feature B

Feature B is located in the northern portion of the project area. This feature is an erosional rill artificially created as a result of the 2022/2023 winter rainfall season. Historical aerial imagery indicates that Drainage Feature B was filled to construct a golf course. The feature appears to have been legally filled between 1980 and 1985 to construct the golf course. As a result, it was not considered a jurisdictional water.

6.1.3 - Pond 1 Through Pond 3

The golf course property contains three pond features, including one feature (Pond 1 – 1.42 acres) that contains standing water and supports woody vegetation that is typical of riparian areas, and two remnant ponds that are dry (Ponds 2 and 3). Trees and shrubs include black willow, arroyo willow, and mulefat. The feature that is actively ponded is connected to a storm drain from Kirkwood Drive but has been artificially created through human intervention and appears to be lined for irrigation purposes. None of the three ponds would be considered as an MSHCP Riverine or Riparian resource as they were clearly constructed along with the golf course. They are artificial in nature despite the presence of native woody vegetation which is ancillary to this artificially created resource.

Based on the artificial nature of these ponds, none of the three ponds would be considered as Riparian or Riverine resources under Section 6.1.2 of the MSHCP.

Based on the project site plan, this feature is being fully avoided so no DBESP would be required as no riparian/riverine resources would be affected by the proposed project.

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix A: Site Photographs

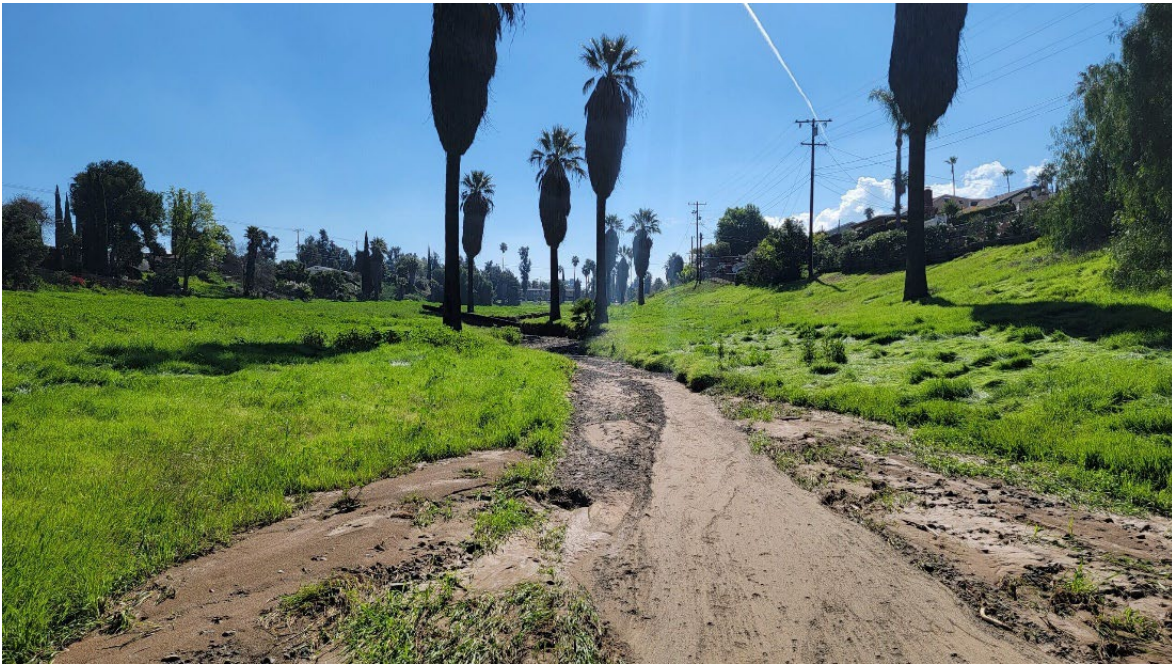
THIS PAGE INTENTIONALLY LEFT BLANK



Photograph 1: View of northern drainage from Paseo Grande, facing northwest.



Photograph 2: View of northern drainage, facing northwest.



Photograph 3: View of northern drainage, facing southeast.



Photograph 4: View of southern drainage from Paseo Grande, facing northwest.



Photograph 5: View of area around the southern drainage, facing northwest.



Photograph 6: View of southern drainage, facing southeast.



Photograph 7: View of southern drainage, facing southeast.



Photograph 8: View of southern drainage, facing northwest.



Photograph 9: View of southern drainage, facing southeast.



Photograph 10: View of northern drainage near Serfas Club Drive, facing southeast.



Photograph 11: View of artificially created eastern basin from Paseo Grande, facing southeast.



Photograph 12: View of eastern basin, facing northeast.



Photograph 13: View of eastern basin, facing northwest.

THIS PAGE INTENTIONALLY LEFT BLANK