
To:	Gil Ruiz	From:	Rocky Brown
	Los Angeles		Thousand Oaks
File:	Alton and Culver Intersection Improvement Project	Date:	November 21, 2019

Reference: Data Summary from Biological Reconnaissance Survey

The following is a summary of the biological resources data collected during the reconnaissance survey of the project area and a surrounding 300-foot buffer, hereto referred to as the Biological Study Area (BSA).

VEGETATION COMMUNITIES/LAND COVER TYPES

As defined in the Manual of California Vegetation, Second Edition (MCVII)¹, a vegetation alliance is “a category of vegetation classification which describes repeating patterns of plants across a landscape. Each alliance is defined by plant species composition, and reflects the effects of local climate, soil, water, disturbance, and other environmental factors.” Generally, Stantec’s mapping and description of plant communities follows the classification system described in MCVII. The MCVII is generally limited to communities that are native to or naturalized within California; however, no native habitat occurs within the BSA. Therefore, the land cover type discussed below is descriptive in nature and not specifically referenced in the MCVII.

The scientific and common names of each species detailed within this report correspond to those described in the second edition of *The Jepson Manual*². Plant species documented during the reconnaissance survey are listed in Table 1.

Developed/Disturbed Land

Because this intersection is situated in a completely built-out area of the City of Irvine, this is the sole land cover type observed within the approximately 43-acre BSA. This classification includes developed lands such as buildings; paved roadways, walkways, and parking lots; and landscaped areas solely featuring planted ornamental species. In general, these areas are dominated by hardscape but also contain planters occupied by urban landscaping. Plants observed include forb and shrub species such as bougainvillea (*Bougainvillea* spp.), pittosporum (*Pittosporum* sp.), rhododendron (*Rhododendron* sp.), geranium (*Pelargonium* sp.), lily of the Nile (*Agapathus praecox*), bird of paradise (*Strelitzia reginae*), and trees such as privet (*Ligustrum* sp.), eucalyptus (*Eucalyptus* spp.), ficus (*Ficus* sp.), pine (*Pinus* sp.), sweet gum tree (*Liquidambar styraciflua*), magnolia (*Magnolia* sp.), and broad-leaved paperbark (*Melaleuca quinquenervia*). Groves of eucalyptus and other street trees are present in some narrow areas of open space adjacent to roads and walkways, though were not mapped independently. Landscaped areas are generally regularly maintained, precluding any significant growth of non-ornamental species, but may be sparsely interspersed with ruderal pioneer plant species that readily colonize open disturbed soil, including pigweed (*Amaranthus albus*), bur clover (*Medicago*

¹ Sawyer, J.O., T. Keeler-Wolf and J.M. Evens. 2009. Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, California.

² Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, D.H. Wilken (eds.) 2012. The Jepson Manual: Vascular Plants of California, 2nd ed. University Press, Berkeley, California.

Reference: Data Summary from Biological Reconnaissance Survey

polymorpha), bristly ox tongue (*Helminthotheca echioides*), and cheeseweed (*Malva parviflora*), as well as other non-native grasses and forbs.

PLANTS AND WILDLIFE OBSERVED DURING THE SURVEY

Plants

Table 1. Vegetation Observed within the BSA

Scientific Name	Common Name
<i>Agapanthus africanus</i>	lily of the Nile
<i>Amaranthus albus</i>	pigweed
<i>Bacopa monnieri</i>	waterhyssop
<i>Bougainvillea spectabilis</i>	bougainvillea
<i>Campsis radicans</i>	trumpet vine
<i>Carissa macrocarpa</i>	natal plum
<i>Cynodon dactylon</i>	Bermuda grass
<i>Eucalyptus</i> sp.	eucalyptus
<i>Ficus</i> sp.	fig
<i>Hedera helix</i>	English ivy
<i>Helminthotheca echioides</i>	bristly ox tongue
<i>Ligustrum</i> sp.	privet
<i>Liquidambar styraciflua</i>	sweet gum tree
<i>Magnolia</i> sp.	magnolia
<i>Malva parviflora</i>	cheeseweed
<i>Medicago polymorpha</i>	bur clover
<i>Melaleuca quinquenervia</i>	broad-leaved paperbark
<i>Pelargonium</i> sp.	geranium
<i>Phoenix canariensis</i>	Canary Island palm
<i>Pinus</i> sp.	pine tree
<i>Pittosporum</i> sp.	pittosporum
<i>Platanus racemosa</i> *	California sycamore
<i>Polypogon monspeliensis</i>	annual beard-grass
<i>Rhododendron</i> sp.	rhododendron
<i>Salix</i> sp.*	willow
<i>Schinus terebinthifolius</i>	Brazilian pepper tree
<i>Stenotaphrum secundatum</i>	St. Augustine grass
<i>Strelitzia reginae</i>	bird of paradise

Reference: Data Summary from Biological Reconnaissance Survey

Scientific Name	Common Name
<i>Taraxacum officinale</i>	dandelion
<i>Typha</i> sp.*	cattail
<i>Vinca</i> sp.	periwinkle
<i>Washingtonia filifera</i> *	fan palm

*Native species

Wildlife

Table 2. Wildlife Observed within the BSA

Scientific Name	Common Name
<i>Anas platyrhynchos</i>	mallard
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Calypte anna</i>	Anna's hummingbird
<i>Charadrius vociferus</i>	killdeer
<i>Corvus brachyrhynchos</i>	American crow

JURISDICTIONAL WATERS/WETLANDS

The National Wetlands Inventory has mapped San Diego Creek, which passes under Culver Drive approximately 630 feet to the northeast of the Alton/Culver intersection, as an R2UBFx feature (Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated) (data is from 2006)³.

SPECIAL-STATUS SPECIES

Special-Status Plants

Table 3 presents a list of special-status plants, including federally- and state listed species and CRPR 1-4 species that are known to occur in the vicinity of the BSA.

A records search of the CNDDDB, the CNPS Online Inventory, and the Consortium of California Herbaria (CCH) was performed for special-status plant taxa and non-protocol plant surveys were conducted within the BSA. Each of the taxa identified in the records searches were assessed for their potential to occur within the BSA based on the following criteria:

- **Present:** Taxa were observed within the BSA during recent botanical surveys or population has been acknowledged by CDFW, USFWS, or local experts.

³ U.S. Fish and Wildlife Service. 2019. Wetland Mapper. National Wetlands Inventory. Washington, D.C.: USFWS. <https://www.fws.gov/wetlands/data/mapper.html>.

Reference: Data Summary from Biological Reconnaissance Survey

- **High:** Both a documented recent record (within 10 years) exists of the taxa within the BSA or the immediate vicinity (approximately 5 miles) and the environmental conditions (including soil type) associated with taxa presence occur within the BSA.
- **Moderate:** Both a documented recent record (within 10 years) exists of the taxa within the BSA or the immediate vicinity (approximately 5 miles) and the environmental conditions associated with taxa presence are marginal and/or limited within the Project Area or the BSA is located within the known current distribution of the taxa and the environmental conditions (including soil type) associated with taxa presence occur within the BSA.
- **Low:** A historical record (over 10 years) exists of the taxa within the BSA or general vicinity (approximately 10 miles) and the environmental conditions (including soil type) associated with taxa presence are marginal and/or limited within the BSA.
- **Not Likely to Occur:** The environmental conditions associated with taxa presence do not occur within the BSA.

Table 3. Known and Potential Occurrence of Special-Status Plant Taxa within the BSA

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	1B.1	Chaparral, coastal scrub, and desert dunes; sandy areas; 60-1570 m.	(Jan) Mar-Sep	Not Likely to Occur No suitable habitat occurs within the BSA and the BSA is outside this species' known elevation range. The nearest recorded occurrence is approximately 7.2 miles to the west of the BSA; however, this observation is from well over 10 years ago. The most recent record is from 2017, approximately 7.4 miles to the west of the BSA.
<i>Aphanisma blitoides</i> aphanisma	1B.2	Coastal bluff scrub, coastal dunes, and coastal scrub. Often found in sandy or gravelly environments; 1-305 m.	Feb-Jun	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest and most recent recorded occurrence is approximately 4.1 miles to the southwest of the BSA; however, this observation is from well over 10 years ago.

Reference: Data Summary from Biological Reconnaissance Survey

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
<i>Astragalus brauntonii</i> Braunton's milk-vetch	FE, 1B.1	Chaparral, coastal scrub, valley and foothill grassland, and recently burned or disturbed areas; sandstone with carbonate layers substrate; 4-640 m.	Jan-Aug	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 8.8 miles to the northeast of the BSA.
<i>Atriplex coulteri</i> Coulter's saltbush	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grasslands. Often found on alkaline or clay substrates; 3-460 m.	Mar-Oct	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.1 miles to the southwest of the BSA.
<i>Atriplex pacifica</i> south coast saltscale	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, and playas; 0-140 m.	Mar-Oct	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.9 miles to the southwest of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
<i>Atriplex serenana</i> var. <i>davidsonii</i> Davidson's saltscale	1B.2	Coastal bluff scrub and coastal scrub. Found in alkaline environments; 10-200 m.	Apr-Oct	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.1 miles to the southwest of the BSA.
<i>Brodiaea filifolia</i> thread-leaved brodiaea	FT, SE, 1B.1	Chaparral (openings), cismontane woodlands, coastal scrub, playas, valley and foothill grassland, and vernal pools. Often found in clay substrates; 25-1120 m.	Mar-Jun	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 9.8 miles to the east of the BSA.

Reference: Data Summary from Biological Reconnaissance Survey

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
<i>Calochortus weedii</i> var. <i>intermedius</i> intermediate mariposa-lily	1B.2	Chaparral, coastal scrub, and valley and foothill grasslands. Found in rocky and calcareous substrates; 105-855 m.	May-Jul	Not Likely to Occur No suitable habitat occurs within the BSA and the BSA is outside this species' known elevation range. The nearest recorded occurrence is approximately 4.6 miles to the south of the BSA.
<i>Centromadia parryi</i> ssp. <i>australis</i> southern tarplant	1B.2	Marshes and swamps (margins), valley and foothill grasslands (vernally mesic), and vernal pools; 0-480 m.	May-Nov	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 0.7 miles to the north of the BSA.
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i> Orcutt's pincushion	1B.1	Coastal bluff scrub (sandy) and coastal dunes; 0-100 m.	Jan-Aug	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest and most recent recorded occurrence is approximately 9.1 miles to the south of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i> salt marsh bird's-beak	FE, SE, 1B.2	Coastal dunes, marshes, and swamps (coastal salt); 0-30 m.	May-Oct (Nov)	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 5.2 miles to the southwest of the BSA.
<i>Chorizanthe parryi</i> var. <i>fernandina</i> San Fernando Valley spineflower	FPT, SE, 1B.1	Coastal scrub (sandy) and valley and foothill grasslands; 150-1220 m.	Apr-Jul	Not Likely to Occur No suitable habitat occurs within the BSA and the BSA is outside this species' known elevation range. The nearest recorded occurrence is approximately 8.1 miles to the northeast of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.

Reference: Data Summary from Biological Reconnaissance Survey

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
<i>Dudleya multicaulis</i> many-stemmed dudleya	1B.2	Chaparral, coastal scrub, and valley and foothill grasslands; Often found in clay substrates; 15-790 m	Apr-Jul	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 2.4 miles to the west of the BSA.
<i>Dudleya stolonifera</i> Laguna Beach dudleya	FT, ST, 1B.1	Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland; rocky substrates; 10-260 m.	May-Jul	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.0 miles to the south of the BSA.
<i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button-celery	FE, SE, 1B.1	Coastal scrub, valley and foothill grassland, vernal pools; mesic; 20-620 m.	Apr-Jun	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.4 miles to the west of the BSA.
<i>Euphorbia misera</i> cliff spurge	2B.2	Coastal bluff scrub, coastal scrub, Mojavean desert scrub; rocky substrates; 10-500 m.	Dec-Aug (Oct)	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.8 miles to the southwest of the BSA.
<i>Helianthus nuttallii</i> ssp. <i>parishii</i> Los Angeles sunflower	1A	Marshes and swamps (coastal salt and freshwater); 10-1525 m.	Aug-Oct	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 9.8 miles to the southwest of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.

Reference: Data Summary from Biological Reconnaissance Survey

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	1B.1	Chaparral (maritime), cismontane woodland, coastal scrub; sandy or gravelly substrate; 70-810 m.	Feb-Jul (Sep)	Not Likely to Occur No suitable habitat occurs within the BSA and the BSA is outside this species' known elevation range. The nearest recorded occurrence is approximately 6.1 miles to the southwest of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
<i>Isocoma menziesii</i> var. <i>decumbens</i> cecumbent goldenbush	1B.2	Chaparral, coastal scrub (sandy, often in disturbed areas); 10-135 m.	Apr-Nov	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 5.6 miles to the southwest of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	1B.1	Marshes and swamps (coastal salt), playas, and vernal pools; 1-1220 m.	Feb-Jun	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 5.7 miles to the southwest of the BSA.
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper-grass	4.3	Chaparral and coastal scrub; 1-885 m.	Jan-Jul	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.1 miles to the southwest of the BSA.
<i>Monardella hypoleuca</i> ssp. <i>intermedia</i> intermediate monardella	1B.3	Chaparral, cismontane woodland, and lower montane coniferous forest; usually found in the understory; 400-1250 m.	Apr-Sep	Not Likely to Occur No suitable habitat occurs within the BSA and the BSA is outside this species' known elevation range. The nearest recorded occurrence is approximately 7.8 miles to the east of the BSA.

Reference: Data Summary from Biological Reconnaissance Survey

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
<i>Nama stenocarpa</i> mud nama	2B.2	Marshes and swamps (lake margins and riverbanks), 5-500 m.	Jan-Jul	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 0.7 miles to the west of the BSA.; however, it should be noted that this occurrence was recorded well over 10 years ago.
<i>Nasturtium gambelii</i> Gambel's water cress	FE, ST, 1B.1	Marshes and swamps (freshwater or brackish); 5-330 m.	Apr-Oct	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 4.3 miles to the northwest of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	1B.1	Coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), and vernal pools; mesic environments; 3-1210 m.	Apr-Jul	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.4 miles to the west of the BSA.
<i>Nemacaulis denudata</i> var. <i>denudata</i> coast woolly-heads	1B.2	Coastal dunes; 0-100 m.	Apr-Sep	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.0 miles to the southwest of the BSA.
<i>Nolina cismontana</i> chaparral nolina	1B.2	Chaparral and coastal scrub; sandstone or gabbro substrate; 140-1275 m.	(Mar) May-Jul	Not Likely to Occur No suitable habitat occurs within the BSA and the BSA is outside this species' known elevation range. The nearest recorded occurrence is approximately 9.4 miles to the east of the BSA.

Reference: Data Summary from Biological Reconnaissance Survey

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
<i>Orcuttia californica</i> California Orcutt's grass	FE, SE, 1B.1	Vernal pools; 15-660 m.	Apr-Aug	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.4 miles to the west of the BSA.
<i>Pentachaeta aurea</i> ssp. <i>allenii</i> Allen's pentachaeta	1B.1	Coastal scrub (openings) and valley and foothill grasslands; 75-520 m.	Mar-Jun	Not Likely to Occur No suitable habitat occurs within the BSA and the BSA is outside this species' known elevation range. The nearest recorded occurrence is approximately 7.2 miles to the northeast of the BSA.
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	2B.2	Chaparral, cismontane woodland, coastal scrub, and riparian woodland; sandy and gravelly substrates; 0-2100 m.	(Jul) Aug- Nov (Dec)	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 9.5 miles to the northeast of the BSA.
<i>Quercus dumosa</i> Nuttall's scrub oak	1B.1	Closed-cone coniferous forest, chaparral, and coastal scrub; sandy and clay loam substrates; 15-400 m.	Feb-Apr (May-Aug)	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 5.7 miles to the southwest of the BSA.
<i>Senecio aphanactis</i> California ragwort	2B.2	Chaparral, cismontane woodland, and coastal scrub; sometimes found in alkaline environments; 15-800 m.	Jan-Apr (May)	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.6 miles to the southwest of the BSA.

Reference: Data Summary from Biological Reconnaissance Survey

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
<i>Sidalcea neomexicana</i> salt spring checkerbloom	2B.2	Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas; alkaline and mesic environments; 15-1530 m.	Mar-Jun	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 4.3 miles to the northwest of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
<i>Suaeda esteroa</i> estuary seablite	1B.2	Marshes and swamps (coastal salt); 0-5 m.	(May) Jul-Oct (Jan)	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 4.2 miles to the southwest of the BSA.
<i>Symphyotrichum defoliatum</i> San Bernardino aster	1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic); found near ditches, streams, and springs; 2-2040 m.	Jul-Nov (Dec)	Not Likely to Occur No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 2.2 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.

Status Codes**US Fish and Wildlife Service (Fed.) Designations:**

FE: Federally listed, endangered

FT: Federally listed, threatened

FPT: Federally proposed, threatened

California Department of Fish and Wildlife (Calif.) Designations:

SE: State listed, endangered

ST: State listed, threatened

California Rare Plant Rank (CRPR) Designation:

1A: Plants presumed extinct in California

1B: Plants rare, threatened, or endangered in California, and elsewhere

2B: Plants presumed extinct in California, but more common elsewhere

4: Plants of limited distribution – a watch list

.1: Seriously threatened in California (high degree/immediacy of threat)

.2: Fairly threatened in California (moderate degree/immediacy of threat)

.3: Not very threatened in California (low degree/immediacy of threat or no current threats known)

Reference: Data Summary from Biological Reconnaissance Survey

Special-Status Wildlife

Special- status taxa include those listed as threatened or endangered under the federal or California Endangered Species Acts, taxa proposed for such listing, Species of Special Concern, and other taxa that have been identified by the USFWS, CDFW, or local jurisdictions as unique or rare and which have the potential to occur within the BSA.

The CNDDDB was queried for occurrences of special-status wildlife taxa within the USGS topographical quadrangles in which the BSA occurs and the three surrounding quadrangles. The specific habitat requirements and the locations of known occurrences of each special-status wildlife taxa were the principal criteria used for inclusion in the list of taxa potentially occurring within the BSA. Table 4 summarizes the special status wildlife taxa known to regionally occur and their potential for occurrence in the BSA. Each of the taxa identified in the database reviews/searches were assessed for its potential to occur within the Project Area based on the following criteria:

- **Present:** Taxa (or sign) were observed in the BSA or in the same watershed (aquatic taxa only) during the most recent surveys, or a population has been acknowledged by CDFW, USFWS, or local experts.
- **High:** Habitat (including soils) for the taxa occurs on site and a known occurrence occurs within the BSA or adjacent areas (within 5 miles of the Project Area) within the past 20 years; however, these taxa were not detected during the most recent surveys.
- **Moderate:** Habitat (including soils) for the taxa occurs on site and a known regional record occurs within the database search, but not within 5 miles of the BSA or within the past 20 years; or a known occurrence occurs within 5 miles of the BSA and within the past 20 years and marginal or limited amounts of habitat occurs on site; or the taxa's range includes the geographic area and suitable habitat exists.
- **Low:** Limited habitat for the taxa occurs on site and no known occurrences were found within the database search and the taxa's range includes the geographic area.

Table 4. Known and Potential Occurrence of Special-Status Wildlife within the BSA

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
INVERTEBRATES					
<i>Bombus crotchii</i>	Crotch bumble bee	SA, State Candidate Endangered	Coastal California east to the sierra-cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Suitable food plants do not occur within the BSA. The nearest recorded occurrence is approximately 4.3 miles to the northwest of the BSA.; however, this occurrence was recorded well over 20 years ago.	Low (as a transient)
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE	Endemic to San Diego and Orange County mesas. Vernal pools.	No suitable vernal pool habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.1 miles to the west of the BSA.	Not Likely to Occur
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE	Native to southern California and northwestern Mexico. Occurs in localized colonies closely associated with the larval food plant, <i>Plantago erecta</i> . Adults use several chaparral annual flowers for food. Six known populations in southwestern Riverside and San Diego Counties and at least one population near Tecate, Mexico.	No suitable larval or adult food plants occur within the BSA. The nearest recorded occurrence is approximately 7.8 miles to the northeast of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	Endemic to western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.0 miles to the east of the BSA.	Not Likely to Occur

November 21, 2019

Gil Ruiz

Page 14 of 24

Reference: Data Summary from Biological Reconnaissance Survey

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
FISH					
<i>Oncorhynchus mykiss irideus</i> pop. 10	steelhead - Southern California Distinct Population Segment (DPS)	FE	Inhabits seasonally accessible rivers and streams. Requires sufficient flows in their natal streams to be able to return from oceans and lakes to spawn. Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerance to warmer water and more variable conditions.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.4 miles to the north of the BSA.	Not Likely to Occur
AMPHIBIANS					
<i>Anaxyrus californicus</i>	arroyo toad	FE, SSC	Found in low gradient, medium-to-large streams and rivers with intermittent and perennial flow in coastal and desert drainages. Occupy aquatic, riparian, and upland habitats in suitable drainages. Require slow-moving streams composed of sandy soils for breeding.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 9.4 miles to the northeast of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur
<i>Lithobates pipiens</i>	northern leopard frog	SSC	Native range is east of Sierra Nevada-Cascade crest. Near permanent or semi-permanent water in a variety of habitats. Highly aquatic species. Shoreline cover and submerged and emergent aquatic vegetation are important habitat characteristics.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.1 miles to the northeast of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur

November 21, 2019

Gil Ruiz

Page 15 of 24

Reference: Data Summary from Biological Reconnaissance Survey

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Spea hammondi</i>	western spadefoot	SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools and other temporary rain pools, cattle tanks, and occasionally pools of intermittent streams are essential for breeding and egg-laying.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 4.4 miles to the south of the BSA.	Not Likely to Occur
<i>Taricha torosa</i>	Coast Range newt	SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats and will migrate over 1 km to breed in ponds, reservoirs and slow-moving streams.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 5.7 miles to the northeast of the BSA; however, this occurrence was recorded over 20 years ago.	Not Likely to Occur
REPTILES					
<i>Anniella stebbinsi</i>	Southern California legless lizard	SSC	Generally, south of the transverse range, extending to northwestern Baja California, occurs in sandy or loose loamy soils under sparse vegetation; disjunct populations in the Tehachapi and Piute mountains in Kern County; variety of habitats; generally, in moist, loose soil, they prefer soils with a high moisture content.	Limited marginally suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.7 miles to the southwest of the BSA; however, this occurrence was recorded well over 20 years ago.	Low
<i>Arizona elegans occidentalis</i>	California glossy snake	SSC	Patchily distributed from the eastern portion of San Francisco bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular Ranges, south to Baja California. Generalist reported from a range of scrub and grassland habits, often with loose or sandy soils.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.1 miles to the southeast of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur

November 21, 2019

Gil Ruiz

Page 16 of 24

Reference: Data Summary from Biological Reconnaissance Survey

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	WL	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of bush and rocks. Perennial plants necessary for its major food: termites.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 5.8 miles to the northeast of the BSA.	Not Likely to Occur
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.6 miles to the east of the BSA.	Not Likely to Occur
<i>Crotalus ruber</i>	red-diamond rattlesnake	SSC	Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slope of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.5 miles to the south of the BSA.	Not Likely to Occur
<i>Emys marmorata</i>	western pond turtle	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Limited marginally suitable habitat occurs within the section of San Diego Creek that passes through the BSA. The nearest recorded occurrence is approximately 1.1 miles to the north of the BSA; however, this occurrence was recorded well over 20 years ago.	Low
<i>Phrynosoma blainvillii</i>	coast horned lizard	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Limited marginally suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 4.8 miles to the south of the BSA.	Low

November 21, 2019

Gil Ruiz

Page 17 of 24

Reference: Data Summary from Biological Reconnaissance Survey

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Salvadora hexalepis virgultea</i>	coast patch-nosed snake	SSC	Brushy or shrubby vegetation in coastal southern California. Require small mammal burrows for refuge and overwintering sites.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.6 miles to the northeast of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur
<i>Thamnophis hammondi</i>	two-striped gartersnake	SSC	Distributed from southeastern slope of the Diablo Range and the Salinas Valley south along the South Coast and Transverse ranges to the Mexican border, and on Santa Catalina Island. Associated with permanent or semi-permanent bodies of water in a variety of habitats. Requires nocturnal retreats, such as small mammal burrows.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 9.0 miles to the northeast of the BSA.	Not Likely to Occur
BIRDS					
<i>Accipiter cooperii</i>	Cooper's hawk	WL	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river floodplains; also, live oaks.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 2.6 miles to the southeast of the BSA.	Not Likely to Occur (nesting or foraging) Low (as a transient)
<i>Agelaius tricolor</i> (nesting colony)	tricolored blackbird	SC, SSC, BCC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate and foraging area with insect prey within a few km of the colony.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 1.7 miles to the east of the BSA.	Not Likely to Occur (nesting or foraging) Low (as a transient)

November 21, 2019

Gil Ruiz

Page 18 of 24

Reference: Data Summary from Biological Reconnaissance Survey

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow	WL	Resident in southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.8 miles to the southeast of the BSA.	Not Likely to Occur (nesting or foraging)
<i>Ammodramus savannarum</i>	grasshopper sparrow	SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.0 miles to the southwest of the BSA.	Not Likely to Occur (nesting or foraging)
<i>Athene cunicularia</i>	burrowing owl	SSC, BCC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 9.6 miles to the west of the BSA.	Not Likely to Occur (nesting or foraging)
<i>Buteo regalis</i>	ferruginous hawk	WL, BCC	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.0 miles to the east of the BSA.	Not Likely to Occur (nesting or foraging)
<i>Campylorhynchus brunneicapillus sandiegensis</i>	coastal cactus wren	SSC, BCC	Southern California coastal sage scrub. Wrens require tall opuntia cactus for nesting and roosting.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 1.3 miles to the south of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur (nesting or foraging)

November 21, 2019

Gil Ruiz

Page 19 of 24

Reference: Data Summary from Biological Reconnaissance Survey

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT, SSC, BCC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.8 miles to the southwest of the BSA.	Not Likely to Occur (nesting or foraging)
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT, SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 4.3 miles to the northwest of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur (nesting or foraging)
<i>Coturnicops noveboracensis</i>	yellow rail	SSC	Summer resident in eastern Sierra Nevada in Mono County. Freshwater marshlands.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 5.0 miles to the southwest of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur (nesting or foraging)
<i>Elanus leucurus</i>	white-tailed kite	FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 1.2 miles to the south of the BSA.	Not Likely to Occur (nesting or foraging) Low (as a transient)
<i>Eremophila alpestris actia</i>	California horned lark	WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also, main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.6 miles to the southwest of the BSA.	Not Likely to Occur (nesting or foraging)

November 21, 2019

Gil Ruiz

Page 20 of 24

Reference: Data Summary from Biological Reconnaissance Survey

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Falco peregrinus anatum</i>	American peregrine falcon	State and Federal Delisted, FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 4.6 miles to the north of the BSA.	Not Likely to Occur (nesting or foraging)
<i>Icteria virens</i>	yellow-breasted chat	SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests, in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft. of ground.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 2.9 miles to the southwest of the BSA.	Not Likely to Occur (nesting or foraging)
<i>Laterallus jamaicensis coturniculus</i>	California black rail	ST, FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 2.9 miles to the north of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur (nesting or foraging)
<i>Pandion haliaetus</i>	osprey	WL	Ocean shore, bays, freshwater lakes, and larger streams. Large nests are built in treetops within 15 miles of a good fish-producing body of water.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.0 miles to the southwest of the BSA.	Not Likely to Occur (nesting or foraging)
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	SE	Inhabits coastal salt marshes, from Santa Barbara south through San Diego County. Nests in <i>Salicornia</i> on and about margins of tidal flats.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.9 miles to the southwest of the BSA.	Not Likely to Occur (nesting or foraging)

November 21, 2019

Gil Ruiz

Page 21 of 24

Reference: Data Summary from Biological Reconnaissance Survey

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT, SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft. in southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 1.4 miles to the south of the BSA.	Not Likely to Occur (nesting or foraging) Low (as a transient)
<i>Rallus obsoletus levipes</i>	light-footed Ridgway's rail	FE, SE, FP	Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover; feeds on mollusks and crustaceans.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 2.0 miles to the west of the BSA.	Not Likely to Occur (nesting or foraging)
<i>Riparia riparia</i>	bank swallow	ST	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.0 miles to the southwest of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur (nesting or foraging)
<i>Setophaga petechia</i>	yellow warbler	SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.0 miles to the south of the BSA.	Not Likely to Occur (nesting or foraging)

November 21, 2019

Gil Ruiz

Page 22 of 24

Reference: Data Summary from Biological Reconnaissance Survey

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Sternula antillarum browni</i>	California least tern	FE, SE, FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.7 miles to the west of the BSA.	Not Likely to Occur (nesting or foraging)
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE, SE	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, <i>Baccharis</i> , mesquite.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 1.3 miles to the south of the BSA.	Not Likely to Occur (nesting or foraging) Low (as a transient)
MAMMALS					
<i>Antrozous pallidus</i>	pallid bat	SSC	Found in semi-arid and arid landscapes, primarily grasslands, shrub-steppe, and desert environments with rocky outcrops. Also found in dry open oak or ponderosa forest and open farmland. Roosts in rock crevices, buildings, bridges, live trees, and snags.	Limited marginally suitable roosting habitat occurs within the BSA. The nearest recorded occurrence is approximately 8.9 miles to the northeast of the BSA; however, this occurrence was recorded well over 20 years ago.	Low
<i>Choeronycteris mexicana</i>	Mexican long-tongued bat	SSC	Occasionally found in San Diego County, which is on the periphery of their range. Feeds on nectar and pollen of night-blooming succulents. Roosts in relatively well-lit caves, and in and around buildings.	No suitable roosting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.3 miles to the north of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur

November 21, 2019

Gil Ruiz

Page 23 of 24

Reference: Data Summary from Biological Reconnaissance Survey

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Eumops perotis californicus</i>	western mastiff bat	SSC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	No suitable roosting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 4.3 miles to the northwest of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	SSC	Coastal scrub of southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.0 miles to the east of the BSA.	Not Likely to Occur
<i>Nyctinomops macrotis</i>	big free-tailed bat	SSC	Migratory species that ranges from southwestern North America, through northern and central Mexico, throughout South America. Mainly inhabits rugged and rocky terrain, preferring rocky cliffs in weathered rock fissures and crevices. They have also been discovered roosting in buildings and in terrestrial plants including ponderosa pines, Douglas firs, and desert shrubs	Limited marginally suitable roosting habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.6 miles to the southwest of the BSA; however, this occurrence was recorded well over 20 years ago.	Low
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	SSC	Inhabits the narrow coastal plains from the Mexican border north to El Segundo, Los Angeles County. Seems to prefer soils of fine alluvial sands near the ocean.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 4.0 miles to the southwest of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur

November 21, 2019

Gil Ruiz

Page 24 of 24

Reference: Data Summary from Biological Reconnaissance Survey

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Sorex ornatus salicornicus</i>	Southern California saltmarsh shrew	SSC	Coastal marshes in Los Angeles, orange and Ventura Counties. Requires dense vegetation and woody debris for cover.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 4.2 miles to the southwest of the BSA; however, this occurrence was recorded well over 20 years ago.	Not Likely to Occur
<i>Taxidea taxus</i>	American badger	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.8 miles to the southwest of the BSA; however, this occurrence was recorded over 20 years ago.	Not Likely to Occur

Federal Rankings:

FE = Federally Endangered

FT = Federally Threatened

BCC = USFWS Bird of Conservation Concern

State Rankings:

SE= State Endangered

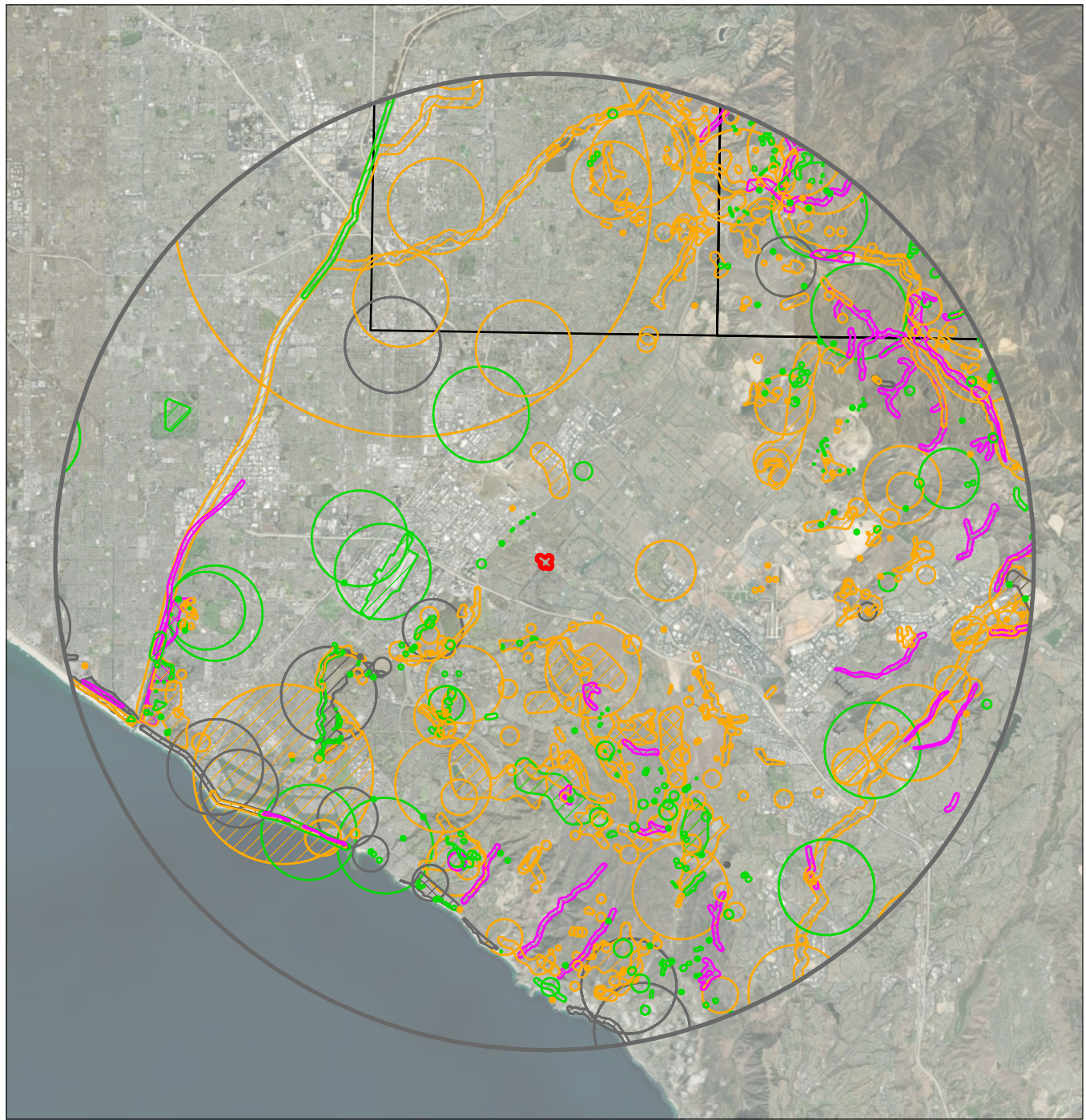
ST = State Threatened

SA = CDFW Special Animal

FP = Fully Protected

WL = CDFW Watch List

SSC = Species of Special Concern



	Biological Study Area		Animal (80m)		Multiple (80m)
	10 Mile Search Radius		Animal (specific)		Multiple (specific)
Symbology			Animal (non-specific)		Multiple (non-specific)
	Plant (80m)		Animal (circular)		Multiple (circular)
	Plant (specific)		Terrestrial Comm. (specific)		Sensitive EO's (Commercial only)
	Plant (non-specific)		Terrestrial Comm. (non-specific)		
	Plant (circular)		Terrestrial Comm. (circular)		

0 1.5 3 Miles
(At original document size of 8.5x11)
1:202,370



Project Location
Irvine, California

Prepared by DL on 2019-10-31
TR by RB on 2019-10-31
IR Review by JV on 2019-10-31

Client/Project

2042558200

Kreuzer Consulting Group
Culver/Alton Intersection Improvements

Figure No.

4a

Title
10 Mile CNDDDB Search Radius

Notes

1. Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
2. Data Sources: Stantec 2019, CNDDDB 2019.
3. Background: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

