Appendix A – Potential Special Status Plant Species

SPECIAL STATUS PLANT LIST. Special Status Plant Species Potentially Occurring or Known to Occur within the Safari Highlands Ranch Biological Study Area.

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Acanthomintha ilicifolia	San Diego Thorn-mint	FT, SE CRPR 1B.1 List A MSCP-NE	Annual herb. Occurs in a distinctive microhabitat, prefering grassy openings in chaparral or sage scrub on gabbroic substrate with friable or broken clay soils, including vernal pools; . Elevation: 35 – 3,150 feet.	HP-Low potential	Limited amount of potentially suitable microhabitat. Not observed in any of the botanical surveys. Underlying soils are sandy loam s, not clay (Bowman 1973); however, there may be unmapped small inclusions of clay onsite.
Adolphia californica	California Adolphia	CRPR 2B.1 List B	Perennial deciduous shrub. Occurs in chaparral, coastal scrub, and valley and foothill grassland. Elevation: 150 – 2,450 feet.	HP-Low potential	This conspicuous perennial species was not observed in any of the botanical surveys; although if present would have likely been detected. Underlying soils are sandy loams, not clay (Bowman 1973); however, there may be unmapped small inclusions of clay onsite.
Ambrosia pumila	San Diego Ambrosia	FE CRPR 1B.1 List A MSCP NE	Perennial rhizomatous herb. Occurs in sandy loam or clay soils in chaparral, coastal scrub, valley and foothill grasslands and vernal pools. Elevation: 65 – 1,350 feet.	HP-Low potential	This perennial species was not observed in any of the botanical surveys. No species records in project vicinity.
Artcostaphylos glandulosa ssp. *crassifolia*	Del Mar Manzanita	FE CRPR 1B.1 List A MSCP	Perennial evergreen shrub. Occurs in maritime, sandy soils in chaparral. Elevation: 0 – 1,200 feet.	A	No habitat present; sandy soils within the survey area are not derived from marine sandstones (Bowman 1973 and Kennedy et al. 1999).
Arctostaphylos rainbowensis	Rainbow Manzanita	CRPR 1B.1 List A	Perennial evergreen shrub. Occurs in chaparral. Elevation: 675 – 2,200 feet	HP-Low potential	This conspicuous perennial species was not observed in any of the botanical surveys; although if present would have likely been detected.

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Artemisia palmeri	**San Diego Sagewort**	**CRPR 4.2 List D**	**Perennial deciduous shrub. Occurs in sandy, mesic soils in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland. Elevation: 50 – 3,000 feet.**	**P**	**Detected at one location adjacent to the primary entrance road within adjacent open space.**
Astragalus deanei	Dean's Milk-vetch	CRPR 1B.1 List A	Perennial herb. Occurs in chaparral, cismontane woodland, coastal scrub, and riparian forest. Elevation: 250 – 2,280 feet.	HP-Low potential	This perennial species was not observed in any of the botanical surveys.
Asplenium vespertinum	Western Spleenwort	CRPR 4.2 List D	Perennial herb. Occurs in chaparral, cismontane woodland, coastal scrub, and riparian forest. Elevation: 250 – 2,280 feet.	HP-Low potential	This perennial species was not observed in any of the botanical surveys.
Astragalus oocarpus	San Diego Milk-vetch	CRPR 1B.2 List A	Perennial herb. Occurs in openings in rocky chaparral and cismontane woodland. Elevation: 600 – 3,200 feet.	HP-Low potential	This perennial species was not observed in any of the botanical surveys. Known within the Boucher Hill and San Pasqual quads.
Atriplex coulteri	Coulter's Saltbush	CRPR 1B.2 List A	Perennial herb. Occurs in alkaline or clay soils in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland. Elevation: 10 – 1,500 feet.	A	No habitat present. There are no alkaline or clay soils onsite (Bowman 1973).
Atriplex parishii	Parish's Brittlescale	CRPR 1B.1 List A	Annual herb. Occurs in alkaline soils in chenopod scrub, playas, and vernal pools. Elevation: 80 – 6,250 feet.	A	No habitat present. There are no alkaline or clay soils onsite (Bowman 1973).
Baccharis vanessae	Encinitas Baccharis	FT, SE CRPR 1B.1 List A MSCP NE	Perennial deciduous shrub. Occurs in sandstone soils in maritime chaparral and cismontane woodland. Elevation: 200 – 2,350 feet.	A	This conspicuous perennial species was not observed in any of the botanical surveys; although if present would have likely been detected. No habitat present. Soils onsite are not derived from marine sandstones (Bowman 1973 and Kennedy et al. 1999).

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Bahiopsis [Viguiera] laciniata	San Diego County Viguiera	CRPR 4.2 List D	Perennial deciduous shrub. Occurs in chaparral, coastal scrub. Elevation: 200 – 2,500 feet.	HP-Low Potential	This conspicuous perennial species was not observed in any of the botanical surveys; although if present would have likely been detected.
Berberis nevinii	Nevin's Barberry	FE, CE CRPR 1B.1 List A MSCP NE	Known from a variety of habitats including Chaparral, Riparian Scrub, and Sage Scrub at elevations ranging from 901 - 2,715 feet.	HP-Low potential	This conspicuous perennial species was not observed in any of the botanical surveys; although if present would have likely been detected. Suitable habitat within the survey area within the known elevational range of the species, the only record of this species within 10-miles of the site is within the Boucher H ill quad to the northeast.
Bloomeria clevelandii	San Diego Goldenstar	CRPR 1B.1 List A	Perennial bulbiferous herb. Occurs in clay soils in chaparral, coastal scrub, valley and foothill woodland, and vernal pools. Elevation: 165 – 1,525 feet.	A	No habitat present. No clay soils onsite (Bowman 1973).
Brodiaea filifolia	Thread-leaved Brodiaea	FE, SE CRPR 1B.1 List A MSCP NE	Perennial bulbiferous herb. Occurs in openings in clay soils in chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools. Elevation: 80 – 3,675 feet.	A	Project site located outside of this species range No habitat present. No clay soils onsite (Bowman 1973).
Brodiaea orcuttii	Orcutt's Brodiaea	CRPR 1B.1 List A MSCP	Perennial bulbiferous herb. Occurs in mesic, clay soils in closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools. Elevation: 100 – 5,550 feet.	A	No habitat present. No clay soils onsite (Bowman 1973).

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
California macrophylla	Round-leaved Filaree	CRPR 1B.1 List B	Annual herb. Occurs in clay soils in cismontane woodland and valley and foothill grassland. Elevation: 50 – 4,000 feet.	A	No habitat present. There are no clay soils mapped onsite (Bowman 1973).
Calandrinia breweri	**Brewer's Redmaids**	**CRPR 4.2 List D**	**Annual herb. It grows in several types of habitat, including chaparral, coastal sage scrub, recently burned and disturbed areas with sandy or loamy soils. Elevations: 50 – 3,000 feet.**	**P**	**Present - associated with disturbed chaparral along the verges of dirt roads in the northern portion of the site and along the northern emergency access road alignment.**
Calochortus dunnii	Dunn's Mariposa Lily	CRPR 1B.2 List A MSCP NE	Annual herb. Found on metavolcanic or gabbroic soils in openings in Chaparral and Closed-Cone Coniferous Forest habitats. Elevations: 1,250 - 6,000 feet.	A	Project site located outside of this species range No habitat present. There are no metavolcanic or gabbroic soils onsite (Bowman 1973).
Camissoniopsis lewisii	Lewis' Evening-primrose	CRPR 3 List C	Annual herb. Occurs in sandy or clay soils in coastal scrub, cismontane woodland, and valley and foothill grassland. Elevation: 0 – 1,000 feet.	HP- Low potential	Limited amount of potentially suitable habitat. Not observed in any of the botanical surveys.
Caulanthus simulans	Payson's Jewel-flower	CRPR 4.2 List D	Annual herb. Occurs in sandy granitic soils in coastal scrub and chaparral long streambeds on steep, rocky slopes Elevation: 300 – 7,200 feet.	HP- Low potential	Most of this species distribution in foothills east of site. Not observed in any of the botanical surveys.
Ceanothus cyaneus	Lakeside Ceanothus	CRPR 1B.2 List A MSCP NE	Perennial evergreen shrub. Occurs in closed-cone coniferous forest and chaparral. Elevation: 770 – 2,500 feet.	A	Project site located outside of this species range..
Ceanothus verrucosus	Wart-stemmed Ceanothus	CRPR 2B.2 List B MSCP	Perennial evergreen shrub. Occurs in chaparral. Elevation: 1 – 1,250 feet.	HP- Low potential	This conspicuous perennial species was not observed in any of the botanical surveys; although if present would have likely been detected. Mafic soils absent.

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Centromadia parryi ssp. *australis*	Southern Tarplant	CRPR 1B.1 List A	Annual herb. Occurs along the margins of marshes and swamps, in vernally mesic valley and foothill grassland, and in vernal pools. Elevation: 0 – 1,575 feet.	HP-Low potential	Limited amount of suitable habitat. Not observed in any of the botanical surveys.
Centromadia pungens spp. *laevis*	Smooth Tarplant	CRPR 1B.1 List A	Annual herb. Occurs in alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland. Elevation: 0 – 2,100 feet.	A	No habitat present. Alkaline soils absent (Bowman 1973).
Chamaebatia australis	Southern Mountain Misery	CRPR 4.2 List D	Perennial evergreen shrub in gabbroic or metavolcanic chaparral; Elevation: 1000 – 3,350 feet.	A	Gabbroic or metavolcanic soils absent (Bowman 1973).
Chorizanthe leptotheca	Peninsular Spineflower	CRPR 4.2.2 List D	Annual herb. Occurs in alluvial fan, granitic chaparral, coastal scrub. Elevations: 1000 – 6,250 feet.	HP-Low potential	Not observed in any of the botanical surveys.
Chorizanthe polygonoides var. *longispina*	Long-spined Spineflower	CRPR 1B.2 List A	Annual herb. Occurs in clay soils in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Elevation: 100 – 5,000 feet.	HP-Low potential	Not observed in any of the botanical surveys. Underlying soils are sandy loam s, not clay (Bowman 1973); however, there may be unmapped small inclusions of clay onsite.
Clarkia delicata	**Delicate Clarkia**	**CRPR 1B.2 List A**	**Annual herb. Occurs in gabbroic soils in chaparral and cismontane woodland. Elevation: 770 – 3,280 feet.**	**P**	**Detected within proposed open space.**
Clinopodium chandleri	San Miguel Savory	CRPR 1B.2 List A	Perennial shrub. Occurs in rocky, gabbroic or metavolcanic soils in chaparral, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grassland. Elevation: 400 – 3,500 feet.	A	No habitat present. There are no metavolcanic or gabbroic soils mapped onsite (Bowman 1973).

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Comarostaphylis diversifolia ssp. *diversifolia*	Summer Holly	CRPR 1B.2 List A	Perennial evergreen shrub. Occurs in chaparral and cismontane woodland. Elevation: 100 – 2,600 feet.	A	Not observed in 1998, 2014 or 2015 botanical surveys. Detected in 1992 prior to 1993 fire. This conspicuous perennial species was not observed in any of the more recent botanical surveys; although if present would have likely been detected.
Convolvulus simulans	Small-flowered Morning-glory	CRPR 4.2.2 List D	Annual herb. Occurs in clay soils, serpentine seeps, chaparral (openings), coastal scrub, and valley and foothill grassland. Elevation: 100 – 2,300 feet.	HP- Low potential	Not observed in any of the botanical surveys. Underlying soils are sandy loam s, not clay (Bowman 1973); however, there may be unmapped small inclusions of clay onsite.
Deinandra conjugens	Otay tarplant	FT, SE CRPR 1B.1 List: A MSCP NE	Annual herb found in fractured clay soils of lightly vegetated coastal scrub, valley and foothill grassland; elevation 25-300 meters (82-985 ft.); blooming period May-June	A	Project site is located outside of this species range
Deinandra paniculata	Paniculate Tarplant	CRPR 4.2 List D	Annual herb. Occurs in mesic sandy coastal scrub and valley foothill grassland. Elevation: 100 – 3,100 feet	HP- Low potential	Limited amount of suitable habitat. Not observed in any of the botanical surveys.
Dichondra occidentalis	Western Dichondra	CRPR 4.2 List D	Perennial rhizomatous herb. Occurs in chaparral, cismontane woodland, coastal scrub valley, and foothill grassland. Elevation: 150 – 1,650 feet.	HP- Low potential	This perennial species was not observed in any of the botanical surveys.
Dudleya brevifolia	Short-leaved Dudleya	SE CRPR 1B.1 List: A MSCP NE	Native, cryptic, perennial herb that prefers open areas of chamise chaparral or Torrey Pine forest on Torrey sandstone with soils mapped as Carlsbad gravelly sandy loam; blooming period in April	A	Project site is located outside of this species range

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Dudleya variegata	Variegated Dudleya	CRPR 1B.2 List A MSCP NE	Perennial herb. Occurs in clay soils in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pools. Elevation: 10 – 1,900 feet.	HP- Low potential	This perennial species was not observed in any of the botanical surveys. . No clay soils mapped onsite (Bowman 1973); however, there may be unmapped small inclusions of clay onsite.
Dudleya viscida	Sticky Dudleya	CRPR 1B.2 List A MSCP	Perennial herb. Occurs on rocky substrates within chaparral and coastal scrub. Elevation: 30 – 1,810 feet	HP- Moderate potential	Not observed in any of the botanical surveys.
Ericameria palmeri var. *palmeri*	Palmer's Goldenbush	CRPR 1B.1 List B MSCP NE	Perennial evergreen shrub. Occurs in mesic soils in chaparral and coastal scrub. Elevation: 100 – 2,000 feet.	HP- Low potential	This conspicuous perennial species was not observed in any of the botanical surveys; although if present would have likely been detected
Eryngium aristulatum var. *parishii*	San Diego Button-celery	FE, SE CRPR 1B.1 List A MSCP	Annual/Perennial herb. Occurs in mesic soils in coastal scrub, valley and foothill grassland, and vernal pools. Elevation: 65 – 8,600 feet.	HP- Low potential	This conspicuous species was not observed in any of the botanical surveys.
Ferocactus viridescens	San Diego Barrel Cactus	CRPR 2B.1 List B MSCP	Perennial stem succulent. Occurs in chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Elevation: 10 – 1,500 feet.	HP- Low potential	This conspicuous perennial species was not observed in any of the botanical surveys; although if present would have likely been detected
Geothallus tuberosus	Campbell's Liverwort	CRPR 1B.1 List A	Ephemeral liverwort. Occurs in mesic coastal scrub and vernal pools. Elevation: 30 – 2,000 feet.	U	No suitable habitat. Not observed in any of the botanical surveys.
Githopsis diffusa ssp. *filicaulis*	Mission Canyon Bluecup	CRPR 3.1 List C	Annual herb. Occurs in mesic, disturbed areas in chaparral. Elevation: 1,500 – 2,300 feet.	HP- Low potential	Limited amount of suitable habitat. Not observed in any of the botanical surveys.

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Grindelia hallii	San Diego Gumplant	CRPR 1B.2 List A	Perennial herb. Occurs in chaparral, lower montane coniferous forest, meadows and seeps, and valley and foothill grassland. Elevation: 600 – 5,725 feet.	HP- Low potential	Limited amount of suitable habitat. Not observed in any of the botanical surveys.
Harpagonella palmeri	Palmer's Grapplinghook	CRPR 4.2 List D	Annual herb. Occurs in clay soils in chaparral, coastal scrub, and valley and foothill grassland. Elevation: 65 – 3,150 feet.	A	No habitat present. There are no clay soils onsite (Bowman 1973).
Holocarpha virgata ssp. *elongata*	Graceful Tarplant	CRPR 4.2 List D	Annual herb. Occurs in chaparral, coastal scrub, cismontane woodland, and valley and foothill grassland. Elevation: 200 – 3,600 feet.	HP- Moderate potential	Not observed in any of the botanical surveys.
Horkelia truncata	Ramona Horkelia	SR CRPR 1B.3 List A	Perennial herb. Occurs in clay or gabbroic soils in chaparral and cismontane woodland. Elevation: 1,300 – 4,265 feet.	A	No habitat present. No gabbroic soils present onsite (Bowman 1973).
Isocoma menziesii var. *decumbens*	Decumbent Goldenbush	CRPR 1B.2 List A	Perennial shrub. Occurs in sandy soils and disturbed areas in chaparral and coastal scrub. Elevation: 30 – 440 feet.	A	Site is above maximum elevation for the species.
Iva hayesiana	San Diego Marsh-elder	CRPR 2B.2 List B	Perennial herb. Occurs in marshes and swamps, and playas. Elevation: 30 – 1,650 feet.	A	No habitat present.
Juncus acutus* ssp. *leopoldii	**Southwestern Spiny Rush**	**CRPR 4.2 List D**	**Perennial shrub. Found in Coastal Salt Marsh at brackish locales, Alkaline Meadows, and Riparian Marshes. At mid-elevations may occur in limited numbers along drainages with willow riparian vegetation or Sycamore Woodland. Elevation: 9 – 3,000 feet.**	**P**	**Detected at one location in the north-central portion of the project site within proposed open space.**
Lepechinia cardiophylla	Heart-leaved Pitcher Sage	CRPR 1B.2 List A MSCP NE	Perennial shrub. Occurs in closed-cone coniferous forest, chaparral, and cismontane woodland. Elevation: 1,700 – 5,000 feet.	A	Site is below the minimum elevation for the species.

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Lepechinia ganderi	Gander's pitcher sage	CRPR 1B.3 List: A MSCP NE	Native shrub with a distinctive acicular calyx that is restricted to gabbroic or metavolcanic derived soils in chaparral, and prefers San Miguel-Exchequer rocky silt loams, with a low-growing but relatively dense chaparral dominated by chamise and black sage; blooming period June-July.	A	Project site is located outside of this species range. No suitable soils onsite.
Lepidium virginicum var. *menziesii* (=var. *robinsonii*	Robinson's Pepper-grass	CRPR 4.2 List A	Annual herb. Occurs in chaparral and coastal scrub. Elevation: 3 – 2,900 feet.	HP-Moderate potential	Not detected during botanical surveys. More common variety detected.
Leptosiphon grandiflorus	Large-flowered Leptosiphon	CRPR 4.2 List D	Annual herb. Occurs in cismontane woodland, coastal scrub, valley and foothill grassland. Elevation: 0 – 4,000 feet.	HP-Low potential	Project site located at western extent of this species range in San Diego County. Not observed in any of the botanical surveys. No known records in project region.
Limnanthes alba ssp. *parishii*	Parish's Meadowfoam	CRPR 1B.2 List A	Annual herb. Mesic meadows Elevation: 2,000 – 6,600 feet.	U	Not observed in any of the botanical surveys. Site is below known elevational distribution.
Mimulus clevelandii	Cleveland's Bush Monkeyflower	CRPR 4.2 List D	Perennial rhizomatous herb. Occurs in gabbroic rocky soils, often in disturbed areas, openings, chaparral cismontane woodland. Elevation: 1,450 – 6,200 feet.	A	Gabbroic soils absent.
Monardella hypoleuca ssp. *lanata*	Felt-leaved Monardella	CRPR 1B.2 List A MSCP	Perennial rhizomatous herb. Occurs in chaparral and cismontane woodland. Elevation: 1,000 – 5,200 feet.	HP-Moderate potential	Not observed in any of the botanical surveys.
Monardella viminea	Willowy Monardella	FE, SE CRPR 1B.1 List A MSCP NE	Perennial herb. Occurs in alluvial ephemeral washes in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland. Elevation: 165 – 750 feet.	A	Project site is located outside of this species range

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Myosurus minimus ssp. *apus*	Little Mousetail	CRPR 3.1 List C	Annual herb. Occurs in valley and foothill grassland and alkaline vernal pools. Elevation: 65 – 2,100 feet.	A	No habitat present.
Nama stenocarpum	Mud Nama	CRPR 2B.2 List B	Annual/Perennial herb. Occurs along lake margins and riverbanks in marshes and swamps. Elevation: 15 – 165 feet.	A	No habitat present.
Navarretia fossalis	Spreading Navarretia	FT CRPR 1B.1 List A MSCP	Annual herb. Occurs in chenopod scrub, marshes and swamps, playas, and vernal pools. Elevation: 100 – 2,150 feet.	A	No habitat present.
Navarretia peninsularis	Baja Navarretia	CRPR 1B.2 List A	Annual herb. Occurs in mesic openings in chaparral, lower montane coniferous forest, meadows and seeps, and pinyon and juniper woodland. Elevation: 5,000 – 7,550 feet.	A	Site is below the minimum elevation for the species.
Nolina cismontana	Chaparral Nolina	CRPR 1B.2 List A	Found in chaparral and coastal scrub habitats on gabbroic or sandstone soils. Elevations: 460 – 4,195 feet.	A	No habitat present. No gabbroic or sandstone soils onsite (Bowman 1973).
Nolina interrata	Dehesa beargrass	SE CRPR 1B.1 List:A MSCP NE	Native, distinctive, perennial herb that prefers chaparral habitat on gabbroic, metavolcanic, or serpentinite substrate; blooming period June-July.	A	Project site is located outside of this species range.
Ophioglossum californicum	California Adder's-tongue	CRPR 4.2 List D	Perennial rhizomatous herb. Occurs on mesic chaparral, valley and foothill grassland. Elevations: 200 – 1,750 feet.	HP- Low potential	Limited amount of suitable habitat. Not observed in any of the botanical surveys.
Opuntia californica var. *californica*	snake cholla	CRPR 1B.1 MSCP: NE List: A	Perennial stem succulent that grows in openings on dry slopes of chaparral and coastal sage scrub; elevation 30-150 meters (100-492 ft.); blooming period April-Ma	A	Project site is located outside of this species range.

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Packera ganderi	Gander's Ragwort	SR CRPR 1B.2 List A	Perennial herb. Occurs in burns and gabbroic outcroppings in chaparral. Elevation: 1,300 – 4,000 feet.	A	No habitat present. No gabbroic soils onsite (Bowman 1973).
Piperia cooperi	**Cooper's Rein Orchid**	**CRPR 4.2 List D**	**Perennial herb. Occurs in Valley and foothill grasslands, chaparral and coastal sage scrub Elevation: 50 – 5,200**	**P**	**Detected at one location in the southern portion of the project site within proposed open space.**
Pentachaeta aurea* ssp. *aurea	**Golden-rayed Pentachaeta**	**CRPR 4.2 List D**	**Annual herb. Occurs in chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Elevation: 250 – 6,100 feet.**	**P**	**Detected at five locations in the west-central and southern portions of the project site.**
Pogogyne abramsii	San Diego Mesa Mint	FE, SE CRPR 1B.1 List A MSCP	Annual herb. Occurs in vernal pools. Elevation: 300 – 650 feet.	A	No habitat present.
Polygala cornuta var. *fishiae*	Fish's Milkwort	CRPR 4.3 List D	Perennial deciduous shrub. Occurs in chaparral, cismontane woodland, riparian woodland. Elevation: 300 – 3,300 feet.	HP-Low potential	This perennial shrub would likely have been observed during botanical surveys.
Quercus dumosa	Nuttall's Scrub Oak	CRPR 1B.1 List A	Perennial evergreen shrub. Occurs in sandy and clay loam soils in closed-cone coniferous forest, chaparral, and coastal scrub. Elevation: 50 – 1,300 feet.	A	Project site is located outside of the known range for this species. Not observed in any of the botanical surveys.
Quercus engelmannii	**Engelmann Oak**	**CRPR 4.2 List D**	**Native, deciduous tree that occurs in chaparral, cismontane and riparian woodland, and grasslands, at elevations ranging from 50-1,300 meters (164-4,265 ft.); blooming period March-June..**	**P**	**Detected throughout the site within oak woodland and chaparral habitats predominately in the northern portion of the site.**
Ribes canthariforme	Moreno Currant	CRPR 1B.3 List A	Perennial deciduous shrub. Occurs in chaparral and riparian scrub. Elevation: 1,100 – 4,000 feet.	HP-Low potential	This perennial shrub would likely have been observed during botanical surveys.

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Scutellaria bolanderi ssp. *austromontana*	Southern Mountains Skullcap	CRPR 1B.2 List A	Perennial rhizomatous herb. Occurs in mesic chaparral, cismontane woodland, and lower montane coniferous forest. Elevation: 1,400 – 6,550 feet.	A	Site is below the minimum elevation for the species.
Selaginella cinerascens	Ashy Spike-moss	CRPR 4.1 List D	Perennial rhizomatous herb. Occurs in chaparral, coastal scrub. Elevation: 50 – 2,100 feet.	HP-Low potential	Not observed in any of the botanical surveys.
Senecio aphanactis	Chaparral Ragwort	CRPR 2B.2 List B	Annual herb. Occurs in alkaline chaparral, cismontane woodland, and coastal scrub. Elevation: 50 – 2,625 feet.	A	No habitat present.
Stemodia durantifolia	Purple Stemodia	CRPR 2B.1 List B	Perennial herb. Occurs in mesic, sandy soils in Sonoran desert scrub. Elevation: 600 – 1,000 feet.	A	No habitat present.
Tetracoccus dioicus	Parry's Tetracoccus	CRPR 1B.2 List A MSCP	Perennial deciduous shrub. Occurs in chaparral and coastal scrub. Elevation: 550 – 3,300 feet.	A	No habitat present. There are no gabbroic soils mapped on the property (Bowman 1973).
Thermopsis californica var. *semota*	Velvety False Lupine	CRPR 1B.2 List A	Perennial rhizomatous herb. Occurs in cismontane woodland, lower montane coniferous forest, meadows and seeps, and valley and foothill grassland. Elevation: 3,300 – 6,135 feet.	A	Site is below the minimum elevation for the species.
Triquetrella californica	Coastal Triquetrella	CRPR 1B.2 List A	Moss. Occurs in coastal bluff scrub and coastal scrub. Elevation: 30 – 330 feet.	A	Site is above maximum elevation for the species.
Xanthisma [Machaeranthera] juncea	**Rush-like Bristleweed**	**CRPR 4.2 List D**	**Perennial shrub. Occurs in sage scrub and chaparral in exposed rocky locations.**	**P**	**Detected at one location in the central portion of the site within proposed open space. It is known to occur on adjacent parcel.**

Abbreviations:

Potential for Occurrence:
A: Absent
HP: Habitat Present
P: Present

Federal Designations:
(Federal Endangered Species Act, USFWS)
FE: Federal listed, endangered

FT: Federal listed, threatened

State Designations:
(California Endangered Species Act, CDFW)
SE: State listed, endangered

ST: State listed, threatened
SR: State Rare

County Lists
List A — Plants rare, threatened or end angered in California and elsewhere.
List B — Plants rare, threatened or end angered in California, but more common elsewhere.
List C — Plants which may be quite rare, but need more information to determine their true rarity status
List D — Plants of limited distribution and are uncommon, but not presently rare or endangered
MSCP — MSCP Covered Species
NE — MSCP Narrow Endemic

California Rare Plant Rank (CRPR) Lists:
CRPR 1A: Are presumed extinct because they have not been seen or collected in the wild in California for many years.
CRPR 1B: Rare throughout their range with the majority of them endemic to California.
CRPR 2: Rare within California but common outside of the state.
CRPR 3: Insufficient information to assign plant to one of the other ranks or reject them.
CRPR 4: Limited distribution or infrequent throughout a broader area of California.

CRPR Threat Code
.1 – Seriously threatened in California
.2 – Fairly threatened in California
.3 – Not very threatened in California

Appendix B – Potential Special Status Animal Species

SENSITIVE WILDLIFE SPECIES KNOWN TO OCCUR WITHIN AN APPROXIMATE 10-MILE RADIUS OF SAFARI HIGHLANDS RANCH PROJECT SITE, COUNTY OF SAN DIEGO.

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
Insects					
Danaus plexippus **Monarch Butterfly**	**Group 2,** **— /— /—**	**This species is found in a variety of open habitats typically where the larval host plants, the true milkweeds (*Asclepias* spp.), are found.**	**Y**	**Observed**	**Detected during 2014 field effort. One *Asclepias* milkweed species was recorded within the survey area.**
Euphydryas editha quino quino checkerspot butterfly	ESA: FE CNDDB: SA Cnty of SD Group: 1 MSCP: NE (Cnty of SD only)	Coastal habitats of sage scrub and chaparral; more inland, can be found in open meadows adjacent to sage scrub, chaparral and oak woodland, as well as juniper woodland and semi-desert scrub; habitats must have open areas with low growing and sparse vegetation; other suitable habitat conditions include dirt trails/roads, especially along hilltops, and clay soils and cryptogrammic crusts, which favor host plant growth; primary caterpillar host plants include *Plantago erecta* at lower elevations and *P. patagonica* and *Antirrhinum coulterianum* at higher elevations; additional host plants may include *Cordylanthus rigidus* and *Castilleja exserta*; adults nectar on low growing annuals; adult flight period typically Mar-Apr, depending on winter rainfall and temperatures.	N	U	The project site is located outside of the USFWS potential range for quino map provided in the USFWS Quino Checkerspot butterfly Guidelines dated December 15, 2014.
Euphys vestris harbisoni Harbison's Dun Skipper	Group 1, — /— /—	Found in moist areas near streams, marshes and swales. The larval	N	U	The larval host plant, San Diego sedge, was not observed within

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
		host plant is San Diego sedge (*Carex spissa*).			the survey area. No known records of this species within project area/vicinity.
Lycaena hermes Hermes Copper Butterfly	Group 1, — /— /—	Associated closely with the larval food plant, red berry (*Rhamnus crocea*). Recent studies indicate that the butterfly prefers those redberry that are roughly 18-years and older.	N	U	There were only limited amounts of redberry shrubs noted within the survey area. Due to relatively frequent fire events onsite, none of these shrubs would be mature enough to be suitable habitat for this species.
Pyrgus ruralis lagunae Laguna Mountains Skipper	Group 1, FE /— /X -C I	This skipper is endemic to San Diego County. It is found on Palomar Mountain and the Laguna Mountains. It is restricted to montane meadow habitats that contain the primary larval host plant, Cleveland's Horkelia (*Horkelia clevelandii*).	N	U	There are no montane meadow habitats within the survey area.
Crustaceans					
Branchinecta sandiegonenis San Diego Fairy Shrimp	Group 1, FE /— /— MSCP	A Vernal Pool obligate.	N	U	There are no Vvrnal pools within the survey area.
Fish					
Gila orcutti Arroyo Chub	Group 1, — /SSC/ FS Sensitive	Found in slow-moving sections of permanent streams in water depths of generally > 40 cm deep. Stream bottom substrates are typically muddy or sandy.	N	U	There are no permanent streams within the survey area. Nearest location: Guejito Creek 3.5 miles east of Lake Wohlford.
Amphibians					
Anaxyrus [Bufo] californicus **Arroyo Southwestern Toad**	**Group 1, FE /SSC /— MSCP**	**Found primarily in the foothills and mountains along stream courses that afford open, sunny sandbars.**	**N**	**A**	**M&A conducted protocol surveys for arroyo toad within potentially suitable habitat on the project site in 2017. The protocol surveys were negative and thus this species is**

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
					considered absent from the project site. **NOTE: *Bufo microscaphus californicus* and *Anaxyrus caifornicus* are synonyms.**
Amphibians (Continued)					
Ensatina klauberi Large-blotched Salamander	Group 1, — /SSC/FS Sensitive	Found in Pine and Oak Woodlands in the San Diego mountain ranges under logs, bark, and rocks.	N	U	Although there are Oak Woodlands within the survey area, there are no CNDDB records of this species within the Rodriguez quad. All of the records are from locations on Palomar Mountain or within the Cleveland National Forest to the northeast (USFWS 2012). NOTE: *Ensatina eschscholtzii klauberi* is a synonym.
Rana aurora draytonii California Red -legged Frog	Group 1, FT /SSC /— MSCP	The California Red-legged Frog usually prefers dense riparian habitats associated with deep, still, or non-moving water. It also occurs in damp areas away from water.	N	U	There is no suitable breeding habitat within the survey area, and the California Red-legged Frog is believed to be extirpated from San Diego County. Also, there is no designated Critical Habitat in San Diego County (USFWS 2010). NOTE: *Rana draytonii* is a synonym.
Rana muscosa Mountain Yellow-legged Frog	Group 1, FE/SSC/FS Sensitive	Historically found in montane streams with sunny banks.	N	U	This species is believed to be extirpated in San Diego County.

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
Spea hammondii **Western Spadefoot Toad**	**Group 2, — — /SSC/B LM Sensitive**	**A cryptic species, this toad probably occurs throughout the coastal plain and foothills, anywhere ephemeral water sources develop.**	**N**	**Observed**	**M&A incidentally observed spadefoot metamorph toadlets on the access road and along the main drainage generally within the southern portion of the site. No breeding habitat was identified onsite; however, calling adults were detected directly offsite on a property that supports a pond where spadefoots likely breed.No CNDDB records of this species within the Rodriquez quad (USFWS 2012). USFWS is currently doing a 12-month review for potential listing of this species. NOTE: *Spea scaphiopus hammondii* is a synonym.**
Reptiles					
Actinemys marmorata pallida Southwestern Pond Turtle	Group 1, — /SSC/FS and BLM Sensitive MSCP	Most often found in environments where water persists year-round. It has also been found at two drainages in the desert. It prefers lakes, streams, ponds or other areas with emergent or floating vegetation and often basks on rocks or protruding logs.	N	U	No suitable habitat occurs within the project site. NOTE: Synonyms are *Clemmys marmorata pallida* and *Emysmarmorata marmorata pallida*.
Anniella pulchra pulchra Silvery Legless Lizard	Group 2, — /SSC/FS Sensitive	Occurs throughout the County (except for the low desert) where it is fossorial in soft soils and deep leaf litters. Some soil moisture is preferred.	N	L	The soils along the edge of the main drainage may be suitable for this fossorial species although the drainage is dry most of the year. Also, there are no CNDDB records of this subspecies in the Rodriquez quad (USFWS 2013).

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
Aspidoscelis hyperythra **Orange-throated Whiptail**	**Group 2,** **— /— /—** MSCP	**Occupies scrub habitats on the coastal plain and lower foothills where Subterranean Termites (*Reticulitermes* sp.), the principal prey species, is found. Shrub cover with openings is required for thermoregulation.**	**Y**	**Observed**	**The site does contain semi-open Diegan Coastal Sage Scrub and there are CNDDB records of this species within the Rodriquez quad (USFWS 2013).** **NOTE: Synonyms are *Aspidoscelis hyperythrus beldingi* and *Cnemidophorus hyperythrus*.**
Aspidoscelis tigris stejnegeri Coastal Western Whiptail	Group 2, — /— /—	Occupies scrub habitats on the coastal plain and lower foothills where shrub cover with openings is required for thermoregulation.	N	M	The site does contain semi-open Diegan Coastal Sage Scrub and there are CNDDB records of this species within the Rodriquez quad (USFWS 2013). NOTE: A synonym is *Cnemidophorus tigris multiscutatus*.
Reptiles (Continued)					
Charina trivirgata **Rosy Boa**	**Group 2,** **— /— /FS Sensitive**	**A cryptic species found in a variety of habitats, including Sage Scrubs, Chaparrals and Pinyon-Juniper Woodlands.**	**Y**	**Observed**	**The site does contain Diegan Coastal Sage Scrub and there is a known population in open space in the south eastern portion of the Safari Park.**
Coleonyx variegatus abbottii San Diego Banded Gecko	Group 1, — /— /—	The Gecko prefers rocky Sage Scrub and Chaparral habitats on the coastal side of the mountains.	N	L	The site does contain rocky Diegan Coastal Sage Scrub, but there are no CNDDB records of this species within the Rodriquez quad (USFWS 2013).
Crotalus ruber **Red Diamond Rattlesnake**	**Group 2,** **— /SSC /—**	**In a variety of habitats, although most frequently found in Sage Scrub and Chaparral. It is found throughout the County except for the low desert.**	**Y**	**Observed**	**The site does contain Diegan Coastal Sage Scrub and this species was detected.**
Diadophis punctatus similis San Diego Ringneck Snake	Group 2, — /— /FS Sensitive	In San Diego, this snake is found in a variety of habitats from the coast to the mountains. It is	N	L	The site does contain rocky Coastal Sage Scrub , but there are no CNDDB records of this species

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
		typically found under rotting logs, bark, rocks and dam p leaves.			within the Rodriquez quad (USFWS 2013).
Phrynosoma coronatum blainvillei **San Diego Horned Lizard**	**Group 2,** **— /SSC/FS** **Sensitive** MSCP	**Found throughout the County (except the low deserts) anywhere the primary prey species, harvester ants (*Pogonomyrmex* sp. and *Messor* sp.) are found. It requires some openings in vegetation for thermoregulation.**	**Y**	**Observed**	**There site does contain semi-open Diegan Coastal Sage Scrub and there are CNDDB records of this species within the Rodriquez quad (USFWS 2013). This species was detected. NOTE: A synonym is *Phrynosoma blainvillii*.**
Reptiles (Continued)					
Plestiodon skiltonianus interp arietalis Coronado Island Skink	Group 2, — /SSC/B LM Sensitive	In a variety of habitats ranging from Coastal Scrub, to Chaparral and forested slopes, into the denser desert scrub and Pinyon-Juniper Woodlands.	N	L	There site does contain rocky Diegan Coastal Sage Scrub, but there are no CNDDB records of this species within the Rodriquez quad (USFWS 2013). NOTE: A synonym is *Eumeces skiltonianus interparietalis*.
Salvadora hexalepis virgultea Coast Patch-nosed Snake	Group 2, — /SSC /—	Found in arid Sage Scrub and Chaparral habitats.	N	M	There site does contain arid Diegan Coastal Sage Scrub, but there are no CNDDB records of this species within the Rodriquez quad (USFWS 2013). Reported as being detected in 1992 (Mooney 2002).
Thamnophis hammondii Two -striped Garter Snake	Group 1, —/SSC/FS and BLM Sensitive	An aquatic snake found in association with fluvial and lacustrine environments, even cattle tanks. Aestivating individuals may be found some distance from water sources.	N	U	The site is quite arid and is dry most of the year.
Thamnophis sirtalis ssp. *infernalis* South Coast Garter Snake	Group 2, —/SSC/—	In southern California, this snake is found in marsh habitats, and up land habitats near permanent water.	N	U	The site is quite arid and is dry most of the year. NOTE: The County list has the subspecies as *novum* , rather than *infernalis*.

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
Mammals					
Antrozous pallidus Pallid Bat	Group 2, — /SSC/FS and BLM Sensitive WBWG High Priority	A bat that feed s on the ground (Jerusalem Crickets and scorpions are typical fare). This species will roost in any cavity (natural or man-made) that affords a considerable modicum of darkness.	N	L	There are trees for roosting, but there are no CNDDB records of this species within the Rodriquez quad (USFWS 2013).
Mammals (Continued)					
Bassariscus astutus Ringtail	Group 2, — /— /—	Found in brushy, wooded areas, generally at lower and middle elevations. Utilizes a mixture of forest and shrubland in close association with rocky areas or riparian habitats; usually not found more than 1 km (0.6 mi) from permanent water. The Ringtail is especially common in foothill canyons. Less common in the high mountains, but is known to live up to 2,600 m.	N	U	The site supports a limited amount of potentially suitable habitat for this species; however, no permanent water source onsite. No CNNDB records for this species in the project area (CNDDB 2017). .
Chaetodipus californicus femoralis Dulzura California Pocket Mouse	Group 2, — /SSC /—	Frequent in arid chaparral habitats in the foothills and lower mountain slopes of the County.	N	L	Suitable habitat present.
Chaetodipus fallax fallax **Northwestern San Diego Pocket Mouse**	**Group2** **— /SSC/—**	**Found in Coastal Sage Scrub, Sage Scrub/Grassland ecotones and Chaparral communities. Found in open, sandy areas.**	**Historical presence**	**M**	**There site contains potentially suitable habitat consisting of Diegan Coastal Sage Scrub and non-native grassland.. No CNDDB records of this species within the Rodriquez quad (CNDDB 2017). One individual reported as being present in the coastal sage scrub during 1998 surveys as presented in Mooney**

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
					2002 document.
Corynorhinus townsendii Townsend's Big-eared Bat	Group 2 — /SSC/BLM Sensitive; FS Sensitive; WBWG High Priority	Associated with Desert Scrub and Pinyon and Juniper Woodlands. It roosts in caves or man-mad e structures.	N	U	There are no suitable roost sites within the survey area. Also, there are no Desert Scrub or Pinyon and Juniper Woodlands onsite.
Dipodomys stephensi Stephen's Kangaroo Rat	Group 1, FE /CT /—	Areas of sparse vegetation primarily grasslands, but may occur in sage scrub or disturbed areas within gently sloping or flat terrain..	N	U	No potentially suitable habitat onsite. The limited amount of non-native grassland that occurs onsite is dense. In addition, the open sage scrub is predominately on steeper slopes. Also, there are no USFWS/CNDDB records of this species within the Rodriquez quad (USFWS 2016, CNDDB 2017).
Euderm amaculatum Spotted Bat	Group 2, — /SSC/BLM Sensitive; WBW High Priority	Found in both montane open coniferous forests and low deserts. This species dwells primarily in caves.	N	U	There are no suitable roost sites within the survey area.

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
Mammals (Continued)					
Eumops perotis californicus Greater Western Mastiff Bat	Group 2, — /SSC/BLM Sensitive; WBWG High Priority	Frequently associated with cliffs or abandoned buildings that afford a considerable vertical drop from the roost to become airborne.	N	U	There are no suitable roost sites within the survey area.
Felis concolor **Mountain Lion**	**Group 2, — /— /—** MSCP	**The Mountain Lion prefers habitats with sufficient vegetative cover and ample prey including, deer, rabbits, squirrels, skunks, and other mammals.**	**Y**	**Detected**	**The riparian habitat along the major drainages afford s the cover required by this large predator and there are Mule Deer in the vicinity. A GPS collared juvenile puma passed through the site several times over a 4-month period before dying (UC Davis). Project vicinity is suboptimal habitat due to human presence and activities in the vicinity.**
Lasiurus blossevillii Western Red Bat	Group 2, — /SSC/FS Sensitive; WBWG High Priority	It is found in and near deciduous trees, frequently in orchard s.	N	L	There are limited number of trees for roosting and there are no CNDDB records of this species within the Rodriquez quad (USFWS 2013).
Lepus californicus bennettii San Diego Black-tailed Jackrabbit	Group 2, — /SSC /—	Found in a variety of habitats throughout the County, but requires open or semi-open vegetation.	N	L	Not observed onsite. The site does contain semi-open Diegan Coastal Sage Scrub, but there are no CNDDB records of this subspecies within the Rodriquez quad (USFWS 2013).
Macrotus californicus California Leaf-nosed Bat	Group 2, — /SSC/ FS and B LM Sensitive; W B W G High Priority	Found in the arid extreme southern regions of California. This bat roosts in buildings, mines and caves.	N	U	There are no suitable roost sites within the survey area.
Myotis ciliolabrum Small-footed Myotis	Group 2, — /— /B LM Sensitive; W BW G Medium Priority	Roosts alone or in small groups in rock crevices, mines, caves, or buildings.	N	L	There are suitable roost sites (rock outcroppings) within the survey area.

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
Mammals (Continued)					
Myotis evotis Long-eared Myotis	Group 2,— /— /B LM Sensitive; W BW G Medium Priority	Found in montane forests.	N	U	There are no coniferous forests within the survey area. Also, there are no CNDDB records of this species within the Rodriquez quad (USFWS 2013).
Myotis yumanensis Yuma Myotis	Group 2, — /— /B LM Sensitive; W BW G Low to Medium Priority	This species roosts in caves and man-made structures, and is closely associated with water sources.	N	U	There are no suitable roost sites within the survey area.
Neotoma lepida intermedia San Diego Desert Woodrat	Group 2, — /SSC/—	An inhabitant of Sage Scrubs and Chaparral, especially with yuccas and cactus. Typical nests are embedded in rock crevices and partially underground.	N	M	There site does contain Diegan Coastal Sage Scrub occupied by Our Lord's Candle and boulder outcrops.
Nyctinomops femorosaccus Pocketed Free-tailed Bat	Group 2, —/SSC /— ;WB WG Medium Priority	Roosting in a variety of situations, this species is associated with desert scrub and pine-oak woodlands.	N	U	There are no desert scrub or pine-oak woodlands within the survey area.
Nyctinomops macrotis Big Free-tailed B at	Group 2, —/SSC /WB WG Medium to High Priority	Associated with desert scrub, woodlands, and evergreen forests, where there are high cliffs and rocky outcrops for roosting.	N	U	There are no suitable roost sites within the survey area.
Odocoileus hemionus **Southern Mule Deer**	**Group 2, — /— /—** MSCP	**Found in habitats with sufficient vegetative cover.**	**Y**	**Observed**	**Detected onsite**
Onychomys torridus ramona Southern Grasshopper Mouse	Group2, — /SSC /—	Found in a variety of habitats, this carnivorous mouse eats mostly insects and other mice.	N	L	There site does contain Diegan Coastal Sage Scrub, but there are no CNDDB records of this species within the Rodriquez quad (USFWS 2013).

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
Mammals (Continued)					
Taxidea taxus American Badger	Group2, — /SSC /— MSCP	A fossorial species of open deserts and grassland habitats.	N	U	There soils within the suitable Non-Native Grassland habitats onsite are rocky and insufficient unsuitable to support badger. Recent sightings in Ramona grassland Preserve and Guejito Creek east of Valley Center and at Daley Ranch conserved open space area.
Birds					
Accipiter cooperii **Cooper's Hawk (nesting)**	**Group 1, — /W L/— MSCP**	**Nesting Cooper's Hawk generally use taller trees, including a number of horticultural species and native Oaks.**	**Y**	**Observed**	**Cooper's Hawk occupies the large oak grove in the southern portion of the site.**
Aimophila ruficeps* ssp. *canescens **Rufous-crowned Sparrow**	**Group 1, — /W L/— MSCP**	**This species nests in Sage Scrub, open or burned Chaparral, and in N on-Native Grasslands with scattered shrubs.**	**Y**	**Observed**	**This species is common within the sage scrub onsite and project vicinity.**
Amphispiza belli belli Bell's Sage Sparrow	Group 1, — /W L/—	This species prefers Sage Scrub and Chaparral habitats with an open canopy and areas of bare soil.	N	U	Although there are Sage Scrub habitats within the survey area, there are no records of this subspecies within the immediate vicinity (Unitt 2004).
Aquila chrysaetos Golden Eagle (nesting and wintering)	Group 1, — /WL/; — Fully Protected/ BLM Sensitive MSCP	Golden Eagle nests on cliff ledges and forages in nearby grassland, Sage Scrub or Chaparral.	N	L	There are no suitable nest sites within the survey area and foraging habitat is limited onsite.. Nearest nesting pairs is are reported on southeast side of San Pasqual Valley and east of Valley Center.

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
Birds (Continued)					
Athene cunicularia Burrowing Owl (burrow sites)	Group 1, BCC/SSC/BLM Sensitive	This owl requires relatively flat terrain to enable the bird to survey its territory from the burrow hole. There are only five known nesting sites areas within the County. At these locations, the owl occurs in open grassland s, and open Sage Scrub habitats.	N	U	The site does not contain suitable terrain for this owl. Also, there are no recent records of this owl within the immediate vicinity (Unitt, 2004).
Buteo lineatus Red-shouldered Hawk	Group 1, — /— /—	Found in dense woods with clearings and water.	N	H	Although on the County's Group 1 list, this hawk is fairly common and adapted to suburban landscapes. Oak Riparian Woodland would provide suitable nest sites for this *Buteo*.
Campylorhynchus brunneicapillum sandiegensis **Coastal Cactus Wren**	**Group 1, BCC/SSC/FS Sensitive MSCP**	**Found in association with stands of *Opuntia* sp. and/or *Cylindropuntia* sp. along the coastal strip and lower foothills.**	**Y**	**Observed**	**There is only one small patch of cacti within the survey area and it is occupied.**
Cathartes aura **Turkey Vulture**	**Group 1, — /— /—**	**This species nests in rock crevices mainly in the mountains of San Diego County. However, non-breeders assemble in communal roosts elsewhere in the County.**	**Y**	**Observed**	**Vultures were seen flying over the survey area and basking on a rock outcrop. No nest sites are present.**
Circus cyaneus Northern Harrier (nesting)	Group 1, — /SSC /— MSCP	A species of grassland s and marshes, nesting in the County is primarily near the coast, especially in the Tijuana River V alley and on Otay Mesa.	N	U	There is limited grasslands suitable for nesting within the survey area. Also, there are no known nesting records for this species within the immediate vicinity (Unitt 2004). NOTE: There SD County List names the subspecies as *hudsonius*.

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
Birds (Continued)					
Coccyzus americanus occidentalis Western Yellow-billed Cuckoo	FE / SE /—	A migrant species in San Diego Co.,	N	U	Migrant individuals have been sighted at several locations in San Doego Co., including San Luis Rey River. Use of sight is unlikely due to lack of suitable ripaian habitats (Clark et al. 2014).
Elanus leucurus White-tailed Kite (nesting)	Group 1, — /Fully Protected/— MSCP	This species nests in tall trees adjacent to foraging habitat that contains its primary prey, the California Vole (*Microtus californicus*).	Historical Presence	L	The site does contain Coast Live Oak trees for nesting, and the surrounding Sage Scrub habitat is not ideal foraging habitat. However, breeding has been confirmed in the immediate vicinity (Unitt, 2004). NOTE: The SD County List lists the White- tailed Kite by a scientific name of *Elanus caeruleus*. This species was recorded onsite in 1992.
Empidonax traillii extimus Southwestern Willow Flycatcher (nesting)	Group 1, FE /CE /— MSCP	This species is restricted to wide riparian habitats, generally with flowing water.	N	U	The Oak Riparian Woodland within the survey area does not contain enough Willows to anticipate this species. A protocol vireo survey in 2014 did not detect this species.
Birds (Continued)					
Icteria virens **Yellow-breasted Chat (nesting)**	**Group 1, — /SSC /—**	**In San Diego County, this bird is typically found in the coastal lowland where riparian woodlands occur.**	**Y**	**Observed**	**The southern portion of the site is fairly open and does not contain many dense areas preferred by the Chat. However, breeding is probable in the project vicinity (Unitt 2004).**
Lanius ludovicianus **Loggerhead Shrike**	**Group 1, BCC/SSC /—**	**In San Diego County, the Loggerhead Shrike is most**	**Y**	**Observed**	**A single individual was noted. According to Unitt (2004),**

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
		numerous in the desert, but it is also known from Sage Scrub, Chaparral, and Grassland habitats.			**there are only winter records of this species in the immediate vicinity.**
Plegadis chihi White-faced Ibis (nesting colony)	Group 1, — /W L/— MSCP	This ibis nests in freshwater marshes and forages in shallow water and wet grass.	N	U	In San Diego County, there were two known active colonies during the period from 1997 to 2001; one at Guajome Lake and one in a pond at the mouth of Keys Canyon in the San Luis Rey River valley (Unitt 2004).
Polioptila californica **Coastal California Gnatcatcher**	**Group 1,** **FT /SSC /—** MSCP	**An obligate inhabitant of Sage Scrub or sometimes open Chaparral where the two habitats intermix.**	**Y**	**Observed**	**A federal protocol survey for this species was conducted onsite in 2014, where four territories of this species were detected. In addition, an incidental observation by M&A was made in 2017. The species is known to occur west of Zoo Road. The protocol survey in 2015 of the northern emergency access road alignment was negative; however, an incidental observation by M&A was made in 2017 and suitable habitat along this route is assumed occupied.**

Scientific Name Common Name	Sensitivity[1] Code and Status[2]	Habitat Preference	Found Onsite (Y or N)	Potential Onsite[3]	Factual Basis for Potential
Birds (Continued)					
Setophaga [Dendroica] petechia brewsteri Yellow Warbler (nesting)	Group 2, BCC /SSC /—	Breeding occurs in mature riparian habitats, primarily along the coastal slope.	N	M	The Riparian Oak Woodland contains limited amounts of willow species, but is dominated by Coast Live Oaks. According to Unitt (2004), breeding is probable within the immediate vicinity.
Sialia mexicana **Western Bluebird**	**Group 2,** **— /— /—** **MSCP**	**Found in areas with a combination of trees and open ground.**	**Y**	**Observed**	**Small winter flocks of western bluebirds were reported as overflights (G. Cummings). Present and assumed to be breeding in Spring 2014 and 2015.**
Tyto alba Common Barn Owl	Group 2, — /— /—	Found on the coastal slope of SD County at low to moderate elevations, occurring in riparian and oak wood land as well as in any open area where trees, buildings, or other man- mad e structures offer secure sites for roosting and nesting.	N	M	The larger Oaks within the survey area might provide suitable nest sites for this owl. Also, breeding has been confirmed in the immediate vicinity (Unitt 2004).
Vireo bellii pusillus Least Bell's Vireo	Group 1, FE/CE /— MSCP	An obligate inhabitant of dense, fairly broad, riparian woodland s with adjacent uplands that provide foraging habitat.	N	U	The understory of the riparian habitat within the mulefat scrub does not seem dense enough to expect this species. Also, there are no breeding records of this species within the immediate vicinity (Unitt 2004). A protocol survey in 2014 was negative.

[1] This sensitive wildlife list is based on a search of the California Natural Diversity Database (CNDDB), the County of San Diego Sensitive Animal List taken from San Diego County of 2008. County of San Diego Guidelines for Determining Significance for Biological Resources Second Revision available from the County's website at http://www.sdcounty.ca.go v/dplu/d ocs/B iological_G uidelines.pdf, and California Department of Fish and Wildlife 2014 California Natural Diversity Data Base: Special Animals. Sacramento, California 60 pp. [available at http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPA nimals.pdf], January .

[2] The status codes are given in the sequence "County Group, federal/state/other." "— " indicates no status at that level. The codes used are defined as follows:

FE — Federal Endangered
pFE — A petition for Federal Endangerment status has been submitted
FT — Federal Threatened
D — Delisted from the Endangered Species Act
BCC — Birds of Conservation Concern on the BCC 2008 list within BCR 32
CE — State Endangered
CT — State Threatened
SSC — California Species of Special Concern
MSCP — MSCP Covered Species
WL — California Department of Fish and Wildlife Watch List
AFSEN — defined as an endangered species by the American Fisheries Society
Fully Protected — A species for which special state legislation exists protecting the species
FS Sensitive — defined as a sensitive species by the USDA Forest Service
BLM Sensitive — defined as a sensitive species by the Bureau of Land Management
WBWG — priority status as defined by the multi-agency Western Bat Working Group
X-CI — defined as critically imperiled by the Xerces Society

[3] The "Potential Onsite" column assesses the potential for the particular species to occur on the subject property given the known habitat preferences and distribution of that species. The codes used in this column n are defined as follows:
Observed — Individuals of this species were found within the bounds of the site.
H — The potential for occurrence is "high". Habitats onsite are considered suitable for the species, and the species is known from the immediate vicinity.
M — The potential for occurrence is "moderate". Habitats and conditions onsite are considered possible for the species.
L — The potential for occurrence is "low". The habitats present onsite are marginal for the species and /or extremely limited in extent. In other words, the species is not anticipated, but it's occurrence cannot be precluded.
U — The potential for occurrence is "unlikely". There habitat and/or food requirements of the species are not present on the subject property.
A – This species is considered absent based on recent presence/absence protocol or focused surveys.

Appendix C – Floral Compendium

SAFARI HIGHLANDS RANCH FLORAL COMPENDIUM. This list is a cumulative list from botanical surveys conducted in 1992, 1998, 2014, and 2015

Species	Common Name	Notes	Observed in 2015
PTERIDOPHYTES - FERNS AND ALLIES **Dryopteridaceae - Wood Fern Family**			
Dryopteris arguta	Coastal Wood Fern		X
Polypodiaceae - Polypody Family			
Polypodium californicum	California Polypody		X
Pteridaceae - Brake Family			
Adiantum jordani	California Maidenhair		
Aspidotis californica	California Lace Fern		X
Myriopteris newberryi	California Cotton Fern	Prior taxon – *Cheilanthes newberryi*	X
Pellaea andromedifolia	Coffee Fern		X
Pellaea mucronata	Bird's Foot Fern		X
Pentagramma triangularis ssp. *triangularis*	Goldback Fern		X
Selaginellaceae - Spike-Moss Family			
Selaginella bigelovii	Bigelow's or Bushy Spike-Moss		X
ANGIOSPERMAE - FLOWERING PLANTS **DICOTYLEDONES** **Adoxaceae - Muskroot Family**			
Sambucus nigra ssp. *caerulea*	Blue Elderberry		X
Amaranthaceae	Amaranth Family		
*Amaranthus albus**	Tumbleweed		
Amaranthus blitoides	Prostrate Pigweed	Observed in 2017 along northern access road near a stream crossing.	
Anacardiaceae - Sumac Family			
Malosma laurina	Laurel Sumac		X
Rhus integrifolia	Lemonade Berry		
Rhus ovata	Sugar Bush		
*Schinus molle**	Peruvian Pepper Tree		X
Toxicodendron diversilobum	Western Poison Oak		X
Apiaceae (Umbelliferae) - Carrot Family			
Apiastrum angustifolium	Wild Celery		X
*Conium maculatum**	Common Poison Hemlock		X
Daucus pusillus	Rattlesnake Weed		X

Foeniculum vulgare	Sweet Fennel		X
Sanicula arguta	Sharp Sanicle/Sharp-Tooth Sanicle		X
Tauschia arguta	Southern Tauschia		X
Apocynaceae - Dogbane Family			
Asclepias fascicularis	Narrow-Leaf Milkweed		X
Funastrum cynanchoides ssp. *hartwegii*	Climbing Milkweed	Prior taxon - *Sarcostemma cynanchoides* ssp. *hartwegii*	X
Asteraceae (Compositae) - Sunflower Family			
Acourtia microcephala	Sacapellote		X
Ambrosia acanthicarpa	Annual Bur-Sage		
Ambrosia psilostachya	Western Ragweed		X
Artemisia californica	California Sagebrush		X
Artemisia douglasiana	Mugwort		X
Artemisia dracunculus	Tarragon		
Artemisia palmeri	San Diego Sagewort	CPRP 4.2	X
Baccahris salicina	Willow Baccharis	Prior taxon - *Baccharis emoryi*	X
Baccharis pilularis	Coyote Brush		
Baccharis salicifolia ssp. *salicifolia*	Mule Fat	Prior taxon - *Baccharis Salicifolia*	X
Baccharis sarothroides	Broom Baccharis		X
Bebbia juncea var. *aspera*	Rush Sweetbush		X
Bidens pilosa	Common Beggar's Tick, Spanish Needles		X
Brickellia californica	California Brickellbush		X
Carduus pycnocephalus ssp. *pycnocephalus**	Italian Thistle		X
*Centaurea melitensis**	Tocalote/Maltese Star Thistle		X
Chaenactis artemisiifolia	White Pincushion		X
Chaenactis glabriuscula var. *glabriuscula*	Yellow Pincushion		X
Chloracantha spinosa	Slimaster	AKA Spine Aster	
Cirsium occidentale var. *occidentale*	Cobweb Thistle		X
*Cirsium vulgare**	Bull Thistle		X
Corethrogyne filaginifolia	California-Aster	Prior taxon - *Lessingia filaginifolia*	X
*Cotula australis**	Australian Brass-Buttons		X
*Crysanthemum coronarium**	Garland Or Crown Daisy		
Deinandra fasciculata	Clustered Tarweed	Prior taxon - *Hemizonia fasciculata*	X

*Dimorphotheca sinuata**	Blue-Eye Cape-Marigold		X
Encelia californica	Bush Sunflower		
Erigeron canadensis	Common Horseweed	Prior taxon - *Conyza canadensis*	X
Erigeron foliosus var. *foliosus*	Leafy Flebane		X
Eriophyllum confertiflorum	Golden-Yarrow		X
Gnaphalium palustre	Lowland Cudweed		
Gutierrezia sarothrae	Matchweed		X
Hazardia squarrosa var. *grindelioides*	Saw-Toothed Goldenbush		X
*Hedypnois cretica**	Crete Hedypnois		X
*Helminthotheca echioides **	Bristly Ox-Tongue	Prior taxon - *Picris echioides*	
Heterotheca grandiflora	Telegraph Weed		
Heterotheca sessiliflora	Sessileflower Goldenaster		
*Hypochaeris glabra**	Smooth Cat's-Ear		X
Isocoma menziesii	Coastal Goldenbush		X
*Lactuca serriola**	Prickly Lettuce		X
Lasthenia californica	California Goldfields		X
Layia platyglossa	Tidy Tips		X
Logfia depressa	Hierba Limpia		
Logfia filaginoides	California Cottonrose	Prior taxon - *Filago californica*	
*Logfia gallica**	Dagger-Leaf Cottonrose, Narrow-Leaf Cottonrose	Prior taxon - *Filago gallica*	X
Malacothrix californica	Desert Dandelion		X
*Matricaria discoidea**	Pineapple Weed		
*Oncosiphon piluliferum**	stinknet	Observed in small discrete patches in 2017 predominately near existing access from Zoo Road.	
Osmadenia tenella	Southern Calycadenia		X
Pentachaeta aurea ssp. *aurea*	Golden-Ray Pentachaeta	CRPR 4.2	X
Porophyllum gracile	Odora		X
Pseudognaphalium beneolens	Fragrant Everlasting	Prior taxon - *Gnaphalium canescens* ssp. *beneolens*	/
Pseudognaphalium biolettii	Bicolored Everlasting/Bioletti's Cudweed	Prior taxon - *Gnaphalium bicolor*	X
Pseudognaphalium californicum	California Everlasting	Prior taxon - *Gnaphalium californicum*	X

Pseudognaphalium stramineum	Cotton-Batting Plant	Prior taxon - *Gnaphalium stramineum* Observed along northern access road in 2017 surveys.	
*Senecio vulgaris**	Common Groundsel		X
Sonchus asper ssp. *asper**	Prickly Sow Thistle		X
*Sonchus oleraceus**	Common Sow Thistle		X
Stylocline gnaphaloides	Everlasting Neststraw		X
Uropappus lindleyi	Silver Puffs		X
Xanthisma junceum	Rush Chaparral-Star	CRPR 4.3; Prior taxon - *Machaeranthera juncea*	X
Xanthium strumarium	Cocklebur		X
Boraginaceae - Borage Family			
Amsinckia menziesii	Rigid Fiddleneck		X
Cryptantha intermedia	Common Cryptantha		X
Cryptantha micromeres	Minute-Flowered Cryptantha		X
Cryptantha muricata	Prickly Cryptantha		
Eriodictyon crassifolium	Thick-Leaf Yerba Santa		X
Eucrypta chrysanthemifolia	Common Eucrypta		X
Nemophila menziesii var. *integrifolia*	Small-Flower Baby Blue-Eyes	Prior taxon - *Nemophila rotata*	X
Nemophila menziesii var. *menziesii*	Menzies's Baby Blue-Eyes		X
Pectocarya linearis ssp. *ferocula*	Slender Pectocarya		X
Pectocarya penicillata	Northern Pectocarya		X
Phacelia cicutaria	Caterpillar Phacelia		X
Phacelia distans	Wild-Heliotrope		
Phacelia grandiflora	Large-Flowered Phacelia		
Phacelia parryi	Parry's Phacelia		X
Phacelia tanacetifolia	Tansy Phacelia		
Phacelia ramosissima	Branching Phacelia		
Pholistoma auritum var. *auritum*	Blue Fiesta Flower		
Pholistoma racemosum	San Diego Fiesta Flower		X
Plagiobothrys collinus var. *gracilis*	San Diego Popcornflower		X
Plagiobothrys nothofulvus	Rusty Popcornflower		X
Brassicaceae (Cruciferae) - Mustard Family			
Athysanus pusillus	Dwarf Athysanus		X

*Brassica nigra**	Black Mustard		X
*Capsella bursa-pastoris**	Shepherd's Purse		X
Caulanthus heterophyllus	San Diego Jewel Flower		X
Caulanthus lasiophyllus	California Mustard	Prior taxon - *Guillenia lasiophyllus*	X
*Hirschfeldia incana**	Shortpod Mustard		X
Lepidium nitidum	Peppergrass / Shining Peppergrass		
Lepidium viginicum var. *virginicum*	Virginia Peppergrass	Keyed to *L. viginicum* var. *virginicum;* very abundant	X
*Raphanus sativus**	Radish		X
*Nasturtium officinale**	White Water-Cress	Prior taxon - *Rorippa nasturtium-aquaticum**	
*Sisymbrium altissimum**	Tumble Mustard		X
*Sisymbrium irio**	London Rocket		X
*Sisymbrium officinale**	Hedge Mustard		
Thysanocarpus curvipes	Hairy Lacepod, Sand Fringepod		X
Thysanocarpus laciniata	Notch Fringepod		X
Cactaceae - Cactus Family			
Opuntia littoralis	Coastal Prickly Pear		X
Caprifoliaceae - Honeysuckle Family			
Lonicera subspicata var. *denudata*	Southern Honeysuckle		X
Symphoricarpos mollis	Snowbush		
Caryophyllaceae - Pink Family			
Cerastium glomeratum	Mouse-Ear Chickweed		X
Polycarpon tetraphyllum ssp. *tetraphyllum**	Four-Leaved Allseed		X
*Silene gallica**	Small-Flower Catchfly		X
Silene laciniata ssp. *laciniata*	Southern Pink		X
Spergularia macrotheca var. *macrotheca*	Sticky Sand-Spurrey		X
*Stellaria media**	Common Chickweed		X
Chenopodiaceae - Goosefoot Family			
Atriplex triangularis	Spearscale		
*Atriplex semibaccata**	Australian Saltbush		
*Chenopodium album**	Lamb's Quarters		
Chenopodium californicum	California Goosefoot		X
*Chenopodium murale**	Pigweed		X
*Salsola tragus**	Russian Thistle		X

Cistaceae - Rock-Rose Family			
Crocanthemum scoparium	Peak Rush-Rose	Prior taxon - *Helianthemum scoparium*	X
Convolvulaceae - Morning-Glory Family			
Calystegia macrostegia	Finger-Leaved Morning-Glory		X
*Convolvulus arvensis**	Bindweed		
Cuscuta californica	Chaparral Dodder		X
Cuscuta subinclusa	Canyon Dodder		
Crassulaceae - Stonecrop Family			
Crassula connata	Pygmy-Weed		X
Dudleya edulis	Ladies' Fingers		X
Dudleya pulverulenta	Chalk Dudleya/Chalky Live-Forever		X
Cucurbitaceae - Gourd Family			
Marah macrocarpus	Chilicothe / Wild Cucumber		X
Ericaceae - Heath Family			
Arctostaphylos glandulosa ssp. *glandulosa*	Eastwood Manzanita		
Comarostaphylis diversifolia ssp. *diversifolia*	Summer Holly	Historically observed in 1992 prior to 1993 wildfire onsite, but not subsequently observed in 1998, 2014 or 2015 botanical surveys.	
Xylococcus bicolor	Mission Manzanita		X
Euphorbiaceae - Spurge Family			
Croton califomicus	California Croton		X
Croton setigerus	Doveweed / Turkey Mullein	Prior taxon - *Eremocarpus setigerus*	X
Euphorbia albomarginata	Rattlesnake Weed, White-Margin Sandmat	Prior taxon - *Chamaesyce albomarginata*	X
*Euphorbia peplus**	Petty Spurge		X
Euphorbia polycarpa	Golondrina / Small-Seed Sandmat	Prior taxon - *Chamaesyce polycarpa*	
*Ricinus communis**	Castor Bean		X
Fabaceae (Leguminosae) - Legume Family			
Acmispon argophyllus var. *argophyllus*	Silverleaf Lotus	Prior taxon - *Lotus argophyllus*	X
Acmispon glaber	Deerweed	Prior taxon - *Lotus scoparius*	X
Acmispon micranthus	Miniature Lotus	Prior taxon - *Lotus micranthus*	

Acmispon strigosus	Strigose Lotus	Prior taxon - *Lotus strigosus*	X
Lathyrus vestitus ssp. *alefeldii*	San Diego Sweet Pea		
Lathyrus vestitus ssp. *vestitus*	Chaparral Sweet Pea		X
Lupinus bicolor	Miniature Lupine		X
Lupinus concinnus	Bajada Lupine		X
Lupinus hirsutissimus	Stinging Lupine		X
Lupinus sparisflorus	Coulter's Lupine		X
Lupinus truncatus	Truncate Lupine / Collar Lupine		X
*Medicago polymorpha**	California Burclover		X
*Medicago sativa**	Sour Clover		
*Melilotus alba**	White Sweetclover		
*Melilotus indicus**	Annual Yellow Sweetclover		X
Trifolium willdenovii	Tomcat Clover		X
*Vachellia farnesiana**	Sweet Acacia		X
Vicia ludoviciana var. *ludoviciana*	Deerpea Vetch		/
Fagaceae - Oak / Beech Family			
Quercus x acutidens	Scrub Oak		
Quercus agrifolia	Coast Live Oak		X
Quercus berberidifolia	Scrub Oak / California Scrub Oak		X
Quercus engelmannii	Engelmann Oak	CRPR 4.2	X
Gentianaceae - Gentian Family			
Centaurium venustum	Canchalagua		
Geraniaceae - Geranium Family			
*Erodium botrys**	Long-Beaked Filaree		X
*Erodium brachycarpum**	Short-Fruited Filaree		X
*Erodium cicutarium**	Red-Stemmed Filaree		X
*Erodium moschatum**	White-Stemmed Filaree		X
*Geranium carolinianum**	Carolina Geranium		X
Grossulariaceae - Gooseberry Family			
Ribes indecorum	White-Flowered Currant		
Ribes speciosum	Fuchsia-Flower Gooseberry		
Juncaceae – Rush Family			
Juncus acutus	Southwestern Spiny Rush	CRPR 4.2	X
Lamiaceae (Labiatae) - Mint Family			
*Marrubium vulgare**	Common Horehound		X

Salvia apiana	White Sage		X
Salvia columbariae	Chia		X
Salvia mellifera	Black Sage		X
Stachys ajugoides	Bugle Hedge-Nettle		
Malvaceae - Mallow Family			
Malacothamnus fasciculatus	Chaparral Bush-Mallow		X
*Malva parviflora**	Cheeseweed		X
Malvella leprosa	Alkali-Mallow		
Sidalcea malviflora ssp. *malviflora*	Common Checkerbloom		X
Myrtaceae - Myrtle Family			
*Eucalyptus globulus**	Blue Gum		X
Montiaceae - Montia Family			
Calandrinia brewerii	Brewer's Calandrinia	CRPR 4.2	X
Calandrinia ciliata	Red Maids		X
Calyptridium monandrum	Common Calyptridium		X
Claytonia perfoliata ssp. *perfoliata*	Common Miner's-Lettuce		X
Myrsinaceae - Myrsine Family			
*Anagallis arvensis**	Scarlet Pimpernel		X
Nyctaginaceae - Four-O'clock Family			
Mirabilis laevis var. *crassifolia*	Wishbone Bush/ California Wishbone Bush	Prior Taxon: *Mirabilis californica*	X
Oleaceae - Olive Family			
*Olea europaea**	Olive		X
Orobanchaceace – Broom-Rape Family			
Castilleja desiflora ssp. *gracilis*	Dense Flower Owl's Clover/ Parish’s Owl’s-Clover		X
Castilleja exserta	Purple Owl's-Clover		X
Cordylanthus rigidus ssp. *setigerus*	Thread-Leaved Bird's Beak		X
Onagraceae - Evening Primrose Family			
Camissonia strigulosa	Sandy-Soil Sun Cup		X
Camissoniopsis bistorta	California Sun Cup	Prior Taxon: *Camissonia bistorta*	X
Camissoniopsis robusta	Robust Sun Cup		X
Clarkia delicata	Delicate Clarkia	CRPR 1B.2	X
Clarkia epilobioides	White Clarkia		X
Clarkia purpurea	Four-Spot Clarkia		X
Epilobium canum	California Fuchsia		
Epilobium ciliatum	Willow-Herb		

Eulobus californicus	Mustard-Like Evening Primrose	Prior Taxon: *Camissonia californica*	X
Oenothera elata ssp. *hirsutissima*	Tall Yellow Evening-Primrose	Observed in drainage near a road crossing along the northern access road in 2017	
Oxalidaceae - Oxalis Family			
Oxalis albicans	Wood-Sorrel		X
*Oxalis pes-caprae**	Bermuda Buttercup		
Paeoniaceae - Peony Family			
Paeonia californica	California Peony		X
Papaveraceae - Poppy Family			
Eschscholzia californica	California Poppy		X
Papaver californicum	Fire Poppy		X
Platystemon californicus	Cream Cups		X
Phrymaceae - Lopseed Family			
Diplacus aurantiacus	Bush Monkeyflower	Prior Taxon: *Mimulus aurantiacus*	X
Diplacus brevipes	Slope Semaphore	Prior Taxon: *Mimulus brevipes*	
Erythranthe guttata	Seep Monkeyflower	Prior Taxon: *Mimulus guttatus*	
Plantaginaceae - Plantain Family			
Antirrhinum coulterianum	Coulter's Snapdragon		X
Antirrhinum kelloggii	Climbing Snapdragon		X
Antirrhinum nuttallianum ssp. *nuttallianum*	Nuttall's Snapdragon		X
Collinsia heterophylla var. *hetgerophylla*	Purple Chinese Houses		X
Keckiella antirrhinoides ssp. *antirrhinoides*	Yellow Bush Penstemon		X
Keckiella cordifolia	Heart-Leaved Bush Penstemon		X
Nuttallanthus texanus	Blue Toadflax		X
Penstemon spectabilis	Royal Penstemon		X
Plantago erecta	Dwarf Plantain/California Plantain		X
*Plantago insularis**	Woolly Plantain		
*Plantago lanceolata**	English Plantain		
Platanaceae - Sycamore Family			
Platanus racemosa	Western Sycamore		X
Polemoniaceae - Phlox Family			
Allophyllum gilioides ssp. *violaceum*	Straggling False-Gilia		X

Eriastrum sapphirinum	Annual Woollystar / Sapphire Woollystar		X
Gilia angelensis	Chaparral Gilia		X
Navarretia atractyloides	Holly-Leaf Skunkweed		X
Navarretia hamata	Hooked Navarretia		X
Linanthus dianthiflorus	Ground Pink		X
Polygonaceae - Buckwheat Family			
Chorizanthe fimbriata var. *fimbriata*	Fringed Spineflower		X
Chorizanthe procumbens	Prostrate Spineflower		X
Chorizanthe staticoides	Turkish Rugging		X
*Emex spinosa**	Devil's Thorn		X
Eriogonum fasciculatum	California Buckwheat		X
Lastarriaea coriacea	Leather-Spineflower		X
*Polygonum argyrocoleon**	Persian Knotweed		
Pterostegia drymarioides	Woodland Threadstem		X
*Rumex crispus**	Curly Dock		X
Rumex californicus	Toothed Willow Dock	Prior taxon - *Rumex Salicifolius*	X
Ranunculaceae - Crowfoot Family			
Clematis ligusticifolia	Western Virgin's Bower		
Clematis pauciflora	Ropevine		X
Delphinium parryi var. *parryi*	Parry's Larkspur		X
Ranunculus hepecarpus	Hairy Fruit Buttercup		X
Thalictrum fendleri var. *polycarpum*	Common Meadow-Rue		X
Rhamnaceae - Buckthorn Family			
Ceanothus crassifolius	Hoary-leaf Ceanothus		X
Ceanothus leucodermis	Chaparral Whitethorn		X
Ceanothus tomentosus	Ramona Ceanothus		
Rhamnus crocea	Redberry		
Rhamnus ilicifolia	Holly-leaf Redberry		X
Rosaceae - Rose Family			
Adenostoma fasciculatum	Chamise		X
Cercocarpus betuloides var. *betuloides*	Birch-Leaf Mountain-Mahogany		
Heteromeles arbutifolia	Toyon/Christmas Berry		X
Potentilla glandulosa	Cinquefoil		
Prunus ilicifolia	Holly-Leaved Cherry		X
Rosa califomica	California Rose		

Rubus ursinus	California Blackberry		X
Rubiaceae - Madder Family			
Galium angustifolium ssp. *angustifolium*	Chaparral Bedstraw		X
Galium aparine	Common Bedstraw		X
Galium nuttallii ssp. *nuttallii*	Nuttal's Bedstraw		
Rutaceae - Rue Family			
Cneoridium dumosum	Bushrue		X
Salicaceae - Willow Family			
Populus fremontii ssp. *fremontii*	Fremont Cottonwood		X
Salix gooddingii	Goodding's Black Willow		X
Salix laevigata	Red Willow		X
Salix lasiandra	Yellow Willow		
Salix lasiolepis	Arroyo Willow	One arroyo willow was observed in 2017 in drainage resprouting from a tree that had previously died back along north access road.	
Saxifragaceae - Saxifrage Family			
Lithophragma affine	Common Woodland Star		X
Lithophragma parviflorum	Prairie Star		X
Saururaceae - Lizard's-Tail Family			
Anemopsis californica	Yerba Mansa		
Scrophularlaceae – Figwort Family			
Scrophularia californica	California Figwort		X
*Verbascum virgatum**	Wand Mullein		
Solanaceae - Nightshade Family			
Datura wrightii	Jimson Weed		X
*Nicotiana glauca**	Tree Tobacco		X
Solanum douglasii	Douglas' Nightshade		X
Solanum parishii	Parish's Nightshade		
Solanum xanti	Chaparral Nightshade		X
Tamaricaceae - Tamarisk Family			
*Tamarix ramosissima**	Mediterranean Tamarix	Observed in 2017 within drainage adjacent to road crossing along the northern access road.	
Tropaeolaceae – Nasturium Family			

*Tropaeolum majus**	Garden Nasturtium		X
Urticaceae - Nettle Family			
Hesperocnide tenella	Western Nettle		
Parietaria hespera var. *californica*	California Pellitory		X
Urtica dioica	Stinging Nettle		X
*Urtica urens**	Dwarf Nettle		X
Zygophyllaceae - Caltrop Family			
*Tribulus terrestris**	Puncture Vine		
MONOCOTYLEDONES - MONOCOTS			
Agavaceae - Century Plant Family			
Hesperoyucca whipplei	Our Lord's Candle	*Prior Taxon: Yucca whipplei*	X
Arecaceae – Palm Family			
Washingtonia robusta	Mexican Fan Palm	Planted at front gate.	X
Cyperaceae - Sedge Family			
Carex triquetra	Trigonous Sedge		X
Cyperus eragrostis	Tall Umbrella-Sedge		X
*Cyperus esculentus**	Yellow Nutsedge		
Eleocharis sp.	Spike Rush	Observed just offsite.	
Iridaceae - Iris Family			
Sisyrinchium bellum	Western Blue-Eyed Grass		X
Juncaceae - Rush Family			
Juncus bufonius var. *bufonius*	Toad-Rush		X
Juncus effusus	Common Rush		X
Juncus mexicanus	Mexican Rush		
Juncus regulosus	Rugose Rush		
Liliaceae - Lily Family			
Allium peninsulare	Red-Flowered Onion		X
Bloomeria crocea	Common Golden-Stars		
Calochortus splendens	Splendid Mariposa Lily		
Calochortus weedii var. *weedii*	Weed's Mariposa		
Chlorogalum parviflorum	Small-Flower Soap-Plant		
Chlorogalum pomeridianum	Wavy-Leaved Soap Plant		X
Melianthaceae - Melianthus Family			
Toxicoscordion fremontii	Fremont's Death Camas	Prior taxon: *Zigadenus fremontii*	
Orchidaceae - Orchid Family			
Piperia cooperi	Cooper’s Rein Orchid	CPRP 4.2	X

Poaceae [Gramineae] - Grass Family			
*Aira caryophyllea**	Silver European Hair Grass		X
Aristida adscensionis	Sixweeks Three-Awn		/
Aristida purpurea var. *purpurea*	Purple Three-Awn		
*Arundo donax**	Giant Reed		
*Avena barbata**	Slender Wild Oat		X
*Avena fatua**	Wild Oat		
Bothriochloa barbinodis	Cane Bluestem		X
*Bromus diandrus**	Ripgut Grass		X
*Bromus hordeaceus**	Soft Chess	Prior taxon - *B. Mollis*	X
Bromus madritensis ssp. *rubens**	Foxtail Chess		X
*Bromus tectorum**	Cheat Grass		
*Conaderia jubata**	Atacama Pampas-Grass		
*Cynodon dactylon**	Common Bermuda Grass		X
*Echinochloa crus-galli**	Barnyard Grass		
*Ehrharta calycina**	Perennial Veldt Grass		X
Elymus condensatus	Giant Wild Rye		
Festuca microstachys	Gray's Fescue	Prior taxon - *Vulpia microstachys*	X
*Festuca myuros **	Foxtail Fescue	Prior taxon - *Vulpia myuros*	X
*Festuca perennis**	Perennial Ryegrass	Prior taxon - *Lolium perenne*	
Festuca octoflora	Six-Weeks Fescue	Prior taxon - *Vulpia octoflora*	
Hordeum murinum var. *leporinum**	Hare Barley		X
*Lamarckia aurea**	Goldentop		X
Melica frutescens	Melic Grass		X
Melica imperfecta	Little California Melic Grass		X
Melinis repens ssp. *repens*	Natal Grass		X
Muhlenbergia microsperma	Littleseed Muhly		X
Muhlenbergia rigens	Deergrass		X
*Phalaris paradoxa**	Canary Grass		/
*Pennisetum setaceum**	Crimson Fountain Grass		X
*Poa annua**	Annual Bluegrass		
*Polypogon monspeliensis**	Rabbitfoot Beardgrass		X
*Schismus barbatus**	Mediterranean Schismus		X
*Setaria virdis**	Green Bristlegrass		
Stipa coronata	Giant Stipa	Prior taxon - *Achnatherum*	X

		coronatum	
Stipa miliacea	Smilo Grass		X
Stipa lepida	Foothill Needle Grass	Prior taxon - *Nassella lepida*	
Stipa pulchra	Purple Needle Grass	Prior taxon - *Nassella pulchra*	X
Themidaceae - Brodiaea Family			
Dichelostemma capitatum	Blue Dicks		X
Typhaceae - Cattail Family			
Typha angustifolia	Narrow-Leaved Cattail		/
Typha latifolia	Broad-Leaved Cattail		

* Non-Native Species

Appendix D – Faunal List

Scientific Name	Common Name	Sign	Habitat Observed In
CLASS INSECTA	**INSECTS**		
DANAIDAE	**MILKWEED BUTTERFLIES**		
Danaus plexippus	monarch butterfly	o	DCSS, Riparian
Danaus gilippus thersippus	striated queen	o	DCSS, Riparian
MUTILLIDAE	**VELVET ANTS**		
Dasymutilla gloriosa	Thistledown Velvet Ant	o	DCSS
RIODINIDAE	**METALMARKS**		
Apodemia virgulti	Behr's metalmark	o	DCSS
CLASS REPTILIA	**REPTILES**		
ANGUIDAE	**ALLIGATOR LIZARDS**		
Elgaria multicarinata	southern alligator lizard	o	offsite, *historical
BOIDAE	**BOAS**		
Lichanura trivirgata	rosy boa		DCSS historical sighting
IGUANIDAE	**IGUANID LIZARDS**		
Phrynosoma blainvillii	San Diego horned lizard	o	CHAP
Sceloporus occidentalis	western fence lizard	o	DCSS
Sceloporus orcutti	granite spiny lizard	o	DCSS
Uta stansburiana elegans	Western side-blotched lizard	o	DCSS
TEIIDAE	**WHIPTAIL LIZARDS**		
Aspidoscelis hyperythra beldingi	Belding's orange-throated whiptail	o	DCSS
Aspidoscelis tigris stejnegeri	coastal whiptail	o	DCSS
COLUBRIDAE	**COLUBRID SNAKES**		
Coluber lateralis lateralis	California striped racer	o	DCSS, Oak Riparian
Salvadora hexalepis virgultea	coast patch-nosed snake	o	offsite, *historical
VIPERIDAE	**VIPERS**		
Crotalus oreganus helleri	Southern Pacific rattlesnake	o	CHAP, NNG
Crotalus ruber	red diamond rattlesnake	o	CHAP, DCSS
CLASS AMPHIBIA	**AMPHIBIANS**		
PELOBATIDAE	**SPADEFOOT TOADS**		
Spea hammondii	western spadefoot	o,v	Metamorphs observed along access paths/roads in 2017; calling adults heard offsite on adjacent property directly to the southeast within a ponded area.
BUFONIDAE	**TRUE TOADS**		
Anaxyrus boreas	western toad	o	Adults, larvae, and metamorphs observed within main drainage through DCSS as well as one metamorph observed on access

Scientific Name	Common Name	Sign	Habitat Observed In
			path in northern portion of site (2017)
HYLIDAE	**TREE FROGS**		
Pseudacris cadaverina	California tree frog	o,v	Adults and larvae observed within main drainage through DCSS (2017)
Pseudacris regilla	Pacific treefrog	o,v	Adults, larvae and metamorphs observed within main drainage through DCSS and one metamorph on access path (2017)
CLASS AVES	**BIRDS**		
PHALACROCORACIDAE	**CORMORANTS**		
Phalacrocorax auritus	double-crested cormorant	o	flyover* offsite (golf course pond)
ARDEIDAE	**HERONS, BITTERNS**		
Ardea herodias	great blue heron	o	flyover
Bubulcus ibis	cattle egret	o	flyover
ANATIDAE	**DUCKS, GEESE, SWANS**		
Anas platyrhynchos	mallard	o	flyover* offsite (golf course pond)
CATHARTIDAE	**NEW WORLD VULTURES**		
Cathartes aura	turkey vulture	o	flyover
ACCIPITRIDAE	**HAWKS, KITES, EAGLES**		
Accipiter cooperii	Cooper's hawk	o, v	Oak Riparian
Aquila chrysaetos	golden eagle	o	*historical (single flyover in 1998)
Buteo jamaicensis	red-tailed hawk	o, v	flyover
Buteo lineatus	red-shouldered hawk	o, v	flyover
Buteo swainsoni	Swainson's hawk	o	flyover
Circus cyaneus	northern harrier	o	flyover
Elanus caeruleus	black-shouldered kite	o	*historical
FALCONIDAE	**FALCONS**		
Falco sparverius	American kestrel	o, v	oak riparian
ODONTOPHORIDAE	**NEW WORLD QUAIL**		
Callipepla californica	California quail	o, v	DCSS, Riparian
PHASIANIDAE	**PARTRIDGES, GROUSE, TURKEYS**		
Meleagris gallopavo	wild turkey	o	DCSS?
RALLIDAE	**RAILS, GALLINULES, COOTS**		
Fulica americana	American coot	o, v	flyover* offsite (golf course pond)

Scientific Name	Common Name	Sign	Habitat Observed In
COLUMBIDAE	**PIGEONS & DOVES**		
Zenaida macroura	mourning dove	o, v	DCSS
CUCULIDAE	**CUCKOOS & ROADRUNNERS**		
Geococcyx californianus	greater roadrunner	o	DCSS
STRIGIDAE	**TRUE OWLS**		
Bubo virginianus	great horned owl	o	DCSS, Riparian
CAPRIMULGIDAE	**NIGHTHAWKS**		
Phalaenoptilus nuttallii	common poorwill	o	DCSS
APODIDAE	**SWIFTS**		
Chaetura vauxi	Vaux's swift	o	flyover
TROCHILIDAE	**HUMMINGBIRDS**		
Calypte anna	Anna's hummingbird	o, v	DCSS
Calypte costae	Costa's hummingbird	o, v	DCSS
PICIDAE	**WOODPECKERS**		
Colaptes auratus	northern flicker	o, v	DCSS
Melanerpes formicivorus	acorn woodpecker	o, v	Oak riparian
Picoides nuttallii	Nuttall's woodpecker	o, v	Oak riparian
Picoides pubescens	downy woodpecker	O	*historical
TYRANNIDAE	**TYRANT FLYCATCHERS**		
Contopus sordidulus	western wood-pewee	O	*historical
Empidonax difficilis	Pacific-slope flycatcher	o, v	DCSS, Oak Riparian
Myiarchus cinerascens	ash-throated flycatcher	o, v	DCSS
Sayornis saya	Say's Phoebe	o	DCSS
Sayornis nigricans	black phoebe	O	*historical
Tyrannus verticalis	western kingbird	o, v	DCSS, riparian
Tyrannus vociferans	Cassin's kingbird	o, v	DCSS, riparian
HIRUNDINIDAE	**SWALLOWS**		
Petrochelidon pyrrhonota	cliff swallow	o, v	flyover
Tachycineta bicolor	tree swallow	o, v	flyover
Tachycineta thalassina	violet-green swallow	O	*historical
CORVIDAE	**JAYS & CROWS**		
Aphelocoma californica	western scrub-jay	o, v	DCSS
Corvus brachyrhynchos	American crow	o, v	flyover
Corvus corax	common raven	o, v	flyover
AEGITHALIDAE	**BUSHTITS**		
Psaltriparus minimus	bushtit	o, v	DCSS

Scientific Name	Common Name	Sign	Habitat Observed In
TROGLODYTIDAE	**WRENS**		
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	o, v	DCSS, cactus
Catherpes mexicanus	canyon wren	o, v	DCSS
Salpinctes obsoletus	rock wren	o, v	DCSS
Thryomanes bewickii	Bewick's wren	o, v	DCSS
Troglodytes aedon	house wren	o, v	DCSS
TIMALIIDAE	**BABBLERS**		
Chamaea fasciata	wrentit	o, v	DCSS
POLIOPTILIDAE	**GNATCATCHERS**		
Polioptila caerulea	blue-gray gnatcatcher	o, v	DCSS, CHAP
Polioptila californica californica	California gnatcatcher	o, v	DCSS
SYLVIIDAE	**OLD WORLD WARBLERS**		
Oreothlypis celata	orange-crowned Warbler	o, v	DCSS
Setophaga nigrescens	black-throated gray Warbler	o	DCSS
TURDIDAE	**THRUSHES**		
Catharus guttantus	hermit thrush	O	*historical
Sialia mexicana	western bluebird	o	DCSS, NNG
MIMIDAE	**MOCKINGBIRDS, THRASHERS**		
Mimus polyglottos	northern mockingbird	o, v	DCSS
Toxostoma redivivum	California thrasher	o, v	DCSS
PTILOGONATIDAE	**SILKY-FLYCATCHERS**		
Phainopepla nitens	phainopepla	o, v	DCSS, Oak Riparian
STURNIDAE	**STARLINGS**		
Sturnus vulgaris	European starling	o, v	DCSS, Oak Riparian
VIREONIDAE	**VIREOS**		
Vireo gilvus	warbling vireo	o	DCSS, Oak Riparian
PARIDAE	**CHICKADEES, TITMICE**		
Baeolophus inornatus	oak titmouse	o	Oak Woodlands
SITTIDAE	**NUTHATCHES**		
Sitta carolinensis	white-breasted nuthatch	o	Oak Woodlands
PARULIDAE	**WOOD WARBLERS**		
Cardellina pusilla	Wilson's warbler	o	DCSS
Dendroica coronata	yellow-rumped warbler	o	DCSS, Riparian
Geothlypis trichas	common yellowthroat	o, v	DCSS, Riparian
Icteria virens	yellow-breasted chat	o, v	DCSS, Riparian

Scientific Name	Common Name	Sign	Habitat Observed In
REGULIDAE	**KINGLETS**		
Regulus calendula	Ruby-crowned Kinglet	o	Oak Riparian
ICTERIDAE	**BLACKBIRDS**		
Agelaius phoeniceus	red-winged blackbird	o, v	DCSS, Riparian
Icterus cucullatus	hooded oriole	o, v	DCSS, Oak Riparian
Quiscalus mexicanus	great-tailed grackle	o, v	*offsite, golf turf
Molothrus ater	brown-headed cowbird	o, v	DCSS, Riparian
EMBERIZIDAE	**SPARROWS**		
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	o, v	DCSS, Oak Riparian
Chondestes grammacus	lark sparrow	O	*historical
Melospiza melodia	song sparrow	o, v	DCSS, Riparian
Melozone crissalis	California towhee	o, v	DCSS
Pipilo erythrophthalmus	Rufous-sided Towhee	o, v	DCSS
Pipilo maculatus	Spotted Towhee	o, v	DCSS
Spizella atrogularis	black-chinned sparrow	o, v	DCSS
Zonotrichia atricapilla	golden-crowned sparrow	o, v	DCSS
Zonotrichia leucophrys	white-crowned sparrow	o, v	DCSS
CARDINALIDAE	**CARDINALS**		
Guiraca caerulea	blue grosbeak	O	*historical
Pheucticus melanocephalus	black-headed grosbeak	o, v	DCSS, Riparian
Passerina amoena	lazuli bunting	o, v	DCSS
FRINGILLIDAE	**FINCHES**		
Spinus psaltria	lesser goldfinch	o, v	DCSS
Spinus tristis	American goldfinch	o, v	DCSS, Oak Riparian
Carpodacus mexicanus	house finch	o, v	DCSS, Riparian
Lonchura punctulata	scaly-breasted munia	o	Riparian
CLASS MAMMALIA	**MAMMALS**		
LEPORIDAE	**HARES & RABBITS**		
Sylvilagus audubonii	desert cottontail	o	DCSS, Riparian
Sylvilagus bachmani	brush rabbit	o	DCSS, CHAP
SCIURIDAE	**SQUIRRELS**		
Otospermophilus beecheyi	California ground squirrel	o	DCSS
CANIDAE	**WOLVES & FOXES**		
Canis familiaris	domestic dog	o	NNG
Canis latrans	coyote	o, s, t	DCSS
HETEROMYIDAE	**POCKET MICE &**		

Scientific Name	Common Name	Sign	Habitat Observed In
	KANGAROO RATS		
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	C	*historical
Dipodomys agilis	Dulzura kangaroo rat	o	CHAP
FELIDAE	**CATS**		
Puma concolor	Mountain Lion	T, GPS	GPS collared individual; drainages
Felis rufus	bobcat	T, S, s	*historical, sign detected
GEOMYIDAE	**POCKET GOPHERS**		
Thomomys bottae	Botta's pocket gopher	B	*historical
PROCYONIDAE	**RACCOONS**		
Procyon lotor	raccoon	s, t	DCSS, Riparian
MURIDAE	**MICE, RATS, AND VOLES**		*historical
Neotoma sp	woodrat	O	*historical
MUSTELIDAE	**WEASELS, SKUNKS & OTTERS**		
Mephitis mephitis	striped skunk	o	DCSS
EQUIDAE	**HORSES & BURROS**		
Equus caballus	horse	o, s, t	NNG
CERVIDAE	**DEER**		
Odocoileus hemionus	mule deer	o, s, t	DCSS

O/o – observed
S/s – sign (scat)
B/b - burrow
T/t – track
V/v - Vocalization
GPS – GPS-collared individual

Appendix E - California Gnatcatcher Reports to USFWS

- Letter from URS to USFWS July 10, 2014: *45-Day report For Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Surveys Concordia Homes Safari View Proposed Development City of Escondido, San Diego County, California URS Project No. 27653213.02004*
- Cummings and Associates March 2015: An *Assessment of the California Gnatcatcher Along the Emergency Access Road to Safari Highlands Ranch County of San Diego, California*

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July 10, 2014

Stacey Love
Recovery Permits Coordinator
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008

Subject: 45-Day report For Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Surveys
Concordia Homes Safari View Proposed Development
City of Escondido, San Diego County, California
URS Project No. 27653213.02004

This letter provides the information required for the 45-day follow up report as specified in the conditions of recovery permits TE-101151-2 (Eric Bailey) and TE-76698A-1 (Ryan Randall). The information required in conditions 7(a) through 7(h) is presented below.

(a) Survey Location
The Concordia Homes Safari View survey location is shown in the topographic and aerial photo maps attached below.

(b) Plant Communities
The site consists of natural open space in eastern Escondido, CA, located to the north of the State Route 78 roadway. Nearby developments include the Eagle Crest residential development to the west of the Concordia site, the San Diego Safari Park to the south of the site, and large lot residential/agricultural parcels along portions of the site boundary in the south and east.

Plant communities in the survey area include Diegan coastal sage scrub, southern mixed chaparral, southern oak woodland, and mule fat scrub. Much of the site is steep and rocky, and fires have altered the relative abundance of plant species. The coastal sage scrub vegetation onsite consists of the following representative species: California sagebrush (*Artemisia californica*), white sage (*Salvia apiana*), flat-topped buckwheat (*Eriogonum fasciculatum*), bush mallow (*Malocothamnus fasciculatus*), laurel sumac (*Malosma* laurina), lemonade berry (*Rhus integrifolia*), and coyote bush (*Baccharis pilularis*). Dried deerweed (*Lotus scoparius*) is also present, and is particularly abundant within portions of the sage scrub on site. These areas of dried deerweed abundance are considered to be of lower quality for California gnatcatcher, due to the low stature of the habitat (less than two feet in height), and the lack of foliage. Portions of the site that are particularly steep, rocky, and sparsely vegetated are also considered to be of lower quality for California gnatcatcher. The habitat quality within the remainder of the site ranges from moderate to excellent for gnatcatcher occupation. This is due to the undisturbed nature of the vegetation and the

URS Corporation
4225 Executive Square,
Suite 1600
La Jolla CA 92037
Tel: 858-812-9292
Fax: 858-812-9293
www.urscorp.com

adequate amount of coastal sage scrub present.

The remaining vegetative communities within the project site are not considered suitable for California gnatcatcher occupation. Thus surveys within these other communities were only conducted along their interface with the coastal sage scrub habitat, to about 200 feet into the non-sage scrub vegetation. The non-sage scrub vegetation communities are southern mixed chaparral, southern oak woodland, and mule fat scrub. These communities are lacking in sage species (*Artemisia* and *Salvia*), and form dense stands of vegetation ranging from 8 feet to 30 feet in height.

(c) Survey Methods

Methods followed the USFWS protocol (1997) for coastal California gnatcatcher Presence/Absence surveys. Three repeat survey visits were conducted within all potential habitats for coastal California gnatcatcher (including lower quality habitats dominated by deerweed and areas of steep, rocky, and sparse vegetation). A map of the survey area was marked with grid lines that created eight survey grids, each containing a one-day survey allotment of 80 acres or less. These grids were then surveyed three times each, with at least 7 days between repeat visits. Survey visits were conducted between April 14 and May 30, 2014. Surveys were not conducted during adverse weather conditions of excess heat and wind. Such conditions occurred from April 30 to May 2, and again from May 12 to 16; site visits were cancelled on these dates.

The presence/absence surveys were conducted by URS Biologists Eric "Rick" Bailey and Ryan Randall. Mr. Bailey and Mr. Randall supervised the following URS Biologists on various survey dates; Laura Swadell and Julie Stout. Survey dates, weather conditions, and observations are included in Table 1 (attached).

(d) California Gnatcatcher Detected

A total of two adult pairs and two single adult male coastal California gnatcatchers were detected within the Concordia Homes Safari View project site. All of the detections were located in the southern and western portions of the site. One of the pairs was observed nest building during initial detection, then incubating at the nest during a later survey date. The other pair was initially detected as a single male, and later observed feeding fledglings during a subsequent survey. The single males behaved secretively, and were observed for just a brief few minutes. It is quite possible that the single males also had female mates. Several brown-headed cowbirds (*Molothrus ater*) were observed on the site, as was expected with horses being prevalent in the area. The gnatcatcher location data are plotted in Figure 2 (attached), and GPS waypoint coordinates are provided below in Section (f).

(e) APN

The APN numbers are 2402703300, 2420103700, 2420103700, 2420103800, 2410600300, and 2420100200.

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(f) GPS Coordinates

The GPS coordinates of the coastal California gnatcatcher locations are; UTM Zone 11S –

Pair With Nest	500176E, 3663931N
Pair Feeding Fledglings	499874E, 3663960N
Single Male	500496E, 3664030N
Single Male	500564E, 3663385N

The GPS coordinates of the brown-headed cowbird locations are; UTM Zone 11S –

5 males & 2 females	499706E, 3663647N
3 males & 2 females	501562E, 3664229N
2 males & 1 female	500734E, 3663916N

(g) Conclusion and Recommendations

The natural open space at the Concordia Homes Safari View project site is occupied by 2 pairs and two single male coastal California gnatcatchers. Any proposed development that would result in loss of gnatcatcher habitat should be mitigated through conservation of similar habitat for the benefit of the coastal California gnatcatcher.

(h) Other Pertinent Observations

Other pertinent observations made during the survey efforts include observations of coastal cactus wren (*Campylorrhynchus brunneicapillus*), Cooper's hawk (*Accipiter cooperii*), yellow-breasted chat (*Icteria virens*), southern California rufous-crowned sparrow (*Aimophila ruficeps*), and orange-throated whiptail (*Cnemidoophorus hyperythrus beldingi*). These species are included in the attached figure, and GPS waypoint coordinates are shown in Table 2 (attached).

I certify that the information in this survey report and attached exhibits fully and accurately represents my work. If you have any questions about these surveys, please contact Eric "Rick" Bailey at 760.518.5637 or Ryan Randall at (858) 812-9292.

Sincerely,

Eric "Rick" Bailey, 7/10/2014
Wildlife Biologist TE-101151-2

Ryan Randall, 7/10/2014
Wildlife Biologist TE-76698A-1

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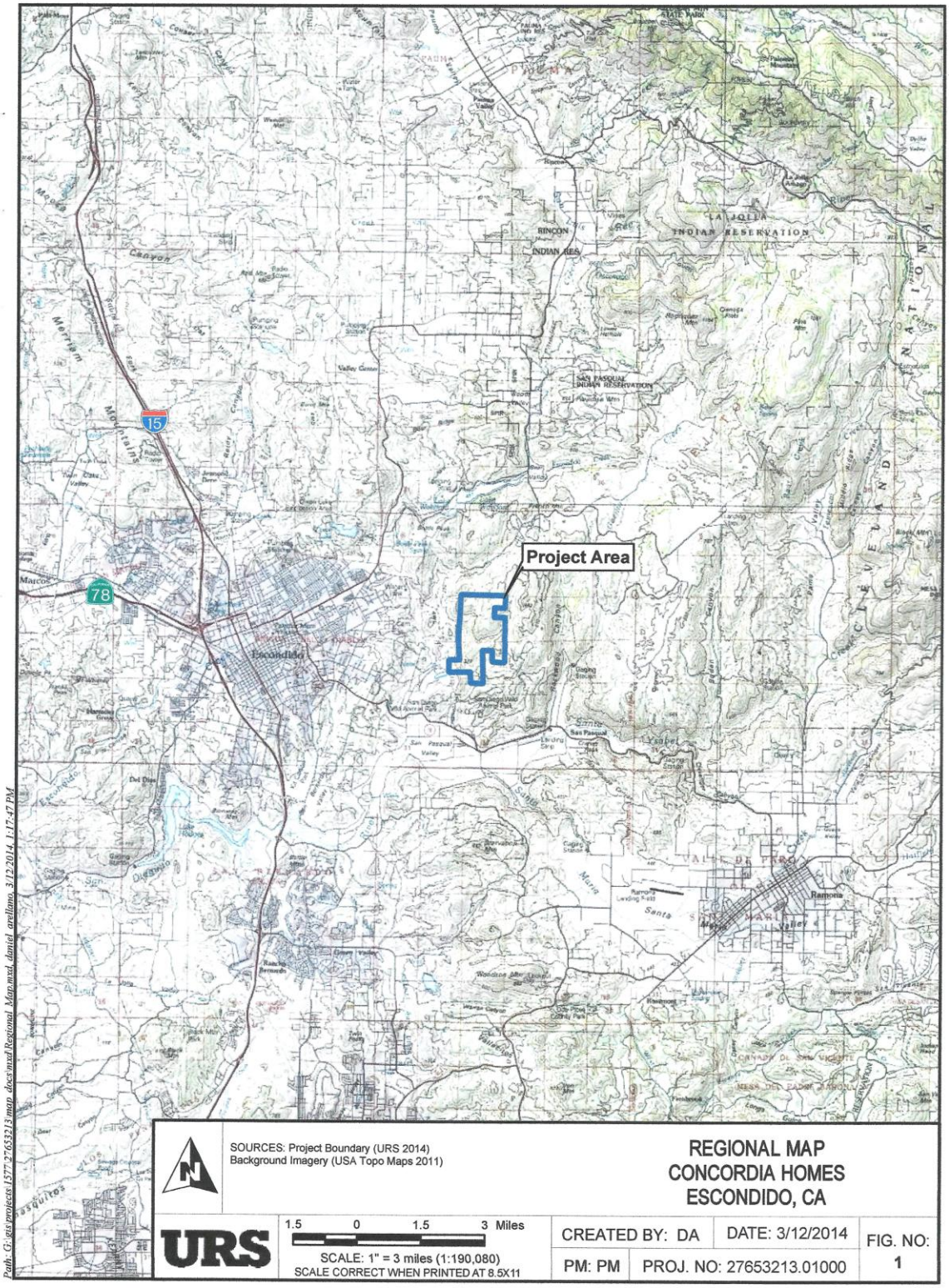
ATTACHMENTS


Project Area
15
78
Escondido
Ramona
RINCON INDIAN RES.
LA JOLLA INDIAN RESERVATION
SAN PASQUAL INDIAN RESERVATION
Path: G:\gis projects\27763213\map_docs\mxd\Regional_Map.mxd, daniel.arellano, 3/12/2014, 1:17:47 PM
SOURCES: Project Boundary (URS 2014)
Background Imagery (USA Topo Maps 2011)
REGIONAL MAP
CONCORDIA HOMES
ESCONDIDO, CA
URS
1.5 0 1.5 3 Miles
SCALE: 1" = 3 miles (1:190,080)
SCALE CORRECT WHEN PRINTED AT 8.5X11
CREATED BY: DA
DATE: 3/12/2014
PM: PM
PROJ. NO: 27653213.01000
FIG. NO: 1

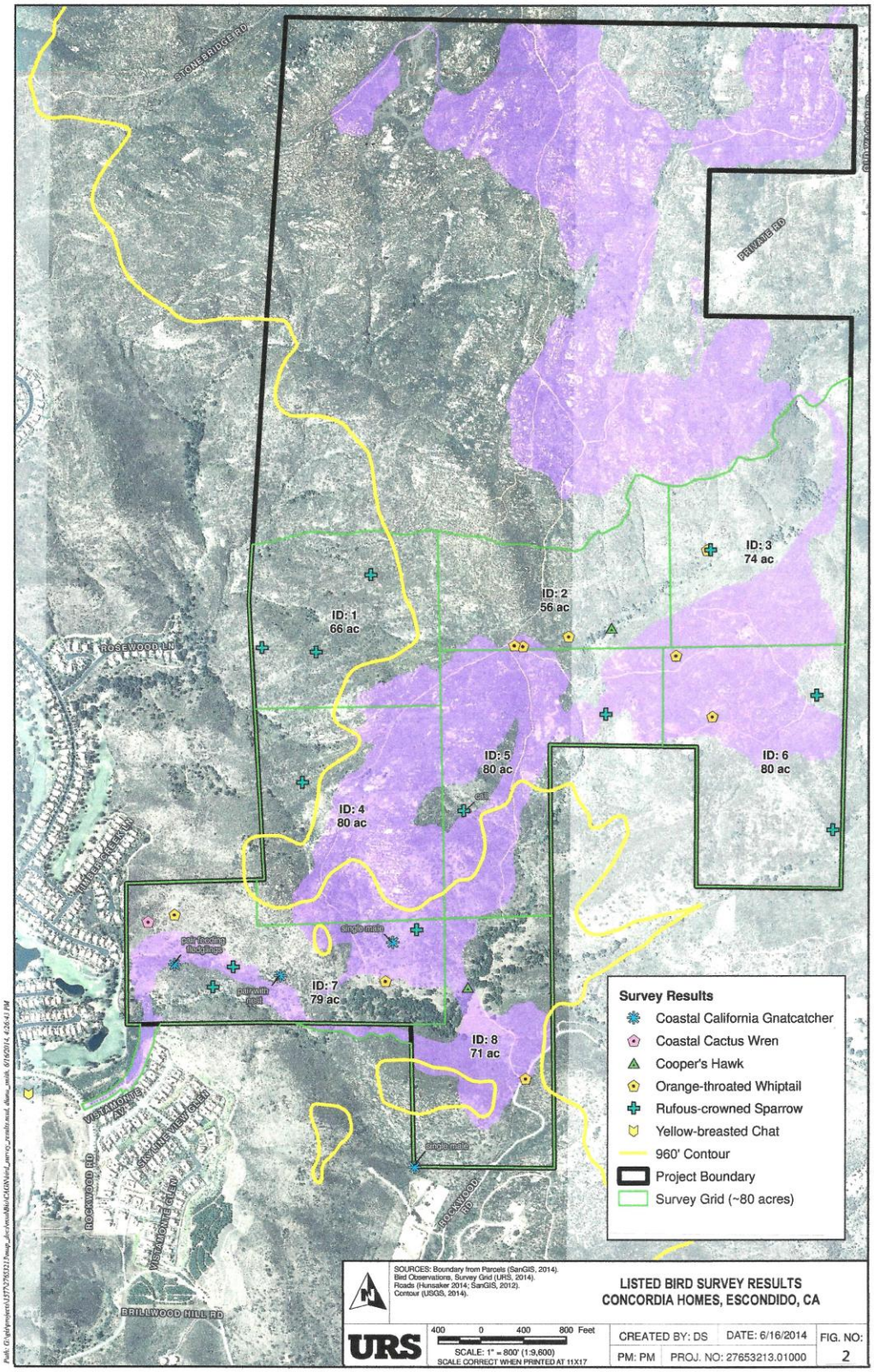

STONE BRIDGE RD
PRIVATE RD
ROSEWOOD LN
ID: 1
66 ac
ID: 2
56 ac
ID: 3
74 ac
ID: 4
80 ac
ID: 5
80 ac
ID: 6
80 ac
ID: 7
79 ac
ID: 8
71 ac
pair feeding fledglings
pair with nest
single male
nest
VISTAMONTE AVE
VISTAMONTE GLEN
ROCKWOOD RD
BRILLWOOD HILL RD
Survey Results
Coastal California Gnatcatcher
Coastal Cactus Wren
Cooper's Hawk
Orange-throated Whiptail
Rufous-crowned Sparrow
Yellow-breasted Chat
960' Contour
Project Boundary
Survey Grid (~80 acres)
SOURCES: Boundary from Parcels (SanGIS, 2014).
Bird Observations, Survey Grid (URS, 2014).
Roads (Hunsaker 2014; SanGIS, 2012).
Contour (USGS, 2014).
LISTED BIRD SURVEY RESULTS
CONCORDIA HOMES, ESCONDIDO, CA
URS
400 0 400 800 Feet
SCALE: 1" = 800' (1:9,600)
SCALE CORRECT WHEN PRINTED AT 11X17
CREATED BY: DS
DATE: 6/16/2014
FIG. NO: 2
PM: PM
PROJ. NO: 27653213.01000

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Table 1
Coastal California Gnatcatcher (CAGN) Monitoring Dates, Site Conditions, and Observations

Date	Time	Sky (%Clouds)	Temp. (deg. F)	Wind (mph)	Personnel and Observations
GRID 1 (seven or more days between repeat visits)					
4/15/2014	06:50 – 11:50	0 – 0	59 – 87	0 – 5	R. Randall: No CAGN present
4/23/2014	06:46 – 11:50	95 – 0	56 – 73	0 – 2	R. Randall: No CAGN present
5/8/2014	06:10 – 11:30	100 - 0	58 - 70	0 – 7	R. Bailey: No CAGN present.
GRID 2 (seven or more days between repeat visits)					
4/18/2014	06:15 – 12:00	100 - 40	58 - 70	0 – 4	R. Bailey: No CAGN present.
4/28/2014	06:23 – 11:22	0 – 0	53 – 82	0 – 6	R. Randall: No CAGN present
5/8/2014	06:30 – 11:30	100 – 0	59 – 69	0 – 7	R. Randall: No CAGN present
GRID 3 (seven or more days between repeat visits)					
4/21/2014	06:00 – 11:30	50 - 0	55 - 82	0 - 3	R. Bailey: No CAGN present.
4/29/2014	06:30 – 09:30	0 – 0	65 – 83	4 – 13	R. Randall: No CAGN present (stopped early due to hot, dry winds. Finished remainder on 5/8/2014)
5/19/2014	06:00 – 11:40	80 - 0	60 - 75	1 - 7	R. Bailey: No CAGN present.
GRID 4 (seven or more days between repeat visits)					
4/15/2014	06:30 – 12:00	0	58 - 82	0 - 8	R. Bailey: No CAGN present.
4/22/2014	06:40 – 11:40	100 – 20	60 – 75	0 – 5	R. Randall: No CAGN present
5/7/2014	06:00 – 11:45	90	55 – 72	1 – 6	R. Randall: CAGN single male seen briefly near Grid 7 (same bird seen there on 5/5/2014)
GRID 5 (seven or more days between repeat visits)					
4/16/2014	06:30 – 12:00	100 – 0	55 – 70	0 – 2	R. Bailey & Laura Swadell: No CAGN present.
4/25/2014	06:27 – 12:00	100 – 5	59 – 75	0 – 5	R. Randall: No CAGN present.
5/7/2014	06:10 – 11:40	90	55 - 72	1 - 6	R. Bailey: No CAGN present.
GRID 6 (seven or more days between repeat visits)					
4/17/2014	06:49 – 11:45	100 – 60	54 – 68	1 – 3	R. Bailey & Laura Swadell: No CAGN present.
4/25/2014	06:15 – 12:00	100 - 10	55 - 74	0 - 8	R. Bailey: No CAGN present.
5/9/2014	06:00 – 12:00	0	50 - 82	0 - 7	R. Bailey: No CAGN present.
GRID 7 (seven or more days between repeat visits)					
4/14/2014	06:00 – 12:30	0	52 – 82	2 – 8	R. Bailey & Julie Stout: CAGN adult pair nest building and a CAGN single male observed downhill to the west.
4/24/2014	06:00 – 12:00	0	52 – 77	0 – 5	R. Bailey: CAGN incubating at nest and cactus wren observed nest building downhill to the west.
5/5/2014	06:00 – 12:00	100 -50	53 – 77	0 – 7	R. Bailey: CAGN pair feeding fledglings in west end of Grid. Single CAGN male in east end of Grid.
5/20/2014	09:00 – 12:00	80 - 20	55 - 69	0 - 7	R. Bailey: Survey east end of Grid to see if single male has a mate, no CAGN found.
5/30/2014	09:00 – 12:00	0 - 5	53 - 82	0 - 7	R. Bailey: Survey east end of Grid to see if single male has a mate, no CAGN found.

URS

Date	Time	Sky (%Clouds)	Temp. (deg. F)	Wind (mph)	Personnel and Observations
GRID 8 (seven or more days between repeat visits)					
4/14/2014	06:30 – 11:35	5 – 0	49 – 87	0 – 10	R. Randall & Laura Swadell: No CAGN present.
4/21/2014	06:46 – 11:50	85 – 0	54 – 88	0 – 2	R. Randall: No CAGN present.
5/6/2014	06:00 – 12:30	70 – 75	58 – 67	4 – 10	R. Randall: CAGN single male at south end of Grid.

Table 2

GPS Waypoint Coordinates for Species Shown in Figure 2

Species*	Easting	Northing	Notes
Coastal Cactus Wren	499797	3664083	pair with nest
Coastal California Gnatcatcher	500176	3663931	pair with nest
Coastal California Gnatcatcher	499874	3663960	Pair feeding fledglings
Coastal California Gnatcatcher	500496	3664030	single male
Coastal California Gnatcatcher	500564	3663385	single male
Cooper's Hawk	500711	3663902	
Cooper's Hawk	501112	3664935	
Yellow-breasted Chat	499460	3663586	
Orange-throated Whiptail	501383	3665160	
Orange-throated Whiptail	500878	3663642	
Orange-throated Whiptail	499873	3664104	
Orange-throated Whiptail	500476	3663918	
Orange-throated Whiptail	501297	3664857	
Orange-throated Whiptail	501402	3664683	
Orange-throated Whiptail	500990	3664910	
Orange-throated Whiptail	500860	3664881	
Orange-throated Whiptail	500836	3664883	
Southern California Rufous-crowned Sparrow	501383	3665160	
Southern California Rufous-crowned Sparrow	501738	3664360	
Southern California Rufous-crowned Sparrow	501689	3664745	
Southern California Rufous-crowned Sparrow	500106	3664870	
Southern California Rufous-crowned Sparrow	500031	3663955	
Southern California Rufous-crowned Sparrow	499974	3663896	
Southern California Rufous-crowned Sparrow	500554	3664066	
Southern California Rufous-crowned Sparrow	500414	3665082	
Southern California Rufous-crowned Sparrow	500224	3664486	individual
Southern California Rufous-crowned Sparrow	500260	3664859	individual
Southern California Rufous-crowned Sparrow	501088	3664687	individual
Southern California Rufous-crowned Sparrow	500685	3664408	call

* Coastal Cactus Wren (*Campylorrhynchus brunneicapillus*), Coastal California Gnatcatcher (*Polioptila californica californica*), Cooper's Hawk (*Accipiter cooperii*), Yellow-breasted Chat (*Icteria virens*), Orange-throated Whiptail (*Cnemidoophorus hyperythrus beldingi*), and Southern California Rufous-crowned Sparrow (*Aimophila ruficeps*).

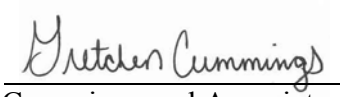
An Assessment of the California Gnatcatcher Along the Emergency Access Road to Safari Highlands Ranch County of San Diego, California

Prepared For:

Althouse and Meade, Inc.
1602 Spring Street
Paso Robles, CA 93446

Prepared By:

Gretchen Cummings



Cummings and Associates
P.O. Box 1209
Ramona, CA 92065
(760)440-0349

11 March 2015
Job Number 1725.35A

Cummings and Associates

An Assessment of the California Gnatcatcher Along the Emergency Access Road to Safari Highlands Ranch County of San Diego, California

SUMMARY

A federal protocol survey for the California Gnatcatcher (*Polioptila californica*) was conducted along the emergency access road to Safari Highlands Ranch during the 2015 breeding season under permit TE-031850-4. The Gnatcatcher survey is a requirement for the environmental analysis associated with the development project proposed for Safari Highlands Ranch. The Gnatcatcher survey was conducted within suitable Sage Scrub habitat out to ±300-feet adjacent to the emergency access road depending upon the topography and vegetation changes (approximately 84-acres) - see Figures 1 and 2. The emergency access road is located in the northern part of the County of San Diego, east of Escondido and Valley Center Road, and southwest of Lake Wohlford. Specifically, the access road begins at the cul-de-sac of Meadow Creek Lane and extends east to Safari Highlands Ranch. Based on the results of this 2015 federal protocol survey, it appears that no California Gnatcatchers presently utilize the survey area.

PHYSICAL ENVIRONMENT

The underlying geology of the survey area is mapped as Granite of Bottle Peak and Granite of Dixon Lake (Kennedy et. al., 1999). The surficial soils mapped by Bowman (1973) are recorded as Friant rocky fine sandy loam, 30 to 70% slopes (FxG), and Cieneba very rocky coarse sandy loam, 30 to 75% slopes (CmrG).

The 84-acre survey area is located on steep slopes in the foothills east of Escondido (see Figure 1). As can be seen in that figure, a major drainage, that is a tributary to the San Dieguito River, occurs through the western side of the survey area. There is an elevation difference across the survey area of approximately 820-feet. The lowest elevation occurs along the main drainage bottom at 520-feet, and the highest elevation occurs at the eastern edge of the survey area at 1,340-feet.

FLORAL ENVIRONMENT

The 84-acre survey area is occupied by Diegan Coastal Sage Scrub. Shrub species noted within the site that are indicative of this vegetation community included California Sagebrush (*Artemisia californica*) and California Buckwheat (*Eriogonum fasciculatum*).

P.O. Box 1209, Ramona, CA 92065 • (619)233-5454 or (760)440-0349
Fax:(760)440-9173 • Email: gretchen.bc@sbcglobal.net
Professional Environmental Services

METHODS

The survey was conducted to determine the presence or absence of the California Gnatcatcher (*Polioptila californica*) in accordance with the current federal protocol (U.S. Fish and Wildlife Service, 1997). On each field date, the habitat adjacent to the emergency access road was surveyed for California Gnatcatchers. The recorded call of the California Gnatcatcher was utilized as a location technique (calls obtained through the Cornell Laboratory of Ornithology; the recording is of a Type I call, in the sense of Atwood (1988)).

The dates, times of survey, and weather conditions for each of the three site visits were as follows:

> **13 February 2015** — The Gnatcatcher survey was conducted between 0800 and 1140 hours. At the beginning of the visit, the temperature was measured at 65.4°F. By the end of the survey, the temperature had risen to 88.6°F. There were no appreciable winds at 0800. However, by 1140 hours, the winds were recorded between 1.6 to 3.0 mph from the east. The sky was sunny and clear throughout (one observer: Gretchen Cummings).
>
> **20 February 2015** — This second site visit of the federal protocol survey for the California Gnatcatcher was conducted between 0830 and 1150 hours. At the beginning of the visit, the temperature was measured at 64.1°F. By the end of the survey, the temperature had risen to 71.4°F. Wind speed was measured at < 2.4 mph from the southeast at 0830 hours and decreased slightly to < 1.7 mph from the west by 1150. There was a 100% deep, marine layer cover throughout the survey period (one observer: Gretchen Cummings).
>
> **5 March 2015** — The third and final survey for the California Gnatcatcher was conducted between 0800 and 1200 hours. The sky was clear and sunny throughout the survey. At the onset of the visit, the temperature was measured at 59.9°F. By the end of the visit, the temperature had risen to 78.5°F. Wind speed was measured at < 2.7 mph from the southwest at 0800 hours. At 1200 hours, wind speed was recorded at < 4.8 mph from the southwest (one observer: Gretchen Cummings).

All birds heard and/or seen during the course of the survey were noted and that information is presented as Table 1. The reader is directed to that table for information about the avifauna present within the bounds of the property.

RESULTS

The diversity of avifauna observed was typical of Sage Scrub habitats adjacent to a riparian corridor. A total of thirty-nine bird species were observed during the three site visits. Year-round residents, such as Red-tailed Hawk, California Quail, Mourning Dove, Anna's Hummingbird, Acorn Woodpecker, Western Scrub Jay, Common Raven, Bushtit, Rock Wren, Canyon Wren, Wrentit, California Thrasher, Spotted Towhee, California Towhee, Rufous-crowned Sparrow, and House Finch were noted during each of the three site visits. No California Gnatcatchers were observed

within the 84-acre survey area. However, one other sensitive bird species, the Rufous-crowned Sparrow was noted during the surveys (see Figure 2 for locations of territories).

California Gnatcatcher. The California Gnatcatcher (*Polioptila californica*) is a threatened species under the federal Endangered Species Act (ESA). It is an obligate inhabitant of Sage Scrub vegetation types and is also found in Chaparral habitat where it integrates with Sage Scrub. Preston, et al. (1998), Atwood (1988), and Braden (1998) have demonstrated that the typical breeding territory of the Gnatcatcher is on the order of 20-acres. This is especially true where the habitats are more xeric and less diverse. Where the habitats are more mesic and have a higher shrub diversity, such as coastal San Diego County, the territories may be significantly less than 20-acres in size.

No California Gnatcatchers were observed along the emergency access road to Safari Highlands Ranch during the 2015 survey. Please note that a search of the California Natural Diversity Database was conducted for other records of this species within a 10-mile radius of the survey area. The closest recorded observation of the California Gnatcatcher was near Oak Hill Memorial Park (cemetery), approximately 3/4-mile to the southwest of the site (Fish and Game, 2015b). The sighting was from September of 2005 of one adult and one juvenile.

Rufous-crowned Sparrow. The Southern California sub-species of Rufous-crowned Sparrow (*Aimophila ruficeps* ssp. *canescens*) is on the state Watch List (Fish and Game, 2015a). There are eight Rufous-crowned Sparrow territories along the emergency access road (see Figure 2 for central locations of territories).

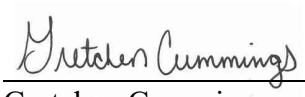
Other Wildlife (Non-Avian) Species. One mammal and four reptiles were observed along the emergency access road. The mammalian species was the California Ground Squirrel (*Spermophilus beecheyi*). The four reptile species seen on-site were the Orange-throated Whiptail (*Aspidoscelis hyperythra*), Western or Coastal Tiger Whiptail (*Aspidoscelis tigris stejnegeri*), Side-blotched Lizard (*Uta stansburiana*), and the Western Fence Lizard (*Sceloporus occidentalis*). Of these five non-avian species, only the Orange-throated Whiptail and the Western or Coastal Tiger Whiptail are considered sensitive. The Orange-throated Whiptail is considered a California Species of Concern by the California Department of Fish and Game (Fish and Game, 2015a). Three Orange-throated Whiptails were noted during the survey (see Figure 2 for locations and dates). The Western or Coastal Tiger Whiptail is also considered a California Species of Concern by the California Department of Fish and Game (Fish and Game, 2015a). Three Western Whiptails were noted during the survey (see Figure 2 for locations and dates).

CONCLUSIONS

The habitat adjacent to the emergency access road to Safari Highlands Ranch in the County of San Diego was surveyed during 2015 for the California Gnatcatcher. In accordance with the federal protocol for the species, a total of three site visits were made to determine the presence or absence of the bird species. Based on the results of the protocol survey, it appears that habitat adjacent to the emergency access road is not currently occupied by California Gnatcatchers.

SURVEYOR CERTIFICATION

I certify that the information in this survey report and attached exhibits fully and accurately represents my work. Any errors or omissions are solely my responsibility.



3/11/15

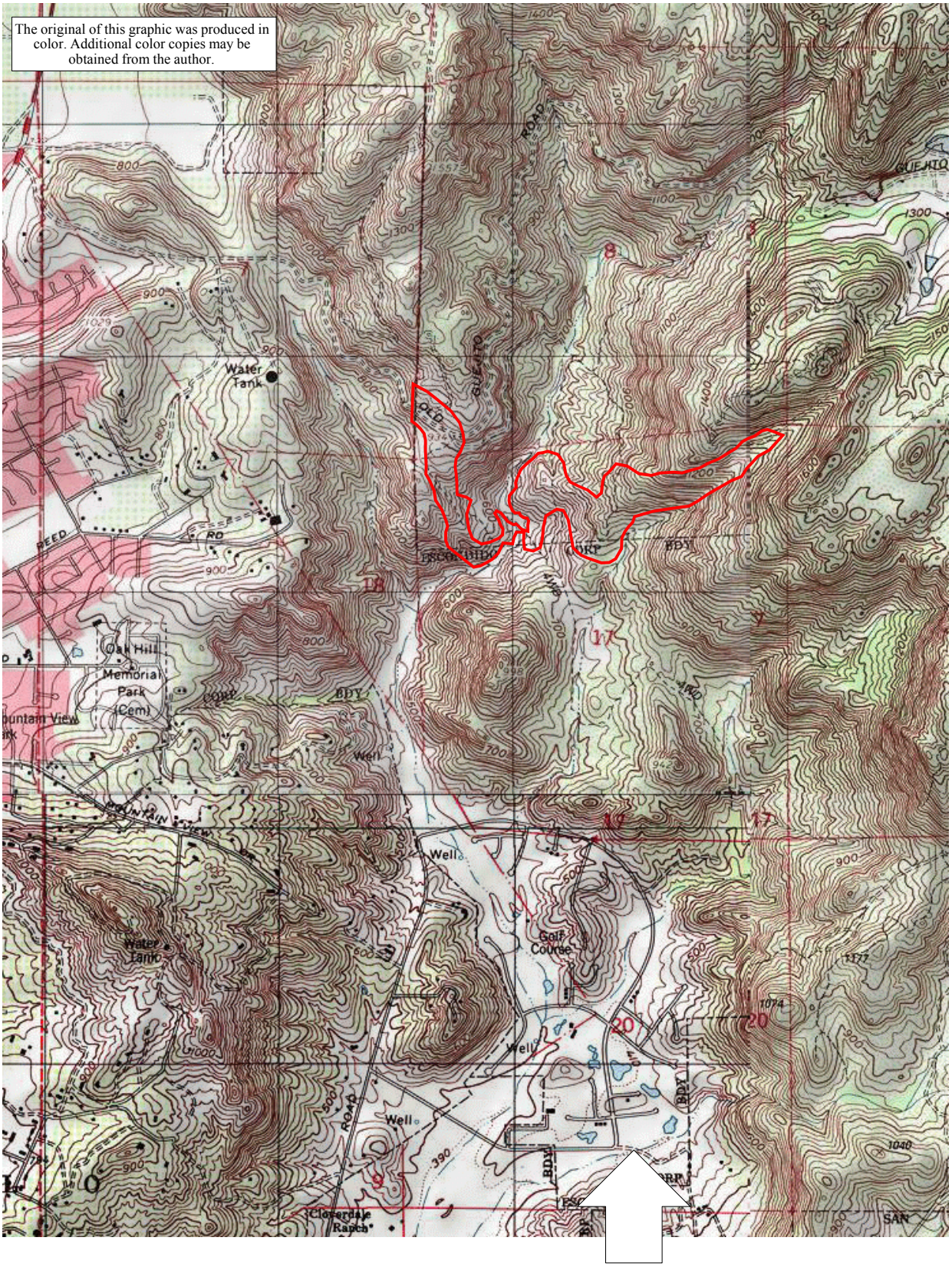
Gretchen Cummings
Principal/Consulting Biologist
(TE-031850-4)

Date

Attachments

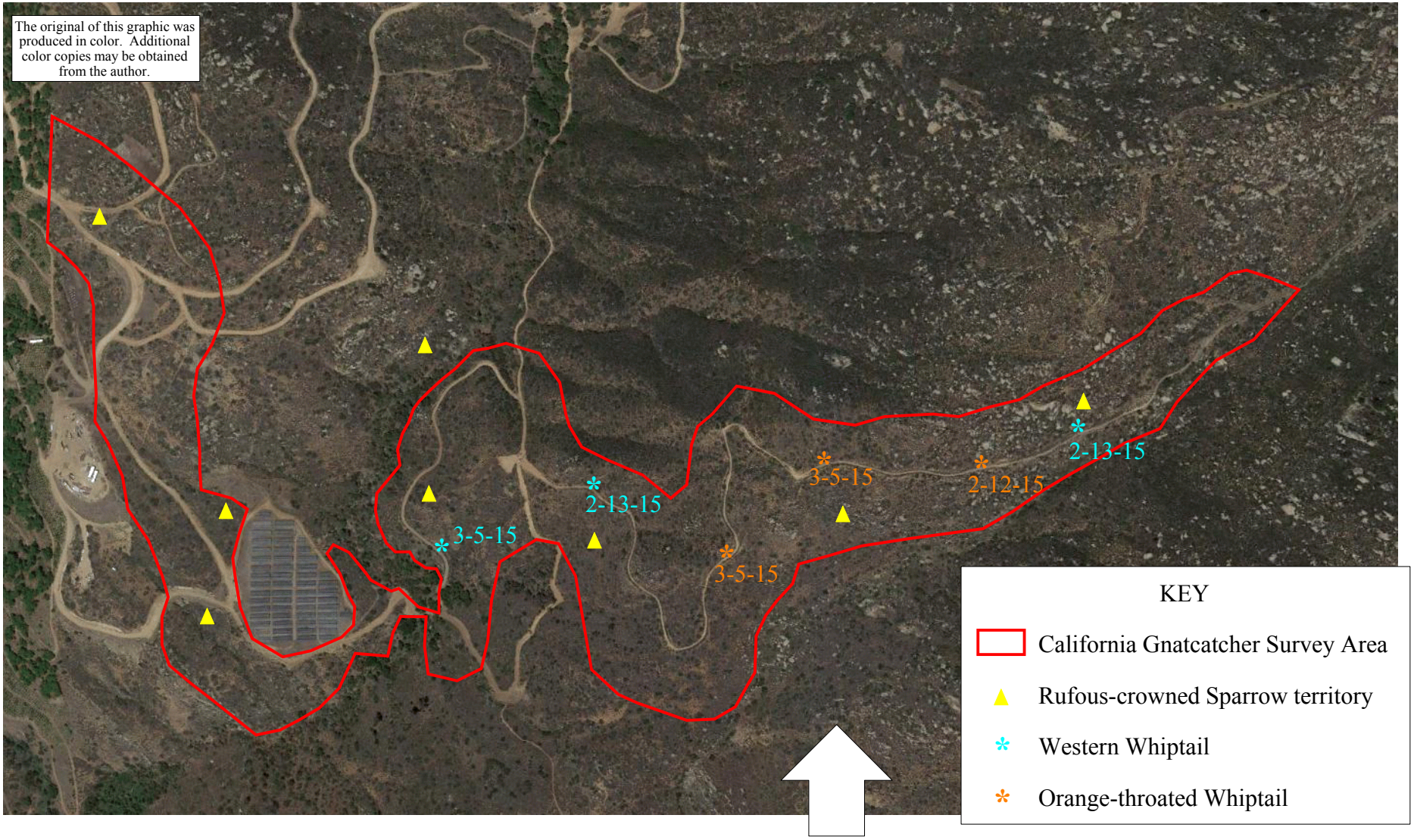
1. Figure 1 — Gnatcatcher Survey Area Shown on the U.S.G.S. 7½-minute Valley Center Quadrangle Map
2. Figure 2 — Locations of Sensitive Species Observations Made During the California Gnatcatcher Survey Shown on an Aerial Photo
3. Table 1 — Birds Observed During the Protocol California Gnatcatcher Presence/Absence Survey
4. References Cited

[:\1725CAGN-rpt.wpd]



Cummings and Associates Job Number 1725.35A 10 March 2015 [:\1725-Fig--1-rev.wpg]

Cummings and Associates	**Gnatcatcher Survey Area Shown in Red on the U.S.G.S. 7½-min Valley Center Quad Map** [Base Map Created with TOPO!® ©2006 National Geographic; ©2005 TeleAtlas]	**Figure 1**



Cummings and Associates Job Number 1725.35A 11 March 2015

Scale: 1-inch = 600-feet

[:\1725-Fig-2.wpg]

Cummings and Associates

Locations of Sensitive Species Observation Made During the 2015 California Gnatcatcher Survey Shown on an Aerial Photo [Base Photo © 2015 Google; Imagery Date 5/11/2014]

Figure 2

Table 1
Bird Species Observed During the Protocol California Gnatcatcher Presence/Absence Survey Along the Emergency Access Road to Safari Highlands Ranch in the County of San Diego, California

Species	13 Feb	20 Feb	5 Mar	Notes
Turkey Vulture (*Cathartes aura*)	1	1	3	Spring migrants. Spring migration typically occurs from late January to mid-April(Unitt, 2004). During each of the visits, this species was seen as overflights.
Northern Harrier (*Circus cyaneus*)	—	—	1	Winter visitor. During the last visit, a female was seen as an overflight, passing from southeast to the northwest over the northeastern portion of the survey area. According to Unitt (2004), "Winter visitors occur mainly from September to March".
Cooper's Hawk (*Accipiter cooperii*)	—	—	1	Migrant or year-round resident in the vicinity. During the last visit, a single individual was seen as an overflight of the eastern end of the access road.
Red-shouldered Hawk (*Buteo lineatus*)	1	—	1	Year-round resident in the vicinity. A single adult was seen soaring and heard calling off-site to the west/southwest during the 2/13/15 and 3/5/15 visits.
Red-tailed Hawk (*Buteo jamaicensis*)	2	1+1	1+1	Year-round resident in the vicinity. During the 2/13/15 visit, a pair was seen soaring together off-site to the west. During the 2/20/15 and 3/5/15 visits, a single individual was seen soaring over the western portion of the access road and another was seen soaring over the eastern portion of the access road. Egg laying is mainly from late February to mid-April (Unitt, 2004).
American Kestrel (*Falco sparverius*)	—	—	1	Year-round resident in the vicinity. During the 3/5/15 visit, a male was seen as an overflight of the main drainage.

Species	13 Feb	20 Feb	5 Mar	Notes
California Quail (*Callipepla californica*)	1+1	1	1+1+ 1 covey	Year-round resident. During each of the first two visits, this species was heard only making the distinctive Rally Call, "chi-CA-go". During the last visit on 3/5/15, Rally Calls were heard, and a covey of about 14 birds were seen as well. The Quail's nesting season is affected by rainfall such that in wetter years, the season is extended. During most years, nesting begins in late March and lasts until late June (Unitt, 2004).
Mourning Dove (*Zenaida macroura*)	8	4	3	Probable breeding resident on-site. During the visits, this species was seen and heard in the main drainage. Nesting occurs typically from March to July (Unitt, 2004).
Greater Roadrunner (*Geococcyx californianus*)	—	1	—	Year-round resident. During the 2/20/15 visit, an individual was heard producing a bill clack within the habitat along the western portion of the access road. During dry to normal rainfall years, the egg laying season occurs between March and early June (Unitt, 2004).
Common Poorwill (*Phalaenoptilus nuttallii*)	—	1	—	Spring migrant. During the 2/20/15 visit, a male was heard making the "poor-will" call in the habitat along the western portion of the access road.
Anna's Hummingbird *(Calypte anna*)	7	6	4	Year-round resident. During the first two visits, aerial displays and chasing behaviors were observed. During the last visit, 4 males were seen and heard singing from perches in shrubs. In San Diego County, most Anna's nest from mid-February to early June (Unitt, 2004).
Acorn Woodpecker (*Melanerpes formicivorus*)	4	3	2	Year-round resident. In San Diego County, egg laying occurs from early April to mid-June (Unitt, 2004). This species was heard making Waka Calls in the riparian habitat along the main drainage.
Nuttall's Woodpecker (*Picoides nuttallii*)	1	—	—	Year-round resident in the vicinity. The Nuttall's Woodpecker is nonmigratory in San Diego County (Unitt, 2004). A single individual was heard making the Rattle Call in the riparian habitat along the main drainage.

Species	13 Feb	20 Feb	5 Mar	Notes
Northern Flicker (*Colaptes auratus*)	1	—	1+1	Year-round resident in the vicinity. During the first and last visits, this species was heard making the single Peah call note from the main drainage.
Say's Phoebe (*Sayornis saya*)	1	—	—	Winter visitor. During the 2/13 visit, a single individual was seen flycatching from the fence around the solar panels. According to Unitt (2004), "Say's Phoebes wintering in San Diego County depart primarily in March and arrive in September".
Cassin's Kingbird (*Tyrannus vociferans*)	2	—	1	Year-round resident in the vicinity. During the first and last visits, Cassin's Kingbirds were heard calling and seen in a small cluster of Eucalyptus trees southeast of the main drainage. Unitt (2004) states that the Cassin's Kingbird begins egg laying during the beginning of April.
Hutton's Vireo (*Vireo huttoni*)	1	—	—	Year-round resident in the vicinity. During the first visit, the monotonous song of this species was heard in the Oaks along the main drainage.
Western Scrub Jay (*Aphelocoma californica*)	3	1+1	3	Year-round resident. This species was heard and/or seen during each of the three site visits.
Common Raven (*Corvus corax*)	5	7	7	Year-round resident in the vicinity. Seen as overflights during all three surveys.
Oak Titmouse (*Baeolophus inornatus*)	1	—	1	Year-round resident in the vicinity. During the first and last visits, a single individual was heard in the Oaks along the main drainage.
Bushtit (*Psaltriparus minimus*)	2+3+2	2+2	3+2+3 +1	Year-round resident in the vicinity. This species is known to flock during the winter and break up into pairs during the breeding season. Nesting season begins as early as 9 February and continues through July (Unitt, 2004).
White-breasted Nuthatch (*Sitta carolinensis*)	1	—	—	Year-round resident in the vicinity. During the first visit, a single White-breasted Nuthatch was heard in the Oaks along the main drainage. Unitt (2004) shows this species as a confirmed breeder in the vicinity.

Species	13 Feb	20 Feb	5 Mar	Notes
Rock Wren (*Salpinctes obsoletus*)	4+2	1+1	5	Year-round resident. This species was seen and heard amongst the numerous boulders along the emergency access road. Males were heard singing during both the first and last visits.
Canyon Wren (*Catherpes mexicanus*)	1+1	1+1+1	1+1	Year-round resident. This species magnificent song was heard along the boulder strewn banks of the upper main drainage, as well as, in the drainage that parallels the emergency access road in the eastern portion of the survey area.
Bewick's Wren (*Thryomanes bewickii*)	1	1+1	—	Year-round resident. This species was heard singing during the first visit, and scolding during the second visit. Egg laying occurs mainly between mid-March to mid-June (Unitt, 2004).
House Wren (*Troglodytes aedon*)	—	—	1	Breeding resident in the vicinity? During the last visit, an individual was heard singing from the riparian habitat along the main drainage. According to Unitt (2004), "Spring migrants return to their breeding territories at low to moderate elevations in March . . ".
Ruby-crowned Kinglet (*Regulus calendula*)	—	1	—	Winter visitor. An individual was seen in the riparian habitat along the main drainage during the 2/20/15 visit.
California Gnatcatcher (*Polioptila californica*)	**—**	**—**	**—**	**See text for discussion.**
Wrentit (*Chamaea fasciata*)	3	3	3	Year-round resident. Although typically a species found in Chaparral habitat, the Wrentit also utilizes Sage Scrub. Egg laying begins during the third or fourth week of March and ends typically in June, rarely in early July (Unitt, 2004).
California Thrasher (*Toxostoma redivivum*)	1+1	3+2	1+1	Year-round resident. A pair of California Thrasher were seen moving through the vegetation together during the 2/20/15 visit. Egg laying typically begins in the third week of March (Unitt, 2004).
Orange-crowned Warbler (*Vermivora celata*)	2	2	1	Early breeding residents? The trill song made by males was heard during each visit from the riparian habitat along the main drainage.

Species	13 Feb	20 Feb	5 Mar	Notes
Yellow-rumped Warbler (*Dendroica coronata*)	4	2	—	Winter visitor. During the first two visits, this species was seen foraging in the riparian habitat along the main drainage.
Common Yellowthroat (*Geothlypis trichas*)	1	2	1	Breeding residents. During the first visit, a single male was seen in the riparian habitat along the main drainage. During the last two visits, males were heard making the Perch song, "wich-i-ty, wich-i-ty, wich-i-ty" from the riparian habitat along the main drainage.
Spotted Towhee (*Pipilo maculatus*)	5	4	1+2	Year-round resident. A pair was seen together during the last visit. Egg laying begins around the end of March/beginning of April and continues into July (Unitt, 2004).
California Towhee (*Pipilo crissalis*)	9+2+2	3+2+2	1+2+1	Year-round resident. During each of the visits, pairs of California Towhees were heard making the pair reunion duet. During the last visit, a California Towhee was seen carrying nesting material in the vegetation to the south of the solar panels. Egg laying begins around the third week in March (Unitt, 2004).
Rufous-crowned Sparrow (*Aimophila ruficeps*)	6	8	7	Year-round resident. There are eight territories along the emergency access road. This species prefers the steep slopes that are prevalent in this area (obviously).
Song Sparrow (*Melospiza melodia*)	—	—	1	Year-round resident. During the last visit, an individual was seen carrying nesting material in the vegetation along the main drainage.
White-crowned Sparrow (*Zonotrichia leucophrys*)	—	1	—	Winter visitor. A single individual was heard during the 2/20/15 visit.
House Finch (*Carpodacus mexicanus*)	7	14	13	Year-round resident. This species was seen mostly in and around the solar panel site. Nesting activity occurs between 19 February and 29 July (Unitt, 2004).
Lesser Goldfinch (*Carduelis psaltria*)	1	—	5	Year-round resident. Seen mainly as overflights. However, one male perched on the fence surrounding the solar site during the last visit.

Total Species: 39

[:\1725-bird-tbl.wpd]

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Appendix F – Site Photographs

Gnatcatcher Survey Gnatcatcher Survey Grid # 1.

5/8/2014, Southern end of Gnatcatcher Survey Grid #1. Steep with moderate amount of Artemisia. Location: 500134 x 3664819 (looking East/Southeast).

Gnatcatcher Survey Gnatcatcher Survey Grid # 1

5/8/2014, Western end of Gnatcatcher Survey Grid #1. Moderate amount of Artemisia and then oaks & houses. Location: 500134 x 3664819 (looking West)

Gnatcatcher Survey Gnatcatcher Survey Grid # 1

5/8/2014, Northwest part of Gnatcatcher Survey Grid #1. Steep & rocky, moderate amount of Artemisia with clusters of oak trees. Location: 500191 x 3665218 (looking Southeast)

Gnatcatcher Survey Gnatcatcher Survey Grid # 2

5/9/2014, Steep south-facing slope in distance, deer weed scrub - low in Artemisia, high in deerweed. Location: 501507 x 3664959 (looking north/northwest)

Gnatcatcher Survey Grid #3.

5/19/2014, Moderate quality CSS. Steep with much deer weed. Location: 501577 x 3665260 (looking west)

Gnatcatcher Survey Grid #3

5/19/2014, CHP on north facing slope (distant slope). Location: 501684 x 3665442 (looking south).

Gnatcatcher Survey Grid #3

5/9/2014, Steep south-facing slope, low in Artemisia, high in deerweed. Location: 501507 x 3664959 (looking north/northwest)

Gnatcatcher Survey Grid #3

4/21/2013, View of Gnatcatcher Survey Grid #3 from Southeast corner looking North/Northwest. Location: 501724 x 3664944

Gnatcatcher Survey Grid #3

4/21/2013, CHP vegetation: Chamise & manzanita in Southeast corner of Gnatcatcher Survey Grid #3. Also has scrub oak, ceanothus, keckiela, very little/no artemisia.

Gnatcatcher Survey Gnatcatcher Survey Grid # 4

5/8/2014, North end of Gnatcatcher Survey Grid #4. Steep with moderate amount of Artemisia. Location: 500394 x 3674655 (looking south)

Gnatcatcher Survey Grid #5

5/7/2013, North end of Gnatcatcher Survey Grid #5. High quality habitat with high amount of Artemisia. Location: 501136 x 3664832 (looking west)

Gnatcatcher Survey Grid #5

5/7/2013, North/central portion of Gnatcatcher Survey Grid #5. Moderate quality habitat: less Artemisia and more deerweed. Location: 500802 x 3664674 (looking East)

Gnatcatcher Survey Grid #5

5/7/2013, South end of Gnatcatcher Survey Grid #5. High amount of Artemisia. Location: 500876 x 3664443 (looking South)

Gnatcatcher Survey Grid #5

3/21/2013, Rock outcrop with moss and chalk lettuce in the East end of Gnatcatcher Survey Grid #5.

Gnatcatcher Survey Grid #5

3/21/2013, Terrace at Northeast side of Gnatcatcher Survey Grid #5.

Gnatcatcher Survey Grid #5

3/21/2013, Rocky drop off section below the terrace from the previous photograph.

Gnatcatcher Survey Grid #5

3/21/2013 Rocky drop off section below the terrace from the previous photograph.

Gnatcatcher Survey Grid #6

4/25/2013, Southwest corner of Gnatcatcher Survey Grid #6. Moderate quality habitat with Artemisia, Eriogonum, Malosma, Mustard.

Gnatcatcher Survey Grid #6

4/25/2013, Drainage at Southeast side of Gnatcatcher Survey Grid #6.

Gnatcatcher Survey Grid #6

4/25/2013, Center of Gnatcatcher Survey Grid #6: Moderate quality habitat structure with white sage, Artemisia, Malosma. High elevation.

Gnatcatcher Survey Grid #6

4/25/2013, Northwest corner of Gnatcatcher Survey Grid #6. High quality habitat: Same ssp as last photo plus poison oak.

Gnatcatcher Survey Grid #7

5/5/2013, High quality habitat in East side of Gnatcatcher Survey Grid #7 where California Gnatcatcher male was found. Location: 500496 x 3664030

Gnatcatcher Survey Grid #7

4/24/2013, Mulefat Scrub habitat in the west end of Gnatcatcher Survey Grid #7.

Gnatcatcher Survey Grid #7

4/24/2013, High quality habitat in the west side of Gnatcatcher Survey Grid #7 where California Gnatcatcher pair with fledglings was found.

Gnatcatcher Survey Grid #7

4/24/2013, CSS on south side of Oak Woodland at East end of Gnatcatcher Survey Grid #7. Artemisia, Keckiela, Malocathamnus, Malosma. Poison oak, chamise, Diplacus (scarlet monkey flower).

Gnatcatcher Survey Grid #7

4/24/2013, CSS on south side of Oak Woodland at East end of Gnatcatcher Survey Grid #7. Artemisia, Keckiela, Malocothamnus, Malosma. Poison oak, chamise, Diplacus (scarlet monkey flower).

Gnatcatcher Survey Grid #7

4/24/2013, Moderate quality habitat on north side of Oak Woodland in east end of Gnatcatcher Survey Grid #7. Artemisia, Eriogonum, Malosma, dry Deerweed. White sage, mustard, squaw bush, cucumber.

Gnatcatcher Survey Grid #7

4/24/2013, Moderate quality habitat on north side of Oak Woodland in East end of Gnatcatcher Survey Grid #7. Artemisia, Eriogonum, Malosma, dry Deerweed. White sage, mustard, squaw bush, cucumber. Steep slopes.

Gnatcatcher Survey Grid #7

4/24/2013, Lower quality habitat in center of Gnatcatcher Survey Grid #7 where California Gnatcatchers built a nest. Steep, rocky, Malosma, Artemisia, Eriogonum, dry Deerweed, Malocothamnus.

Gnatcatcher Survey Grid #7

4/24/2013, Cactus patch in west end of Gnatcatcher Survey Grid #7 where Cactus Wren pair built nest. Prickly pear, Malosma, mustard, Sambucus.

Gnatcatcher Survey Grid #7

5/7/2013, Active Cactus Wren nest in west end of Gnatcatcher Survey Grid #7. Location: 499819 x 3664060

Gnatcatcher Survey Grid #7

5/5/2013, Prior season California Gnatcatcher nest in west end of Gnatcatcher Survey Grid #7.

Gnatcatcher Survey Grid #7

5/5/2013, Striped Racer in Oak Woodland at Southeast end of Gnatcatcher Survey Grid #7.

Gnatcatcher Survey Grid #7

4/14/2013, Bedrock milling station in west portion of Gnatcatcher Survey Grid #7.

West of Gnatcatcher Survey Grid #7

5/20/2014, Riparian area nearby off site: location is west/downstream of intersection of Rockwood Road and Vistamonte Avenue.

Gnatcatcher Survey Grid #8

3/21/2013, Oak Woodland channel at North end of Gnatcatcher Survey Grid #8.

Gnatcatcher Survey Grid #8

3/21/2013, Oak Woodland wash at North end of Gnatcatcher Survey Grid #8. Channel 2' deep & 6' wide.

Facing east up drainage filled with chaparral at central portion of project site.

Turkey vultures basking on a rock outcropping.

Typical unvegetated channel Waters of US/State on the project site.

Well incised channel with vertical banks, Ordinary High Water Mark width is the same as the Top of Bank width.

Northern emergency access road alignment. The alignments uses an existing dirt road that includes a drainage crossing through oak riparian woodland.

Second drainage crossing associated with the northern emergency access road alignment. This drainage is dominated by chaparral vegetation.

Typical mixed chaparral habitat in the northern half of the project site and northern emergency access road alignment. View north of typical chaparral habitat in the northwestern portion of the Study Area. Taken 4/8/2015

Mesic meadow dominated by western ragweed and deer grass in this photograph. Adjacent upland vegetation is mixed chaparral.

View south of the lower elevation grassland and oak riparian habitats. Taken 4/6/2015.

View northwest of the southeastern portion of the Study Area. Taken 4/6/2015. Sage scrub and Deer weed scrub are the dominant vegetation in this photograph.

View south of thick chaparral on steep slopes of the northwestern portion of the Study Area. Taken 4/6/2015.

View northeast of the oak riparian area in the southern portion of the Study Area. Taken 3/31/2015

View northeast of rock outcrop habitat dominated by spike moss. Taken 4/1/2015.

CRPR 4.2 species golden rayed Pentachaeta (*Pentachaeta aurea* ssp. *aurea*). Taken 4/6/2015.

Southern Pacific rattlesnake

San Diego Horned Lizard.

Appendix G – MSCP Consistency Analysis Report
(prepared by Merkel & Associates, Inc. 2017)

SAFARI HIGHLANDS RANCH PROJECT
MSCP/MHCP CONSISTENCY ANALYSIS REPORT

October 2017

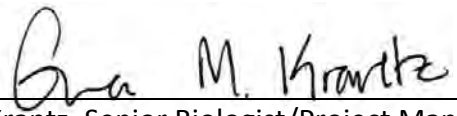
Prepared for:

Safari Highlands Ranch, LLC
Contact: Jeb Hall
437 South Highway 101, Suite 212
Solana Beach, CA 92075
Phone: (858) 875-7373
Fax: (858) 875-7374
jeb@concordiahomes.cc

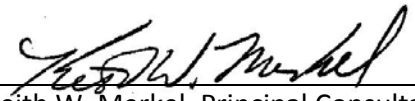
County of San Diego
Planning & Development Services
5510 Overland Avenue, Suite 310
San Diego, CA 92123

Prepared by:

Merkel & Associates, Inc.
Contact: Gina Krantz
5434 Ruffin Road
San Diego, California 92123
Phone: (858) 560-5465
Fax: (858) 560-7779
gkrantz@merkelinc.com



Gina Krantz, Senior Biologist/Project Manager



Keith W. Merkel, Principal Consultant

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APPENDICES

INTRODUCTION

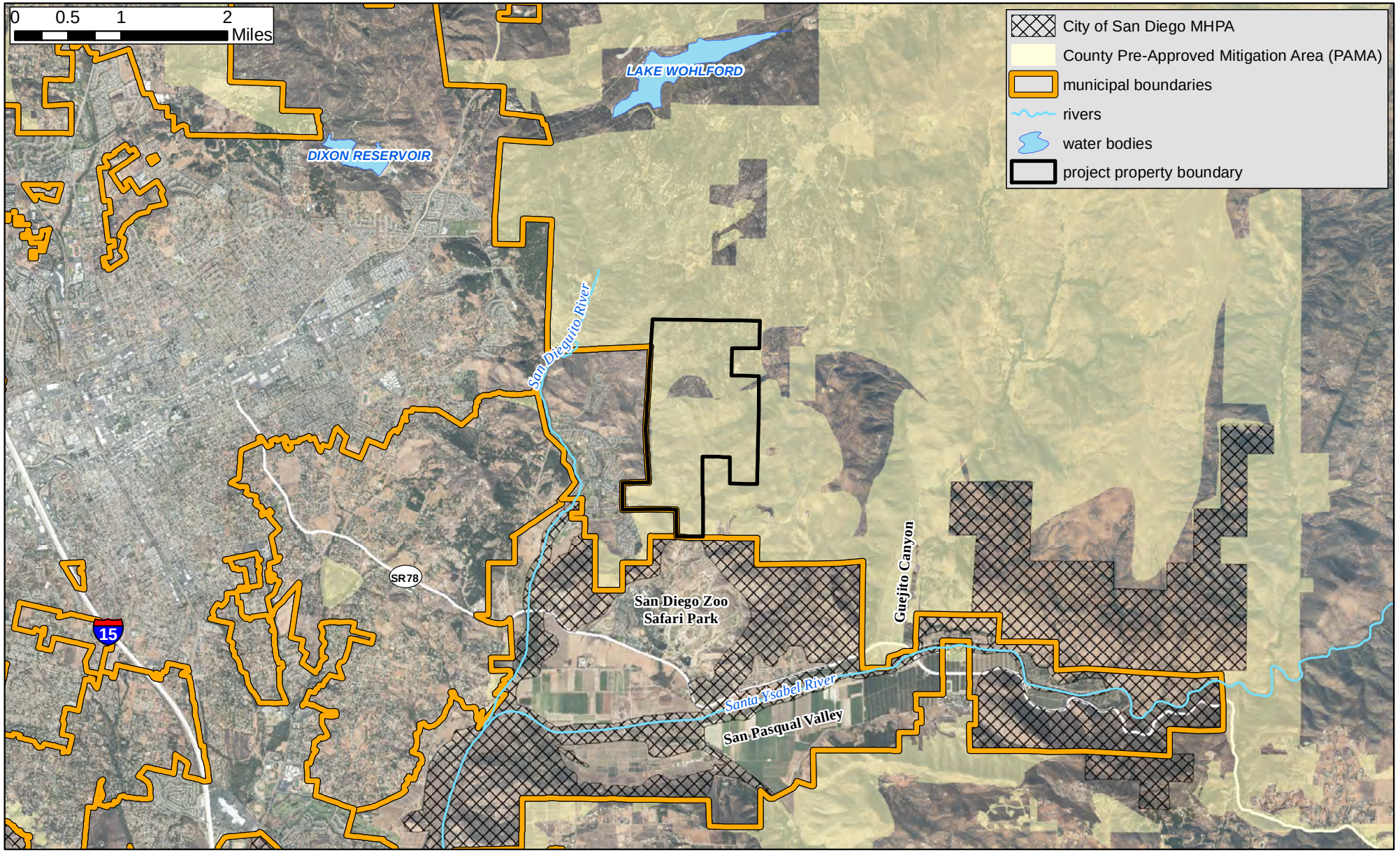
The proposed Safari Highlands Ranch project includes the proposed annexation of land within the project site currently within the County of San Diego (County) jurisdiction to the City of Escondido. Further, the land proposed for annexation is located within the adopted South County Multiple Species Conservation Program (MSCP) Pre-Approved Mitigation Areas (PAMA) generally in the southern half of the project site and draft unadopted North County MSCP PAMA in the northern half the project site. The proposed annexation requires the preparation of an acceptable multi-party annexation agreement between the County, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), City of Escondido, and the project applicant, Safari Highlands Ranch, LLC, as well as, approval by the San Diego Local Agency Formation Commission (LAFCO).

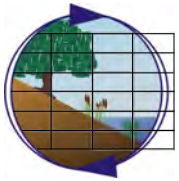
Based on a meeting with the County of San Diego planning staff, project applicants, City of Escondido, and project environmental consultants on January 27, 2017, it was discussed that additional coordination is necessary with the County and Wildlife Agencies (i.e., USFWS, CDFW) prior to the preparation of the draft project annexation agreement. To assist the County and Wildlife Agencies in their review of the proposed project and the potential effects on the applicable adopted South County MSCP Subarea Plan, the approved North County MSCP Planning Agreement, adopted City of San Diego MSCP Subarea Plan, and the unadopted and inactive City of Escondido Multiple Habitat Conservation Plan (MHCP) Subarea Plan, it was requested that Merkel & Associates, Inc. (M&A) prepare this MSCP/MHCP consistency analysis.

Althouse and Meade, Inc. (Althouse) prepared the original project Biological Technical Report and the Biological Resource Management Plan (BRMP) for the Safari Highlands Ranch Project, dated October 2016 and November 2016, respectively. Subsequently, M&A reviewed and updated the Althouse Biological Report to include arroyo toad protocol survey results and an updated project impact analysis needed to ensure MSCP consistency. This MSCP consistency analysis assesses the proposed project as provided in the updated M&A/Althouse biological report dated October 2017.

Project Site Location

The project site encompasses approximately 1,100 acres located along the southeastern boundary of the City of Escondido and northern boundary of the adopted South County MSCP Subarea within the northern portion of the Metro-Lakeside Jamul Segment in the County of San Diego. The site is located approximately 1.5 miles north of State Route 78 and Santa Ysabel River within the San Pasqual Valley and 2 miles south of Lake Wohlford (Figure 1). Directly to the west and southwest are conserved open space lands within the Escondido city limits and to the south are the San Diego Zoological Society Safari Park and the City of San Diego's Multi-Habitat Planning Area (MHPA) to the southeast and southwest within the boundaries of the City of San Diego. Also to the southwest is a large residential development and golf course. Private undeveloped lands occur to the east with one parcel being conserved in open space and private rural residences occurring on large lots to the southeast, north and northeast of the project property (Figure 2).





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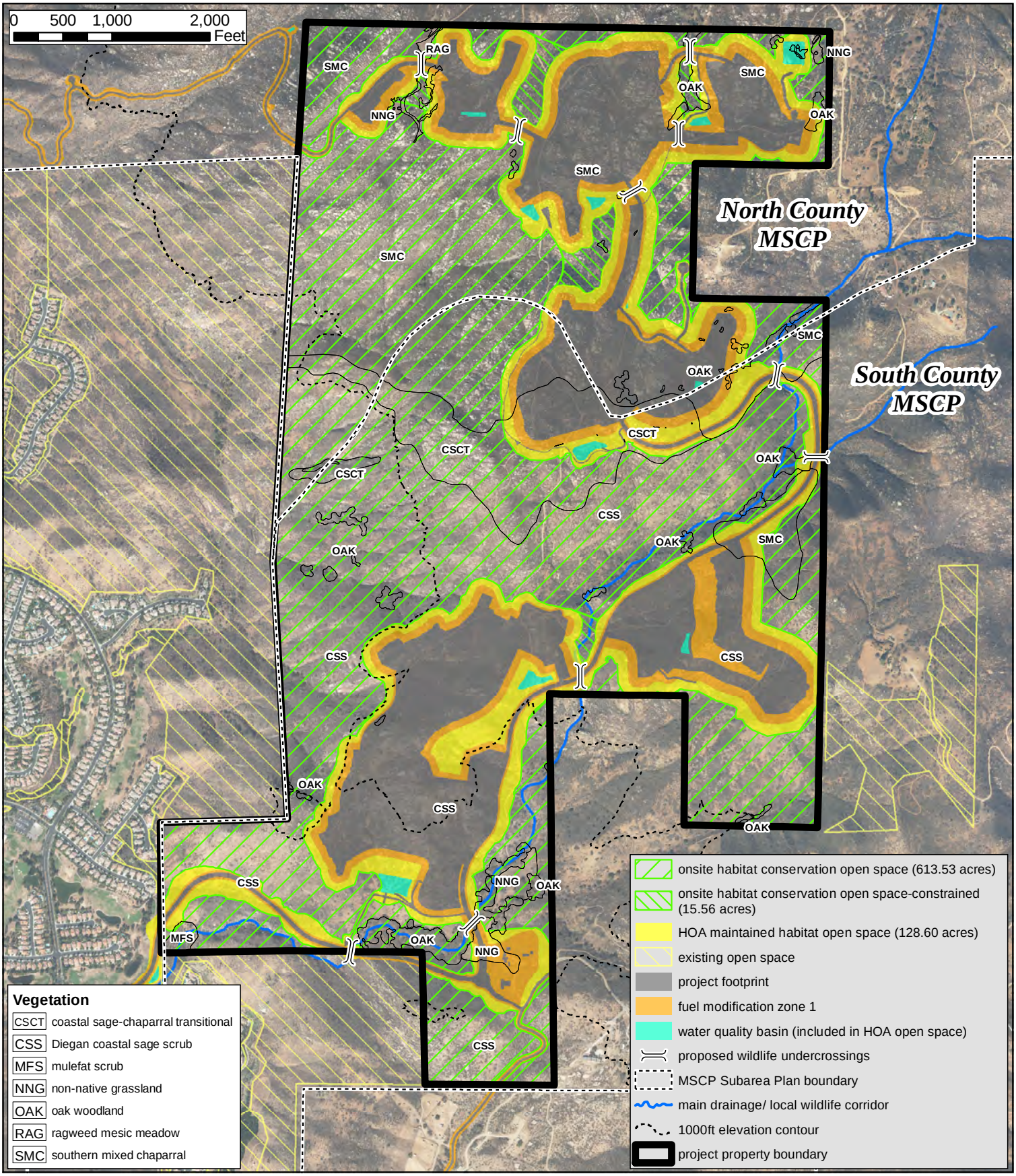
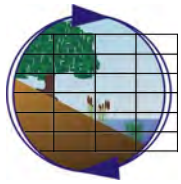
Vicinity Map

Safari Highlands Ranch

Figure 1





N W E S

Proposed Open Space
Safari Highlands Ranch

Figure 2

The southern half of the project site is within the County of San Diego's adopted MSCP Subarea and specifically within the northern portion of the Metro-Lakeside Jamul Segment; and the northern half is within the County's proposed draft unadopted North County MSCP Planning Area. The majority of the adopted South County MSCP portion of the project site is a mapped PAMA and entirety of the draft North County MSCP portion of the site is mapped as a draft PAMA (Figure 1).

Proposed Project Description

The project includes a 1,098.6-acre portion of Specific Plan Area (SPA) 4 and proposes 550 luxury single-family residential dwelling units on lots ranging upwards from an average of approximately 16,400 square feet. Public uses will consist of a fire station, public parking for the fire station and approximately 9.3 miles of public trails. Two emergency access roads will be provided offsite, one to the northwest and another to the south. The northern emergency access road will be approximately 2.4 miles long and will connect to Stonebridge Road, an existing road leading through Beacon-Sun Ranch. The southern emergency access road will be an approximately one mile long segment of the existing Zoo Road that will be upgraded to accommodate emergency vehicles accessing the project from State Route 78 (San Pasqual Valley Road). Fuel modification zone (FMZ) 1 is proposed 75-100 feet from the project footprint and would consist of vegetation clearing and irrigation. FMZ 2 is an additional 75-100 feet beyond FMZ 1 that would be subject to vegetation thinning for wildfire fuel management purposes but not irrigated. The management of FMZ 2 would retain the native vegetation character of the FMZ 2, while reducing vegetation density, height, and flammability characteristics. This principally means a reduction in tall and highly flammable chaparral species over lower growing and lower flammable sage scrub plant species. . The project would establish a 128.60-acre Homeowner's Association (HOA) maintained habitat open space including FMZ 2 to buffer the proposed development and reduce edge effects to adjacent conservation open space. An extensive native habitat revegetation program is proposed within the HOA maintained habitat open space to better integrate natural areas and the proposed development. The HOA maintained habitat open space including FMZ 2 is illustrated along with the development envelopes in Figure 2.

The project proposes 629.09 acres of habitat conservation open space that includes large blocks of native habitat connecting to offsite conserved lands to the west, east, and south, as well as to vacant undeveloped private lands to the east and north (Figure 2). Within the conservation open space, there are several habitat areas that support existing drainages, wetlands, and/or sensitive native habitat that may be constrained by the proposed development predominately in the northern portion of the site. These areas (approximately 15.5 acres) referred to as habitat conservation open space-constrained would be conserved to maintain connectivity within the drainage, avoid wetlands/riparian habitat, and/or facilitate wildlife movement along with the larger blocks of habitat within the conservation open space (Figure 2).

MSCP/MHCP CONSISTENCY ANALYSIS

There are four MSCP or MHCP Subarea Plans boundaries that either overlap or are directly adjacent to the project property. These include the adopted South County MSCP (southern portion of project site), the draft unadopted North County MSCP (northern portion of project site and offsite northern emergency access road) for which there is an adopted Planning Agreement, the adopted City of San Diego MSCP Subarea (offsite southern emergency access road), and the draft unadopted City of Escondido MHCP within the City of Escondido limits directly to the west/southwest and located outside of the proposed project site and/or offsite emergency roads. Because the project site presently straddles both adopted and unadopted conservation plan under the County MSCP and is proposed to be annexed into the City of Escondido where an unadopted and inactive draft subarea plan been has been prepared under an adopted MHCP subregional plan, the conservation planning environment for the site is complex. As a result, the analyses in this document consider the most stringent applicable criteria/standards and mitigation ratios of any of the plans, adopted or unadopted. Each of these MSCP/MHCP Plans is addressed below separately with the applicable MSCP/MHCP findings, criteria, and/or goals summarized followed by the project's applicability and consistency in bold.

Adopted South County MSCP Subarea Plan Findings

Projects within the Subarea Plan must demonstrate conformance with the MSCP by completing MSCP Findings. These findings are required by the Subarea Plan and/or the BMO, and are required for all projects within the MSCP. The Findings are made up of the following five sections. These findings are followed by a description (in bold) of how the proposed project meets each finding.

- *BRCA Status (BMO Section 86.506 (a)(1) a).*
  - ✓ **Only the southern portion of the project site is located within the adopted MSCP Subarea and this area is predominately located inside a PAMA (approximately 43 acres near the center of the site is not mapped as PAMA although the purpose of the exclusion is not clear) (Figures 1 and 2). The remainder of the project site, located in the draft North County MSCP Subarea, is mapped entirely as a PAMA. Since the majority of the site is mapped as a PAMA (and the non-PAMA area supports native habitat and is surrounded by PAMA), the entire project site would be considered a BRCA. However, only the southern portion of the project site is located within the adopted MSCP Subarea.**

- *Project Design Criteria (BMO Section 86.505(a))*
  Impacts to the following shall be avoided to the maximum extent practicable:

  Critical Populations of Sensitive Plant Species within the MSCP Subarea (Attachment C).
  - ✓ **Based on rare plant surveys conducted onsite in 2014-2015, no critical populations of sensitive plant species as specified in Attachment C list occur or are expected to occur on the project site due to the lack of suitable habitat, soils and/or the project site is located outside of the species known range; therefore, no impacts to these species/populations would occur. While no critical plant populations occur on site,**

the M&A/Althouse biological report Figures 4a-4c mapped the sensitive plant species observed onsite through the 2014, 2015, and 2017 field efforts (Appendix 1).

Significant Populations of Rare, Narrow Endemic Animal Species within the MSCP Subarea (Attachment D)

- ✓ **Based on the M&A/Althouse biological report the only rare, narrow endemic species that is known or expected to occur onsite is the cactus wren.**

- ✓ **The project site supports one pair of cactus wren in a relatively small patch of cactus scrub. Due to the limited amount of suitable nesting habitat onsite and only one pair documented in the onsite habitat, the onsite cactus wren would not be considered a significant population. Further, the onsite cactus wren pair is to be conserved within the cactus scrub patch that is surrounded by a larger area of Diegan coastal sage scrub to be conserved.**

- ✓ **The project site supports marginal habitat, at best, for arroyo toad. M&A conducted arroyo toad (*Anaxyrus californicus*) protocol surveys during the appropriate survey period in 2017 within an above average rain season. The protocol surveys were negative, therefore, the project site does not support arroyo toad and the proposed project would not impact arroyo toad.**

- ✓ **Golden eagle (*Aquila chrysaetos*) is not expected to nest onsite due to lack of potential nesting habitat and lack of known nesting records onsite. The nearest golden eagle nesting record is dated 1991 and is located approximately 5,400 feet east of the northeastern boundary of the project site in Rockwood Canyon (CNDDB 2017). This golden eagle nesting location is extant (Robert Fisher, pers. comm., July 5, 2017) within Rockwood Canyon. The project site supports potentially suitable peripheral foraging habitat although the golden eagles' primary prey (i.e., jackrabbits) have not been observed/detected onsite. The M&A/Althouse biological report includes an assessment of golden eagle potential to occur onsite through the review of the best available data and information including the U.S. Geological Survey (USGS) biotelemetry data for golden eagle (Tracey et al 2016 and 2017). The USGS golden eagle telemetry data displayed infrequent golden eagle flyover movement data on or in close proximity to the project site; however, this study is not an exhaustive study of all golden eagle that may occur in the project area. Further, based on the M&A/Althouse biological report no golden eagles were observed at the project site during 2014, 2015, or 2017 field efforts conducted by project biologists, which included over 84 person field days on-site and at the off-site facilities. Based on previous biological surveys conducted onsite in 1998 and 1999 by Mooney & Associates, Inc., only one occurrence of golden eagle flying over the site was observed.**

Narrow Endemic Plant Species within the MSCP Subarea (Attachment E),

- ✓ **None of the MSCP Narrow Endemic species on this list were observed during 2014-2015 rare plant surveys conducted onsite and/or are not expected to occur onsite and/or have a low potential to occur onsite.**

San Diego County Sensitive Plants, as defined herein, and impacts to land determined to be a Biological Resource Core Area

- ✓ **The project site supports a large amount of lower sensitivity County sensitive plants and is entirely considered a BRCA due to the PAMA mapping over the majority of the site. The project minimizes impacts to County Sensitive Plants and BRCA lands where applicable and to the maximum extent practicable; however, due to the extent of County sensitive plant species onsite, impacts to these resources are generally unavoidable.**

The project would avoid the above resources to the maximum extent practicable by using the following design criteria:

Project development shall be sited in areas which minimize impact to habitat;

- ✓ **Although the majority of the project site supports native habitat, the proposed project avoids impacts to wetlands and oak riparian woodland (Tier I) habitats to the maximum extent practicable and minimizes other native habitat impacts where feasible. The project design retains wildlife movement connectivity and maintains large contiguous blocks of native habitat over smaller blocks of habitat. Further the design considers the conservation designations and values of surrounding lands in the context of onsite conservation configuration to ensure that resource value is optimized on the site with respect to landscape ecology considerations.**

Clustering to the maximum extent permitted by County regulations shall be considered where necessary as a means of achieving avoidance;

- ✓ **The project development footprint is clustered into four large clusters in two general areas (i.e., northern and southern) of the property. These clusters are then connected by a single roadway that integrates wildlife undercrossings to maintain habitat continuity and wildlife movement.**

Notwithstanding the requirements of the Slope Encroachment Regulations contained within the Resource Protection Ordinance, projects shall be allowed to utilize design which may encroach into steep slopes to avoid impacts to habitat;

- ✓ **The project considered impacts to steep slopes to avoid impacts to habitat including the onsite drainages that support oak riparian woodland in the project design, where applicable.**

The County shall consider reduction in road standards to the maximum extent consistent with public safety considerations;

- ✓ **The project considered reduction in road standards to the maximum extent consistent with public safety considerations. Specifically, the project originally proposed the entry road as a public road; however, the project design was revised to propose all project-related roads as private roads in order to deviate from public road standards which, among other things, would require gradients and road widths that would result in greater impact on habitat area and environmental resources.**

Projects shall be required to comply with applicable design criteria in the South County MSCP Subarea Plan, attached hereto as Attachment G (Preserve Design Criteria) and Attachment H (Design Criteria for Linkages and Corridors).

- ✓ **The project complies with the adopted MSCP Preserve Design Criteria and Design Criteria for Linkages and Corridors, as specifically provided in the following sections.**

- *Preserve Design Criteria (BMO Attachment G)*
  General goals on both a project-by-project basis and for the Segment as a whole are to do the following:

  1) Acknowledge the no-net-loss-of-wetlands standard that individual projects must meet to satisfy state and federal wetland goals, policies, and standards and implement applicable County ordinances with regards to wetland mitigation;

  - ✓ **The proposed project would avoid and/or minimize impacts to wetlands to maximum extent practicable and would apply the federal and state no net loss policy as well as adopted County wetland mitigation ratios and regulations to the project where applicable. In the case of oak riparian woodland mitigation, the City of Escondido's draft Subarea Plan and MHCP mitigation ratio of 3:1 is greater than the County's mitigation ratio of 2:1 for same habitat; therefore, the project would apply the 3:1 mitigation ratio since this mitigation ratio is the most stringent for this habitat type among all the MSCP/MHCP plans considered for this project.**

  2) Include measures to maximize the habitat structural diversity of conserved habitat areas, including conservation of unique habitats and habitat features (e.g., soil types, rock outcrops, drainages, host plants);

  - ✓ **The project proposes the following measures to maximize the habitat structural diversity of conserved habitat areas:**
    - o **avoid and conserve large connecting blocks of native habitats,**
    - o **avoid/minimize impacts and conserve mesic meadow habitat;**
    - o **avoid/minimize impacts and conserve rock outcroppings;**
    - o **avoid/minimize impacts and conserve the onsite riparian drainages/oak riparian woodland to facilitate wildlife movement, provide wildlife habitat, and to maintain stream hydrology connections;**
    - o **inclusion of wildlife undercrossings along identified local wildlife movement corridors onsite that intersect the proposed roads with an appropriate openness ratio (e.g., an openness ratio of at least 0.75 for larger mammals such as mule deer and mountain lion; or smaller sized culverts for small wildlife species such as small mammals and herpetofauna) is being proposed to meet goals of connectivity for wildlife movement. While the project plans do not yet have the degree of specificity to evaluate achievement of this objective, the project proponent has committed to achieving this standard as the project moves through design engineering phases;**
    - o **minimize impacts and apply buffers to preserved oak trees including Engelmann oaks;**
    - o **avoid and conserve all of cactus wren breeding habitat, and**

- **implement a native revegetation program within HOA maintained habitat open space.**

3) Provide for the conservation of spatially representative examples of extensive patches of coastal sage scrub and other habitat types that were ranked as having high and very high biological value by the MSCP habitat evaluation model;

- ✓ **The MSCP Habitat Evaluation Model Map is included in the adopted South County MSCP Subarea Plan and BMO Attachment G. The southern portion of the project site lies within the adopted MSCP Subarea. The habitat evaluation model from the adopted plan was extracted from the plan PDF and spatially registered to digitize modeled habitat value categories. Impacts were then evaluated by overlaying development footprints and the results from the MSCP habitat evaluation model. This allowed determination of the extent of project impact and conservation of habitat defined by the evaluation model (Appendix 2). The onsite areas ranked as High and/or Very High biological value based on the Habitat Evaluation Model is generally located in the central portion and along the southwestern portions of the project site. Based on the adopted MSCP habitat evaluation model, there are approximately 301 acres of mapped Very High value habitat and approximately 89 acres of habitat mapped as High value within the adopted South County MSCP area of the site. These Very High and High value areas predominately support coastal sage scrub (CSS) with a few areas of southern mixed chaparral and interspersed patches of oak riparian woodland along the main drainage that runs along the central and southwestern areas of the site. Within the mapped Very High Value habitat there is approximately 219 acres of Very High value CSS. Within the High value habitat there is approximately 56 acres of High value CSS within the adopted MSCP Subarea of the site.**

- ✓ **The project proposes to conserve approximately 65 percent of Very High value habitat (i.e., 196 acres out of 301 acres). Within this, 153 acres out of 219 acres of Very High value CSS (70 percent) would be conserved onsite.**

- ✓ **The project proposes to conserve approximately 83 percent of High value habitat (i.e., 74 acres out of 89 acres of High value habitat) and 88 percent of High value CSS habitat (i.e., 49 acres out of 56 acres) within the adopted MSCP Subarea.**

- ✓ **The proposed project HOA maintained habitat open space/FMZ 2 includes 41 acres of Very High value including 21 acres of Very High value CSS, as well as 3 acres of High value habitat including 2 acres of High value CSS. Although these zones will be maintained and thinned for fuel purposes and will not be counted to offset habitat impacts, they will be managed as an HOA maintained habitat open space, revegetated, and will provide additional functional scale and buffering to the conserved lands that add to habitat value. As a note, impacts to these zones would be mitigated by the proposed habitat conservation open space.**

4) Create significant blocks of habitat to reduce the edge effects and maximize the ratio of surface area to the perimeter of conserved habitats using the criteria set out in Chapter 6, Section 6.2.3 of the MSCP Plan.

- ✓ **The project proposes a large block of conserved native habitat along the western portions of the site that connect to existing open space located offsite to the west, as well as across the central portion of the project site that connects the existing offsite open space from the west to vacant undeveloped land to the east that supports native habitat and is located in the County PAMA. Signage and fencing where appropriate along the interface between the proposed development and open space will restrict access to the biological open space areas except along designated trails to minimize potential future impacts to the sensitive habitats. The HOA maintained habitat open space includes a native revegetation program that would provide native habitat within a buffer between the development and conserved open space. Further, the project would prepare and implement a Biological Resource Management Plan for the conservation open space to ensure its success.**

- ✓ **Several sensitive habitat areas supporting drainages have been avoided and wildlife undercrossings have been integrated into these areas to maintain habitat connectivity. Where open space narrows between development areas, corridor design objectives have been used to maintain short and wide connections to the maximum extent practical. To facilitate review, these areas are mapped as constrained open space (Figure 2). The project proposes 629.09 acres of habitat conservation open space. Of the 629.09 acres, only 2 percent (15.56 acres) is considered to be constrained by potential edge effects of adjacent development, considering habitat size and configuration (Figure 2).**

5) Provide incentives for development in the least sensitive habitat areas;

- ✓ **The project applies the adopted MSCP mitigation ratios that have been developed to provide an incentive for development outside and mitigate inside the PAMA. Further, the project has been designed to avoid and/or minimize impacts to wetlands, oak woodlands, coastal sage scrub, and chaparral to maximum extent practicable.**

6) Minimize impacts to narrow endemic species and avoid impacts to core populations of narrow endemic species;

- ✓ **As provided above in the Project Design Criteria section, no narrow endemic species or core populations of narrow endemics would be impacted by the project.**

7) Preserve the biological integrity of linkages between Biological Resource Core Areas; and

- ✓ **The project site is not located within a MSCP linkage as provided in the MSCP and thus would not affect a linkage.**

8) Achieve the conservation goals for covered species and habitats**.** The adopted MSCP Condition for Coverage for California gnatcatcher includes the conservation of the following:

68% of habitat supporting core gnatcatcher populations, 70% of Very High value and 62% of High value gnatcatcher (CSS) habitat, and critical habitat linkages between core areas.

- ✓ **The project applies habitat mitigation ratios that are consistent with the adopted MSCP/BMO as well as the BMO project criteria (as provided in these Findings) and is consistent with MSCP habitat and covered species conservation goals.**

- ✓ **The Escondido/San Pasqual Valley "core" reserve gnatcatcher population identified in the Population Viability Analysis of the California Gnatcatcher in the adopted MSCP likely extends into the southernmost portions of the project site. One of the gnatcatcher MSCP conditions for coverage includes the conservation of 68% of habitat that supports core gnatcatcher populations. The onsite areas of occupied gnatcatcher habitat (e.g., five gnatcatcher territories/occurrences) and presumed occupied habitat are located in the southern and western portions of the site, respectively, and are located below 1, 000 feet in elevation. The project proposes a total of 189.06 acres of CSS out of 265.10 acres of CSS (71%) below the 1,000 elevation contour will be conserved in the proposed conservation open space onsite. The proposed conservation of 71% of habitat supporting the onsite portion of the core gnatcatcher population meets the gnatcatcher condition of coverage requiring 68%. This area represents the remaining onsite gnatcatcher occupied habitat after project implementation and the remaining onsite portion of the Escondido/San Pasqual Valley "core" regional gnatcatcher population that likely extends onsite. It is expected that the onsite gnatcatchers will be able to continue to utilize the conserved CSS habitat after project implementation. Similarly, offsite gnatcatchers may utilize the suitable habitat within the proposed conserved open space due to its connectivity to adjacent occupied and conserved CSS habitat located south and west of the project.**

- ✓ **The project includes the onsite conservation of 70% (153 acres out of 219 acres acres) of CSS habitat mapped as Very High value and 88% (49 acres out of 56 acres) of CSS mapped as High value (Appendix 2). The Condition of Coverage for gnatcatcher includes the conservation of 70% of Very High value and 62% of High Value CSS habitat. The proposed project onsite conservation meets the 70% Very High Value condition and exceeds the amount of High Value condition by 26%. Notably, all gnatcatcher occurrences on site were within the habitat modeled as Very High.**

- ✓ **The project site is not a critical habitat linkage between core areas, as provided in in the MSCP.**

- *Design Criteria for Corridors and Linkages (BMO Attachment H)*

  The following are the design criteria to protect the biological values of regional linkages and corridors:

1) Habitat linkages as defined by the Biological Mitigation Ordinance, rather than just corridors, will be maintained.

- ✓ **The project site is not located within a Critical Biological Resource Area as identified in Section 4.2.2 of the adopted Subarea Plan nor is the project located within one of the five linkages identified in Section 4.2.3 of the Subarea Plan. No regional habitat linkages/corridors occur onsite. The closest regional linkage is the San Pasqual Valley approximately 1.5 miles south of the project site and/or Guejito Canyon approximately 1.5 miles east of the project site. Further, the project site is not located within or in proximity to a primary linkage/corridor between the northern and southern regional populations of California gnatcatcher in the population viability analysis for gnatcatcher, as referenced in the MSCP.**

2) Existing movement corridors within linkages will be identified are maintained.

- ✓ **The project site is not located within a regional linkage. Three local wildlife movement corridors occur onsite including the main drainage/riparian corridor (primary local movement corridor) that runs east-west in the central portion of the site. Two of the three local movement corridors are proposed to be maintained through onsite conservation open space and appropriately sized wildlife undercrossings at roadways including where the topography naturally narrows (Figure 2).**

3) Corridors with good vegetative and/or topographiç cover will be protected.

- ✓ **As described above, the identified local movement corridors are proposed to be protected.**

4) Regional linkages that accommodate travel for a wide range of wildlife species, especially those linkages that support resident populations of wildlife, will be selected.

- ✓ **No regional linkage/corridor occur onsite.**

5) The width of a linkage will be based on the biological information for the target species, especially those linkages that support resident populations of wildlife, will be selected.

- ✓ **Based on the M&A/Althouse biological report, larger mammals including mountain lion and mule deer have been documented in the main drainage/primary corridor that runs through the central and southern portion of the project site. The project proposes to largely avoid impacts to this main drainage/primary local corridor and the secondary smaller drainage/corridor in the northern portion of the site that facilitates wildlife movement through the inclusion of appropriately sized wildlife undercrossings (e.g., greater than or equal to 0.75 openness ratio for large mammals in main drainage; smaller openness ratio for secondary corridor) where proposed roads intersect this drainage.**

6) If a corridor is relatively long, it must be wide enough for animals to hide in during the day. Generally, wide linkages are better than narrower ones. If narrow corridors are unavoidable, they should be relatively short. If the minimum width of a corridor is 400 feet, it should be no longer than 500 feet. A width of greater than 1,000 feet is recommended for larger mammals and birds. Corridors for bobcats, deer, and other large animals should reach rim-to-rim along drainages, especially if the topography is steep.

- ✓ **The width of the primary local movement corridor within the existing main drainage/canyon in the central portion of the site is generally steep and generally ranges between 1,000 feet to 1,600 feet in width spanning rim to rim, except where it naturally narrows to 300-700 feet in width. This drainage/canyon continues to the south where the canyon narrows to approximately 200-400 feet wide and the creek bottom is rocky near the southeastern project property boundary. The rocky drainage runs offsite for approximately 800 feet in length and then continues back onsite at the southeastern corner where it flattens out to a large linear patch of oak riparian woodland along the drainage. This reach of the riparian corridor onsite ranges from 200 feet to 700 feet wide and includes the entire extent of the oak riparian woodland and intermixed non-native grassland. The corridor continues to the west generally along the site's southern boundary approximately 200 feet wide rim to rim where this steep and rocky drainage/corridor continues offsite to an open and relatively flat section that supports mule fat scrub and further southwest through partially developed areas where it ultimately connects to San Dieguito River.**

- ✓ **The project proposes to retain the integrity and function of the main local movement corridor described above through proposed onsite habitat conservation, buffers to development, and appropriately sized wildlife undercrossings.**

7) Visual continuum (i.e., long lines-of-sight) will be provided within movement corridors. This makes it more likely that the animals will keep moving through it. Developments along the rim of a canyon used as a corridor should be set back from the canyon rim and screened to minimize their visual impact.

- ✓ **The existing main wildlife movement corridor will remain intact and the proposed wildlife undercrossings will be designed to maintain wildlife movement for the larger species that are known to move through this main drainage/riparian corridor. This includes a design of the undercrossing to meet or exceed the recommended openness ratio of 0.75, where applicable. As described in the M&A/Althouse report, the areas of development at the top of the canyons adjacent to the wildlife corridor would be buffered to reduce the potential for any substantial indirect visual impacts within wildlife movement corridors and maintain the visual continuity of the local corridors onsite.**

8) Corridors with low levels of human disturbance, especially at night, will be selected. This includes maintaining low noise levels and limiting artificial lighting.

- ✓ **Project design features (e.g., HOA maintained habitat open space) would reduce potential indirect impacts from edge effects on the conserved habitats including the wildlife movement corridors. As provided in the M&A/Althouse biological report, project night-time lighting adjacent to biological open space areas would be shielded and directed away from the conserved habitat to avoid any significant indirect effects of light pollution on the conserved habitat. Signage and appropriate fencing will restrict access to the biological open space areas except along designated trails to avoid and/or minimize potential disturbance and noise**

levels in corridors. Further, project grading activities would avoid the breeding season and applicable noise restrictions would be implemented if necessary.

9) Barriers, such as roads, will be minimized. Roads that cross corridors should have 10-foot high fencing that channels wildlife to underpasses located away from interchanges. The length-to-width ratio for wildlife underpasses is less than 2, although this restriction can be relaxed for underpasses with a height of greater than 30 feet.

- ✓ **All of the proposed roads that cross any of the local wildlife movement corridors onsite include wildlife undercrossings (Figure 2). The project wildlife undercrossings along the main drainage are proposed as arched culverts with a natural substrate bottom and wing fencing that would channel wildlife to the undercrossing. The proposed wildlife undercrossings will have an appropriate openness ratio to meet goals of connectivity for wildlife movement. The undercrossings along the small drainage in the northern portion of the site would be appropriately sized to facilitate continued small mammal and herpetofauna movement. While the project plans do not yet have the degree of specificity to evaluate achievement of this objective, the project proponent has committed to achieving this standard as the project moves through design engineering phases. Further, the speed limit for the proposed Safari Highlands Ranch Road that runs through the project site is planned to be 30 miles per hour maximum. The project would also implement traffic calming measures such as speed bumps with signs noticing the presence of a wildlife crossing.**

10) Where possible at wildlife crossings, road bridges for the vehicular traffic rather than tunnels for wildlife use will be employed. Box culverts will only be used when they can achieve the wildlife crossing/movement goals for a specific location. Crossings will be designed as follows: sound insulation materials will be provided; the substrate will be left in a natural condition and vegetated with native vegetation if possible; a line-of-sight to the other end will be provided; and, if necessary, low-level illumination will be installed in the tunnel.

- ✓ **The project wildlife undercrossings are proposed along the main drainage as arched culverts with a natural substrate bottom and wing fencing that would channel wildlife to the undercrossing. Other design features such as the use of sound insulation materials, line of sight through the undercrossing, and low level illumination will be considered in the final design of the project wildlife undercrossings and the project proponent has committed to achieving this standard as the project moves through design engineering phases.**

11) If continuous corridors do not exist, archipelago (or stepping-stone) corridors may be used for short distances. For example, the gnatcatcher may use disjunct patches of sage scrub for dispersal if the distance involved is under l-2 miles.

- ✓ **Continuous movement corridors are proposed to be maintained within the two local wildlife movement corridors that occur along the main drainage and a smaller drainage. Further, the large blocks of proposed conserved native habitat would be contiguous to conserved lands to the west and south, as well as large tracts of undeveloped lands to the east. The smaller areas of proposed onsite**

conservation in the southern portions of the site that supports coastal sage scrub and gnatcatcher are contiguous with conserved gnatcatcher occupied lands directly offsite to the south and southwest.

- *Subarea Plan Findings (MSCP Subarea Plan Section 1.2 Goals)*

The adopted MSCP Subarea Plan has an overall preservation goal of 98,379 acres (54%) out of 181,358 acres of vegetation communities. Within the Metro-Lakeside Jamul (MLJ) Segment of the Subarea the overall habitat conservation goal is 44,764 acres (39%) out of 115,241 acres (Subarea Table 4-2). Further, the anticipated conservation goal within the MLJ Segment from project mitigation (not existing conservation or future acquisitions) is calculated to be 16,650 acres (44%) of the 44,764 acres total, as provided in Section 4.4 of Subarea Plan.

As provided in the 2015 MSCP Annual Report, from the adoption of the Subarea Plan in 1997 through 2015, the County and its MSCP partners have achieved 77% (75,450 acres of the proposed 98,379-acre) of the total conservation goal. As stated in the MSCP, the habitat type with the largest amount of land remaining to be protected in the MLJ Segment is CSS.

The MSCP conservation goals for CSS are as follows:

- County Subarea Table 1-2: CSS Total 71,326; Total Goal 44,254 (62%)
- Metro-Lakeside Jamul Segment Table 4-2 provided below:
  Entire Segment CSS Total 40,070; Total Goal 18,626 (46%);
  North of I-8 in Segment CSS Total 14,859; Total Goal 9,525 (64%);

Preservation is targeted within areas identified as having habitat with high biological value consisting of lands within a PAMA/BRCA or lands located outside of the PAMA that significantly contribute to a viable regional ecosystem according to criteria set forth in the Biological Mitigation Ordinance. Conservation is encouraged within both PAMA and BRCA by providing mitigation ratios (Subarea Plan Table 4-8; BMO Attachment M) that favor development outside of identified or qualifying conservation areas and mitigation inside these areas. The easiest way to ensure that the MSCP conservation objectives are met on a plan basis is to target meeting the goals on a project by project basis. For this reason, the Safari Highlands Ranch project has established conservation goals equal to or greater than the applicable plan–segment goals. Specifically, this entails meeting the MLJ Segment conservation goals of 39 percent of the overall native habitat and conservation of 64 percent of the CSS habitat.

- ✓ **Although only the southern portion of the project site is located within the adopted MSCP Subarea, it is expected that the adopted MSCP criteria and mitigation ratios would apply for the entire project site and have been assumed in this section of the analysis (Table 1).**
- ✓ **The project proposes to apply the Subarea Plan/BMO mitigation ratios, as directed in the MSCP and particularly in Section 4.2 for the MLJ Segment. Based on the applied mitigation ratios that range between 2:1 to 1:1 depending on the impacted habitat tier (except for oak woodland that applies a greater ratio, as discussed further in the MHCP Section below), the proposed habitat mitigation requirement totals approximately 620**

acres (55%) of the approximately 1,130 acres site (Table 1). The proposed habitat mitigation is consistent with the Subarea Plan overall habitat preservation goal of 54% and greatly exceeds the MLJ Segment goal of 39%.

- ✓ **The proposed project CSS mitigation (adopted MSCP mitigation ratio of 1.5:1) would result in the conservation of 394.39 acres out of 643.16 acres (61%) to offset project impacts to coastal sage scrub (including Diegan coastal sage scrub, cactus scrub, and coastal sage-chaparral transitional habitats). This mitigation requirement would fall slightly under the Subarea Plan conservation CSS goal of 62% as well as the northern MLJ Segment CSS goal of 64%. To meet the MSCP Subarea Plan northern MLJ Segment CSS conservation goal, the project has committed to conserve an additional 17.23 acres of CSS offsite in addition to the proposed CSS habitat mitigation requirement of 394.39 acres for a total of 411.62 acres of CSS conservation (64%).**

Table 1. Estimated Project Impacts and Mitigation Requirements & Proposed Onsite Conservation Open Space

Vegetation Community	MSCP Tier	Total Project Site (Onsite and Offsite) Acreage	Project Total Impacts	Approved MSCP Mitigation Ratio	Required Mitigation Acreage	Onsite Conservation Open Space	Onsite Conservation Open Space-Constrained	Total Onsite Proposed Conservation Open Space
Ragweed Mesic Meadow	I	1.29	0.15	2:1	0.30	0.99	0.15	1.14
Mulefat Scrub	I	1.89	0.07	2:1	0.14	1.82	0.00	1.82
Oak Riparian Woodland	I	20.45	2.62	3:1*	7.86	16.20	1.63	17.83
Oak Woodland	I	5.01	2.58	3:1*	7.74	2.43	0.00	2.43**
Cactus Scrub	II	0.63	0.00	1.5:1	0.00	0.63	0.00	0.63
Diegan Coastal Sage Scrub (includes rock outcroppings)	II	574.83	236.01	1.5:1	354.02	337.26	1.54	338.80***
Coastal Scrub-Chaparral Transitional (includes rock outcroppings)	II	67.70	26.91	1.5:1	40.37	40.78	0.00	40.78
Southern Mixed Chaparral (includes rock outcroppings)	III	424.32	206.21	1:1	206.21	206.30	11.82	218.12
Non-native Grassland	III	7.88	3.06	1:1	3.06	4.67	0.14	4.81
Disturbed Habitat	n/a	18.84	16.15	n/a	0.00	2.38	0.28	2.66
Agricultural Lands	n/a	2.14	2.14	n/a	0.00	0.00	0.00	0.00
Developed	n/a	6.83	6.76	n/a	0.00	0.07	0.00	0.07
Total:		**1,131.81**	**502.66**	**-**	**619.70**	**613.53**	**15.56**	**629.09**

***** The applied mitigation ratio for oak riparian woodland and oak woodland impacts is from the MHCP and City of Escondido draft Subarea Plan since it is greater than the adopted South County MSCP mitigation ratio.

****** The required project habitat mitigation for oak woodland (7.74 acres) would be met through onsite conservation of 2.43 acres of oak woodland as well as onsite conservation of 5.31 acres of oak riparian woodland.

******* Proposed onsite habitat mitigation for Diegan coastal sage scrub is deficient by 15.22 acres and shall be met through a small amount of cactus scrub (0.63 acre) and an excess of 0.41 acre of coastal-scrub-chaparral transitional habitats to be conserved onsite as well as offsite habitat mitigation for the remainder 14.18 acre

Annexation

As provided in the MSCP-Implementing Agreement (page 24), "In the event land within the County's jurisdiction is annexed to another jurisdiction, an agreement shall be reached between the County, the annexing jurisdiction, the USFWS, and CDFW, as part of the annexation process, to ensure that any development of the annexed lands proceeds in accordance with the conservation goals of the MSCP…."

- ✓ **Take:**

  The proposed project may affect coastal California gnatcatcher; therefore, the project requires take authorization for any potential Incidental Take for coastal California gnatcatcher. It is anticipated that the U.S. Army Corps of Engineers (ACOE) would consult with USFWS through Section 7 consultation to obtain take authorization for California gnatcatcher during the 404 permit process for the proposed project. Further, the proposed annexation agreement that would be agreed upon between all involved parties (County, Wildlife Agencies, City, and applicant) would also be an option to provide a transfer of take authorization for California gnatcatcher from the County of San Diego to the City of Escondido.

- ✓ **Conservation Goals:**

  Although the annexation of lands to the City would provide take for Covered Species within the project site development, the proposed conservation and loss acreages would be retained within the County's MSCP tracking. The proposed conservation would contribute to County habitat conservation goals as provided in the MSCP and the County would retain conservation allocation accounting opportunity to fulfill MSCP preserve goals. Therefore, the project would not jeopardize the buildout of the County MSCP preserve and would be in accordance with the conservation goals of the MSCP.

Draft North County MSCP Planning Agreement

The northern portion of the project site is located along the southeastern boundary of the draft North County MSCP Subarea and mapped as a draft PAMA (Figure 1). Further, this portion of the project site is mapped predominately as Moderate or Low value in the MSCP Habitat Evaluation Map (Appendix 3). Since the North County MSCP is in draft form, the project is evaluated against the goals and criteria in the draft North County MSCP Planning Agreement, as provided below.

Section 3. Planning Goals

The planning goals in this document are general and relate to the MSCP Plan not individual projects. These goals include but are not limited to the following:

- Provide for the conservation and management of Covered Species;
- Provide a basis for permits necessary to lawfully take Covered Species;
- Provide a comprehensive means to coordinate and standardize mitigation and compensation requirements of FESA, CESA, CEQA, NEPA, and NCCPA within the Planning Areas;

- Provide clear expectations and regulatory predictability for persons carrying out Covered Activities within the Planning Areas.

  ✓ **The project proposes avoidance, minimization, and mitigation measures including mitigation ratios based on the adopted MSCP Plan that are expected to be consistent with the draft MSCP Plan conservation goals and objectives.**

Section 5. Preliminary Conservation Objectives

Similar to the planning goals above, these preliminary conservation objectives are general and are intended to be achieved through the Plans. These objectives include but are not limited to the following:

- Provide for the protection of species, natural communities, and ecosystems on a landscape level;
- Protect threatened, endangered, or other special status plant and animal species, and minimize and mitigate the take or loss of proposed Covered Species;
- Identify and designate biologically sensitive habitat areas;
- Set forth species-specific goals and objectives.

  ✓ **The project proposes avoidance, minimization, and mitigation measures including mitigation ratios based on the adopted MSCP Plan that are expected to be consistent with the draft MSCP Plan conservation goals and objectives.**

Section 6.6. Interim Project Processing (Exhibit B)

✓ *Meetings will be scheduled on an as-needed basis and will be held in conjunction with existing Habitat Loss Permit Batching Meetings.*

✓ *At the above meetings, County and Wildlife Agencies will discuss the project, answer questions, etc.:*

If the project would affect CSS, then

- *Provide information on how the project follows the NCCP Act of 2003.*
- *NCCP 4d Findings shall be applied and a draft Habitat Loss Permit shall be prepared and included as part of the CEQA public review process*
  - **The northern portion of the site is within the draft North County MSCP Subarea. The draft North County MSCP Habitat Evaluation Model Map (Appendix 3) and the California Gnatcatcher Habitat Evaluation Model Results for the North County Plan are provided as pdf's on the County MSCP North County Plan-Maps webpage (http://www.sandiegocounty.gov/content/sdc/pds/mscp/nc/maps-photos.html).**
  - **The northern portion of the project site is mapped predominately as Moderate value and Low value based on the draft North County Habitat Evaluation Model. These lower value areas predominately support**

southern mixed chaparral with smaller isolated patches of oak woodland. Two areas of High value occur in the central portion of the draft North County MSCP Subarea onsite; one of these areas supports coastal sage scrub while the other supports southern mixed chaparral with patches of oak woodland. The only Very High value area mapped onsite appears to occur along one of the drainages in the northwestern portion of the site that also supports southern mixed chaparral. In addition, the majority of the project site is mapped as "none" in the draft North County MSCP California Gnatcatcher Habitat Evaluation Model Results.

- **The proposed offsite northern emergency access road to the northwest of the project site is located within the draft North County MSCP Subarea and in general is mapped predominately as Low value with smaller areas of High value and Moderate value in the draft MSCP Habitat Evaluation Model and predominately mapped as "none" with smaller areas of Moderate and High value in the southwestern portion of the access road in the Gnatcatcher Habitat Evaluation Model Results.**
- **The project CSS habitat impacts associated with the offsite northern emergency access road within the draft North County MSCP Subarea consists of 9.29 acres of impacts over a nearly two linear mile distance from grading and vegetation clearing activities associated with the offsite northern emergency access road. This emergency access road would be secured and not be accessible to the general public or residents and would only be in use in the case of an emergency (i.e., wildfire).**
- **Protocol surveys for the federally listed California gnatcatcher conducted in 2015 for the offsite northern emergency access road were negative; however, in 2017 an individual California gnatcatcher was incidentally observed by M&A biologists adjacent to this offsite northern access road located at approximately 520 feet in elevation within open riparian habitat adjacent to CSS (M&A/Althouse 2017). It is unclear if the gnatcatcher individual observed in late September 2017 was moving through the project area, has an established territory within suitable CSS habitat in the vicinity of the proposed emergency access route, or moved into the more mesic riparian area during the late summer as is typical when sage scrub habitat begins to dry out. For purposes of project impact assessment, any suitable CSS habitat that occurs along the northern emergency access route that is located below 1,000 feet in elevation has been assumed to be occupied by gnatcatcher.**
- **The project is expected to meet and address the following Draft NCCP 4d Findings in a subsequent submittal to ensure consistency with draft MSCP Planning Agreement and in support of a Habitat Loss Permit:**
    - **The habitat loss does not exceed the five percent guidelines;**
    - **The habitat loss will not preclude connectivity between areas of high habitat values;**

- **The habitat loss will not preclude or prevent the preparation of the subregional NCCP;**
- **The habitat loss has been minimized and mitigated to the maximum extent practicable in accordance with Section 4.3 of the NCCP Process guidelines;**
- **The habitat loss will not appreciably reduce the likelihood of survival and recovery of listed species in the wild; and**
- **The habitat loss is incidental to otherwise lawful activities.**

✓ *At the review meetings or within 30 days of review meeting (if possible), the Wildlife Agencies shall provide information such as a list of concerns, additional studies needed, project alternatives, mitigation measures, and guidance on anticipated permits to the County and project applicant.*

Section 6.7.3 Annexation of Lands

"In the event land within the County's jurisdiction is proposed to be annexed to another jurisdiction, the County shall request that LAFCO impose a requirement on the annexing jurisdiction that it shall enter into an agreement between the County, the annexing jurisdiction, USFWS, and CDFW as part of the annexation process to ensure that annexation would only occur when the annexation will not jeopardize the buildout of the preserve or the coverage of species within either of the Planning Areas, or compromise viable habitat linkages within the proposed preserve, and that any development of the annexed lands proceeds in accordance with the Planning Goals set out in section 3 of this Agreement and the Preliminary Conservation Goals set out in section 5 of this Agreement…."

✓ **Conservation Goals: The project proposes that project conservation would not be transferred to the City but rather would be retained by the County. The proposed conservation would contribute to anticipated draft County habitat conservation goals (not currently available to the public) expected to be similar to those provided in the adopted MSCP. Further, the County would retain conservation allocation accounting opportunity to fulfill anticipated MSCP preserve goals. Therefore, the project would not jeopardize the buildout of the draft County MSCP preserve and would be in accordance with the anticipated conservation goals of the draft MSCP.**

Adopted City of San Diego MSCP

The City of San Diego municipal boundary runs along the southern project property boundary. The only portion of the proposed project that is located within the City of San Diego jurisdiction is the proposed southern emergency access road consisting of improvements to an existing road (i.e., Zoo Road/Rockwood Road). This proposed project feature is subject to the criteria in the adopted City of San Diego's MSCP Subarea Plan. The City's MSCP Multi-Habitat Planning Area (MHPA) is located predominately to the southwest and southeast on either side of the San Diego Zoo Safari Park; however, there is a relatively narrow connecting strip of MHPA that occurs along the southern boundary of the project site where the existing Zoo Road/Rockwood Road is located and the

southern emergency access route is proposed (Figure 3). Further, the project site is located outside and not in proximity to City Cornerstone Lands (Figure 3). The City's MSCP Subarea Plan specifies in *Section 1.2.5 Cornerstone Lands and San Pasqual Valley* that "portions of San Pasqual Valley from the narrows east to Boden Canyon; this area of San Pasqual Valley is not part of the cornerstone lands."

The proposed impacts associated with the southern emergency access road activities that would consist of improvements/widening of the existing Zoo Road/Rockwood Road are subject to the City's MSCP mitigation ratios to sensitive habitats that occur along this road as well as any conditions of coverage for potentially impacted species covered under the MSCP Subarea Plan. The proposed project southern emergency access road activities are consistent with the City's MSCP Subarea Plan requirements.

Further, since portions of the project site is located adjacent to the City of San Diego MHPA, the project would be consistent with the City's MSCP Section 1.4.3 *Land Use Adjacency Guidelines*, to ensure the adjacent MHPA is not affected by the proposed project as summarized below.

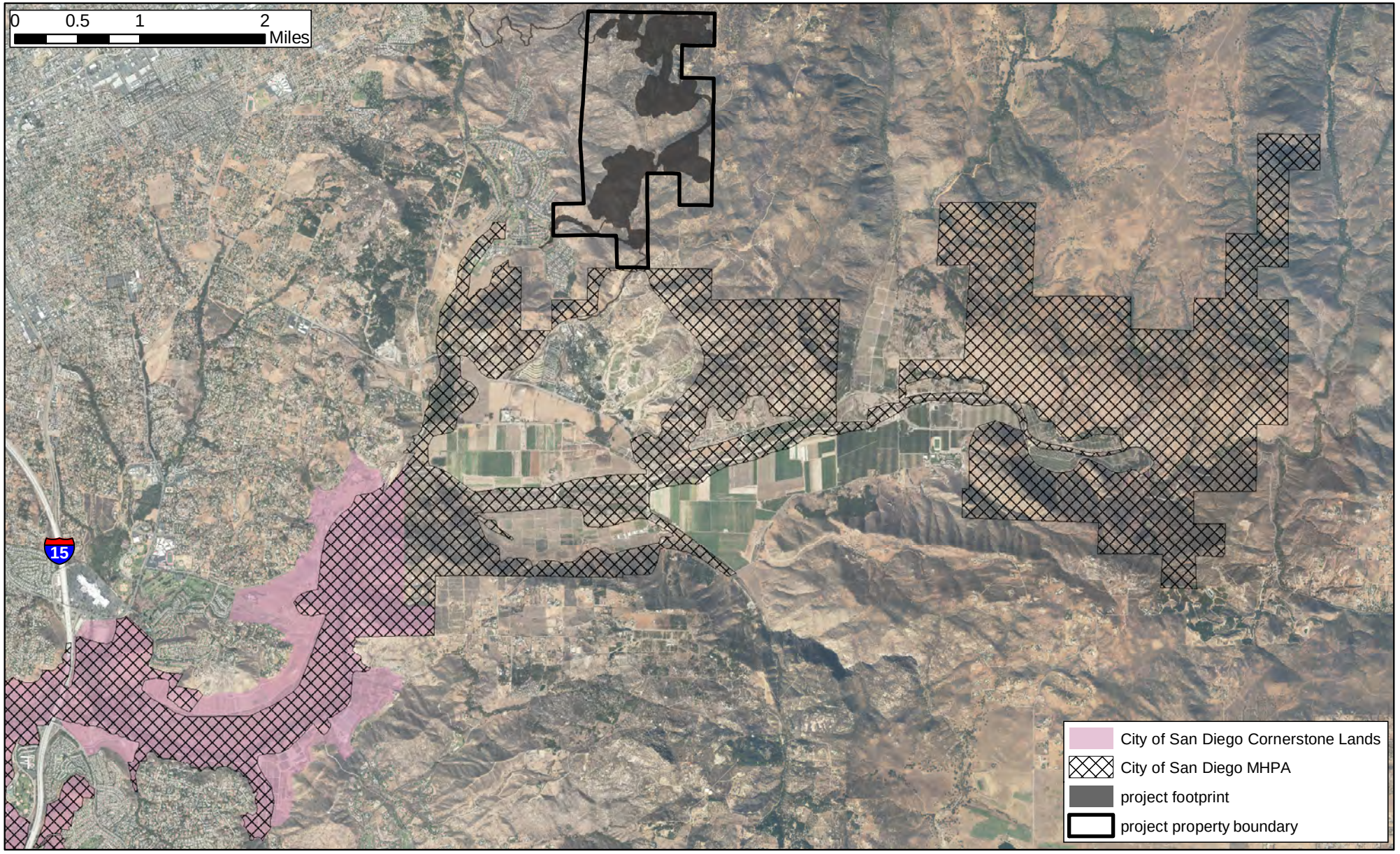
- ✓ ***Drainage*: The project would not drain directly into the adjacent MHPA. Stormwater runoff will be controlled on-site through a comprehensive stormwater system that will meet the latest Regional Water Quality Control Board and City of Escondido regulations for drainage and stormwater runoff. The proposed stormwater system includes retention and detention basins as well as hydro-modification management practices including the use of biofilters.**

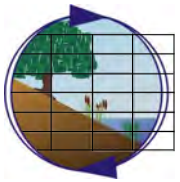
  ***Toxics*: The use of materials such as chemicals or products that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality would be assessed and incorporate measures such as the proposed stormwater retention/detention basins to avoid and/or reduce impacts into MHPA. Further, any project use of chemicals, fuels, lubricants, or biocides shall be in compliance with all local, state, and federal regulations.**

- ✓ ***Lighting:* Project night-time lighting adjacent to biological open space areas and offsite City MHPA shall be shielded and directed away from the conserved habitat to reduce any indirect effects of light pollution on the conserved habitat.**

- ✓ ***Noise:* Restriction on construction activities during the sensitive avian breeding season will reduce the potential for indirect noise impacts while the project is being grubbed and graded. Further, the project BRMP would include noise management if necessary to minimize noise within the proposed habitat conservation/open space areas that are contiguous with the adjacent City MHPA along the southern project boundary.**

- ✓ ***Barriers*: Signage and appropriate fencing will restrict access to the biological open space areas except along designated trails to minimize potential future impacts to the sensitive habitats.**





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City Cornerstone Lands in the Project Vicinity

Safari Highlands Ranch

Figure 3

- ✓ ***Invasives:*** **The project proposes a native revegetation program within the temporarily impacted areas. The revegetation plant palette shall not include any invasive non-native plant species onsite and therefore, no introduction of invasive plant species would be introduced into areas adjacent to the MHPA. Further, the project BRMP would include an invasive species management program that includes the removal of existing invasive plants, prevention/reduction of invasive plant introduction, and regular ongoing removal of invasive plant species, as needed.**

- ✓ ***Brush Management*****: The proposed fuel modification zones are located entirely within the project site and would not extend into or affect the adjacent MHPA.**

- ✓ ***Grading/Land Development*****: The proposed manufactured slopes associated with the project are included within the project development footprint onsite and would not extend into or affect the adjacent MHPA.**

Multiple Habitat Conservation Plan (MHCP)

The MHCP is a comprehensive subregional habitat conservation planning program that was adopted in 2003 for a 175 square mile area in northwestern San Diego County including the following jurisdictions: Oceanside, Vista, Carlsbad, San Marcos, Escondido, Encinitas, and Solana Beach.

Draft City of Escondido MHCP Subarea Plan

The City of Escondido has an unadopted draft MHCP Subarea Plan dated June 2001 and does not have an Implementing Agreement or incidental take permit. Therefore, this draft Subarea Plan is not specifically applicable to any potential projects under discretionary review although it may be referred to as a guideline. Further, based on the 2007 USFWS letter regarding non-concurrence of NCCP 4(d) rule Habitat Loss Permits, the City of Escondido has not progressed on actively developing their draft Subarea Plan and therefore, the USFWS will not concur on interim incidental take of coastal California gnatcatcher through the Habitat Loss Permit process, thus rendering the Subarea Plan ineffective to address gnatcatcher and coastal sage scrub impacts. Notwithstanding, the regulatory function of the unadopted draft City of Escondido MHCP Subarea Plan has been used as one tool for assessment of conservation design in this document.

The City of Escondido draft Subarea Plan specifies in Section 6.6 for Annexations that future annexations of land to the City of Escondido must be covered by the requirements of an NCCP Subarea Plan. It further states that if an approved County Subarea Plan and implementing agreement exists for the area being annexed, the approved County Subarea Plan applies. In the case of the Safari Highlands Ranch project site, the County's adopted South County MSCP Subarea Plan applies for the southern half of the project site. Within the northern portion of the project site that occurs in the unadopted North County MSCP Subarea, the City of Escondido would work cooperatively with the County and Wildlife Agencies to ensure consistency with the applicable provisions related to conservation design in both the City of Escondido's unadopted draft Subarea Plan and the County's adopted and unadopted MSCP Subarea Plans. Finally, the City of Escondido would be responsible for ensuring that any project level conservation plan is implemented following annexation to the City.

ADDITIONAL MEASURES TO ENSURE MSCP/MHCP CONSISTENCY

It is the intent of the Safari Highlands Ranch Project to be consistent with applicable MSCP/MHCP standards. As such, this document has identified how the project achieves this goal. In some instances, the detailed engineering for the submitted project has not been developed to the state of being adequate to fully assess MSCP consistency. Specifically, this is the case for wildlife undercrossings wherein an openness ratio of 0.75 (where applicable) is being proposed to meet goals of connectivity for wildlife movement. While the plans do not yet have the degree of specificity to evaluate achievement of this objective, the project proponent has committed to achieving this standard as the project moves through design engineering phases. Similarly, to be consistent with mitigation ratios of the adopted MSCP as well as planned conservation goal levels, the project requires conservation of CSS beyond that fully achievable onsite. This will require acquisition of offsite mitigation habitat either at an existing mitigation bank, or an approved appropriate mitigation site. Again, this need has been acknowledged by the project proponent and will be met. The project proponent has made the following commitments to ensure the project is consistent with the adopted MSCP habitat protection goals, criteria, and/or mitigation ratio:

- ✓ The proposed onsite CSS (i.e., cactus scrub, Diegan coastal sage scrub, and coastal scrub-chaparral transitional) conservation total acreage of 380.21 acres is deficient by 14.18 acres to meet the overall CSS mitigation requirement of 394.39 acres in the adopted MSCP at a 1.5:1 ratio (Table 1). The project would include an additional 14.18 acres of CSS conservation to meet the CSS mitigation requirement for the project and to ensure consistency with the MSCP mitigation ratios and habitat protection goals.

- ✓ The proposed project mitigation acreages and associated conservation percentages are consistent with the adopted MSCP habitat protection goals, except for the northern MLJ Segment CSS goal of 64%. The mitigation ratios would only yield 61% conservation, falling short of the 64% MLJ Segment goal by 3% (17.23 acres). To achieve this conservation objective, the project proponent has committed to increasing the additional CSS conservation by 17.23 acres to be achieved through off-site conservation.

    - o ***IMPORTANT NOTE*: The two above CSS habitat additional measures can be achieved by offsite CSS habitat conservation of 31.41 acres beyond the proposed 380.21 acres of onsite CSS conservation open space for a total of 411.62 acres of CSS conservation.**

- ✓ The project would require a Habitat Loss Permit for the CSS habitat impacts associated with the offsite northern emergency access road within the draft North County MSCP Subarea Planning Area.

- ✓ Take authorization for California gnatcatcher could be obtained under the South County MSCP and integrated into the Multi-party Annexation Agreement and/or through ESA Section 7 consultation between the U.S. Army Corps of Engineers and USFWS during the 404 permit process.

MSCP/MHCP SUMMARY

Although the proposed project generally applies the Findings/requirements from the adopted South County MSCP and analyzes consistency with the adopted South County MSCP, North County MSCP Planning Agreement, and adopted City of San Diego MSCP, the project is also consistent with the draft unadopted City of Escondido Subarea Plan as well as the MHCP.

Based on this approach, it has been determined that all of the MSCP/MHCP criteria/standards and mitigation ratios applicable to the project are provided in the adopted South County MSCP Subarea Plan, with one exception regarding the mitigation ratio for oak riparian woodland/oak woodland impacts. The City of Escondido's draft MHCP Subarea Plan mitigation ratio of 3:1 for impacts to oak woodland/Habitat Group B is greater than the adopted County's mitigation ratio of 2:1 for same habitat; therefore, the project proposes to apply the 3:1 mitigation ratio for impacts to oak woodland since this mitigation ratio is the most stringent for this habitat type among all the applicable adopted and unadopted MSCPs/MHCPs.

In summary, the proposed project including the additional measures summarized above are expected to be consistent with the adopted South County MSCP, adopted North County MSCP Planning Agreement, adopted City of San Diego MSCP, and the draft unadopted City of Escondido MHCP, based on the Consistency Analysis provided herein.

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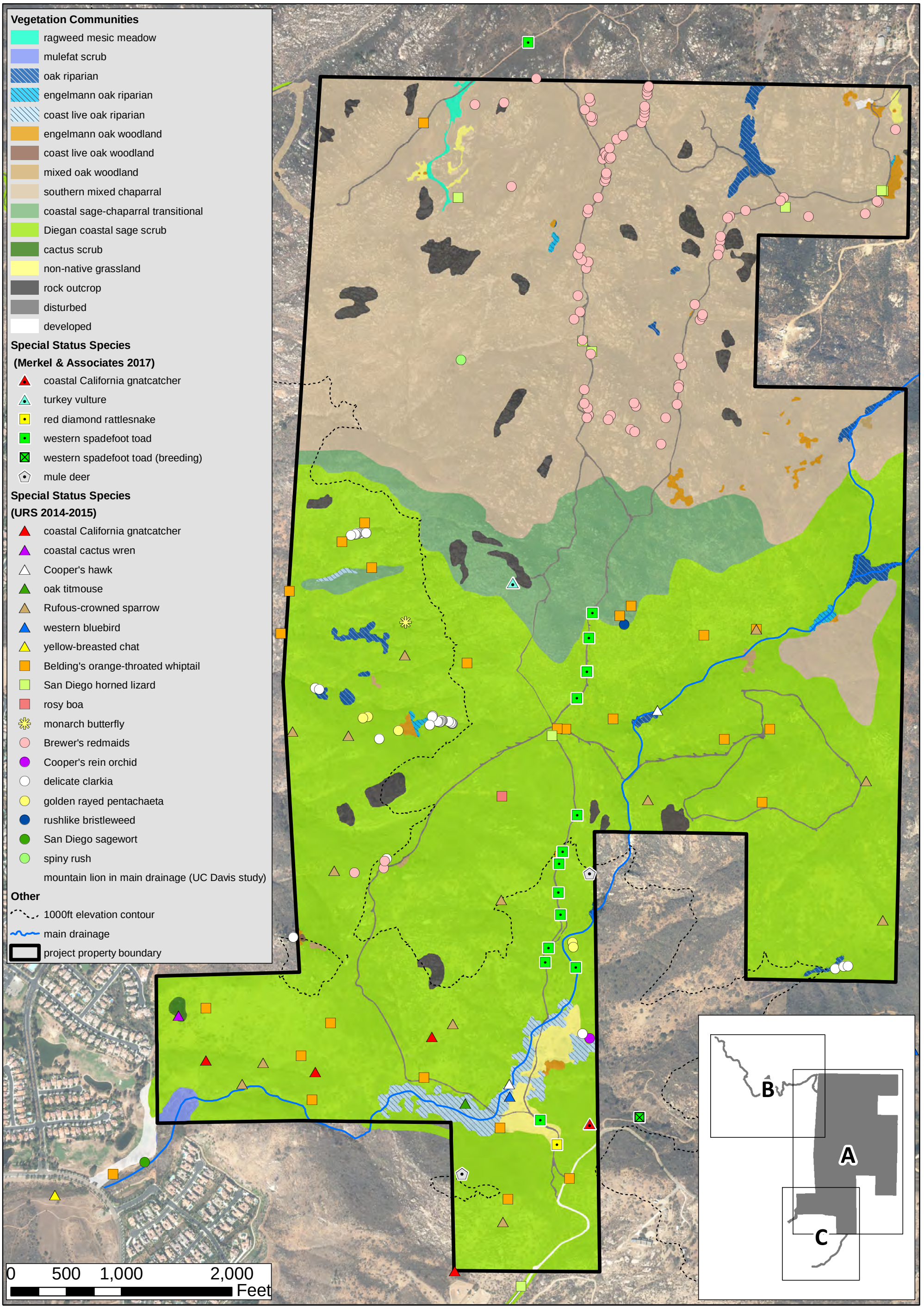
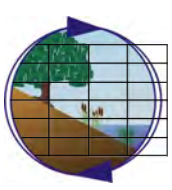
Appendix 1. Biological Resources Figures 4a-4c from A&M/M&A Updated Biological Report dated October 2017





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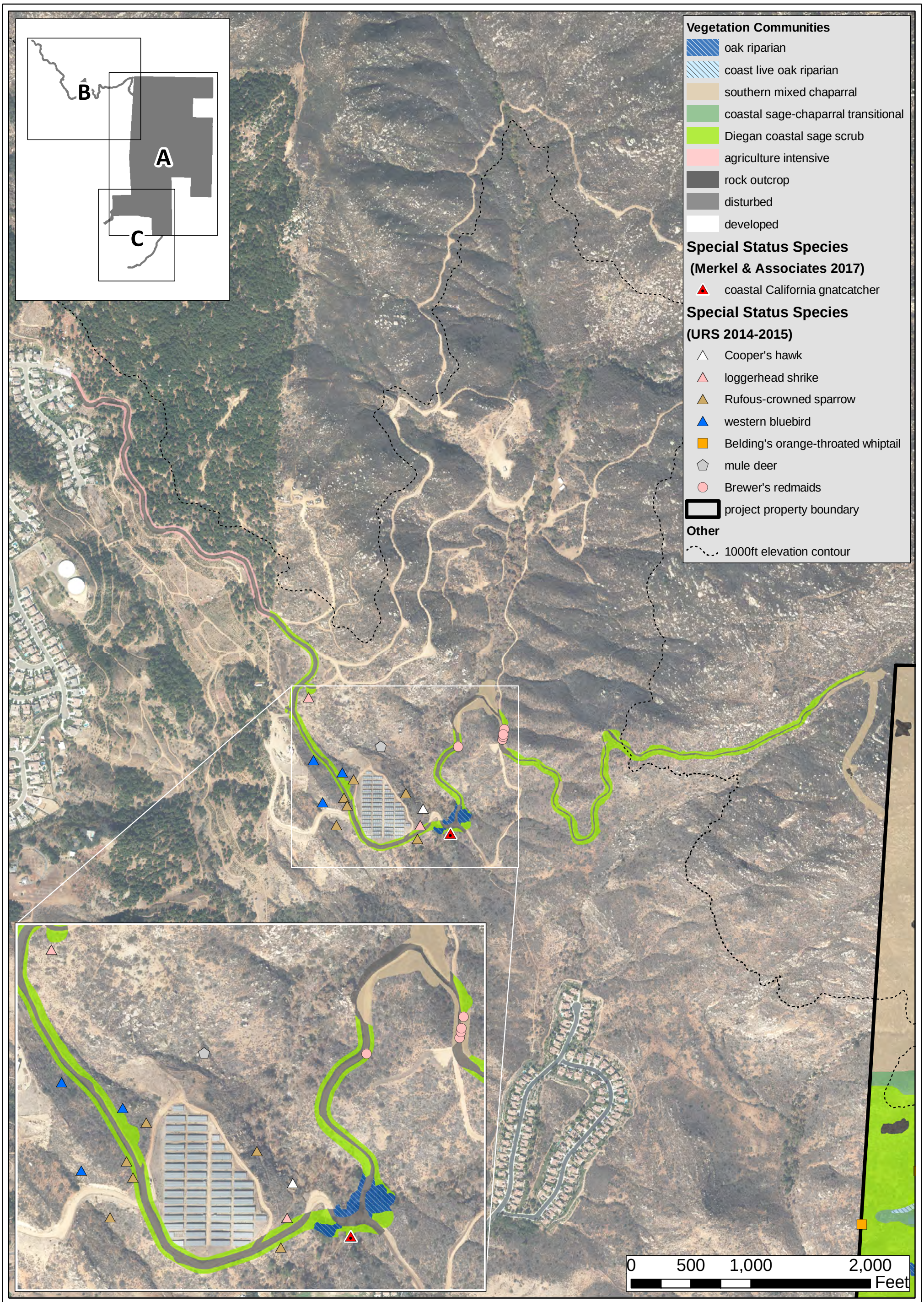
Biological Resources Map

Safari Highlands Ranch

Source: URS, Althouse & Meade, and Merkel & Associates

Figure 4a



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Biological Resources Map

Safari Highlands Ranch

Source: URS, Althouse & Meade, and Merkel & Associates

Figure 4b

0 500 1,000 Feet

Vegetation Communities

- mulefat scrub
- coast live oak riparian
- engelmann oak woodland
- coast live oak woodland
- mixed oak woodland
- Diegan coastal sage scrub
- cactus scrub
- non-native grassland
- rock outcrop
- disturbed
- developed

Special Status Species

(Merkel & Associates 2017)

- coastal California gnatcatcher
- red diamond rattlesnake
- western spadefoot toad
- mule deer

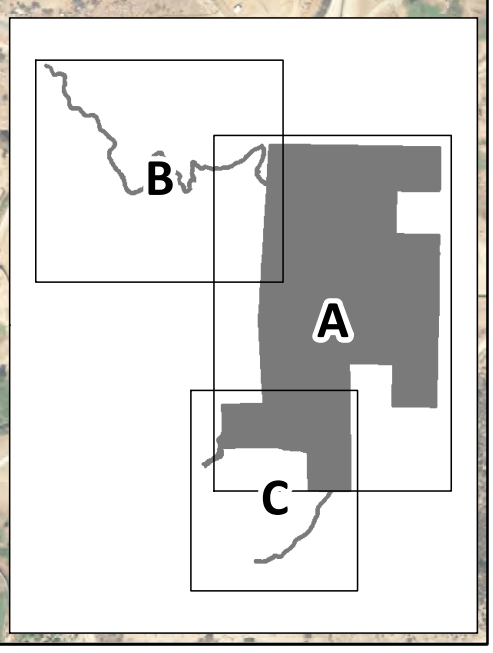
Special Status Species

(URS 2014-2015)

- coastal California gnatcatcher
- coastal cactus wren
- Cooper's hawk
- oak titmouse
- Rufous-crowned sparrow
- western bluebird
- Belding's orange-throated whiptail
- San Diego horned lizard
- Cooper's rein orchid
- delicate clarkia
- golden rayed pentachaeta
- San Diego sagewort
- mountain lion in main drainage (UC Davis study)

Other

- 1000ft elevation contour
- main drainage
- project property boundary



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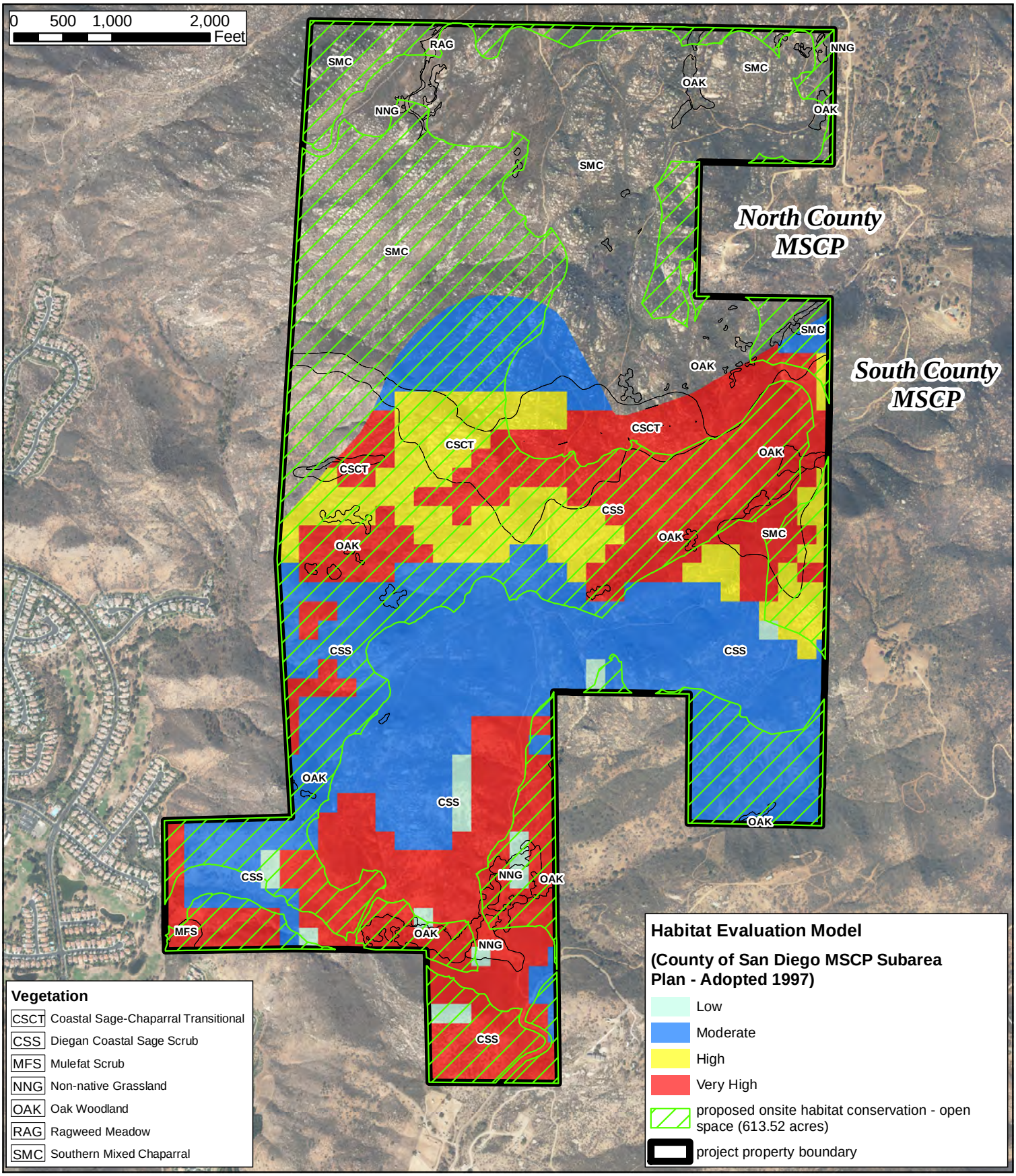
Biological Resources Map

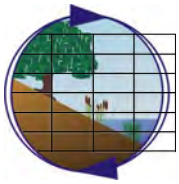
Safari Highlands Ranch

Source: URS, Althouse & Meade, and Merkel & Associates

Figure 4c

Appendix 2. Adopted MSCP Habitat Evaluation Map (1998) within Project Site





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Habitat Evaluation Model

Safari Highlands Ranch

Appendix 3. North County MSCP Habitat Evaluation Map (2008)

APPENDIX 3. DRAFT NORTH COUNTY MSCP HABITAT EVALUATION MODEL