GENERAL BIOLOGICAL RESOURCES ASSESSMENT

TENTATIVE PARCEL MAP NO. 20188
APN 0357-241-06-0000

SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for:

Merrell Johnson Companies,
22221 U.S. Highway 18
Apple Valley, California 92307

Prepared by:

RCA Associates, Inc.
15555 Main Street, #D4-235
Hesperia, California 92345
Principal Investigator: Randall C. Arnold, Jr.

Report prepared by: R. Arnold, R. Hunter, & L. Cardoso

Project: #2020-18

April 18, 2020

TITLE PAGE

Date Report Written: April 18, 2020

Field Work Completed: April 14, 2020

Report Title: General Biological Resources Assessment

Assessor's Parcel Numbers: 0357-241-06-0000
Tentative Parcel Map No. 20188

Prepared for: Merrell Johnson Companies

Principal Investigators: Randall C. Arnold, Jr., Senior Biologist
Ryan Hunter, Biologist
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EXECUTIVE SUMMARY

The Project Proponent retained RCA Associates, Inc. to conduct a general biological resource assessment on Tentative Parcel Map No. 20188. The property is approximately 114-acres in size and the Proponent is proposing to construct single family dwellings on Parcels 1-4, with a remainder 27-acre parcel in the eastern portion of the property. No development plans are proposed for the remainder parcel at the present time.

Biological surveys were conducted on April 14, 2020 during which the biological resources present on the site were evaluated. Plant and animal species were identified and the on-site habitats were evaluated to determine additional species which may utilize the habitats, but were not identified during the field investigations. Comprehensive plant and animal species lists were also compiled.

1.0 INTRODUCTION AND PROJECT DESCRIPTION

Biological field investigations were conducted on April 14, 2020 on the property (114-acres) which is located along highway 173 in Summit Valley, California (Appendix A: Figures 1, 2, and 3). The proponent is proposing to construct single-family dwellings within Parcels 1-4 (Figure 1). This technical report provides information on the general biological resources present on the site, as well as within the immediate surrounding areas.

Following completion of a comprehensive data review, surveys were performed on the site during which the biological resources on the property and in the surrounding areas were documented by biologists from RCA Associates, Inc. As part of the surveys, the property site and the adjoining lands were evaluated for the presence of native habitats which could potentially support populations of special status wildlife species. Pedestrian surveys were walked in a meandering pattern throughout the site in order for biologists from RCA Associates, Inc. to identify the plants and animals, as well as any special status species. The property was also evaluated for the presence of sensitive habitats including stream channels, wetlands, vernal pools, riparian habitats, and jurisdictional areas.

Based on data from USFWS, CDFW, and a search of the California Natural Diversity Database (CNDDB, 2020) for the Silverwood Lake, California quadrangle, there are eight listed (i.e., threatened and endangered) wildlife species that have been documented within the quadrangle (Tables 4-1 and 4-2). Species include arroyo toad (*Anaxyrus californicus*), bald eagle (*Haliaeetus leucocephalus*), Crotch bumble bee (*Bombus crotchi*), Mojave tarplant (*Deinandra mohavensis*), quino checkerspot butterfly (*Euphydryas editha quino*), California red-legged frog (*Rana draytoni*), southern mountain yellow-legged frog (*Rana muscosa*) and Mohave tui chub (*Siphateles bicolor mohavensis*). One listed plant (i.e., Mojave tarplant) has also been documented in the

area. Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2000) and Whitaker (1980).

The Proponent is proposing to construct four residential dwellings on Parcels 1-4 as depicted in Figure 1, with the remainder parcel (27-acres) to remain vacant. No development plans are currently being proposed for the remainder parcel (Figure 1). The single-family dwellings will be accessed via Highway 173 which is located on the southern boundary of the property (Figure 1). Vacant lands surround the property on the north, east, and west with single-family dwellings located south of the property across Highway 173.

"OFFICIAL USE ONLY"

TENTATIVE
PARCEL MAP NO. 20188

BEING A DIVISION OF THE NORTH 1/2 OF THE NORTHWEST 1/4 AND THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 34, TOWNSHIP 3 NORTH, RANGE 4 WEST, S.B.M., COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA

MERRELL JOHNSON COMPANIES
JANUARY 2020

NOTES:

THERE ARE 119.6 ACRES TO THIS LAND DIVISION.

THERE ARE A TOTAL OF 4 NUMBERED LOTS AND A REMAINDER TO THIS PARCEL MAP.

EXISTING ZONING: RL-5
EXISTING USE: SFR
PROPOSED ZONING: RL-5
PROPOSED USE: SFR

PARCELS ARE FOR LAND SALE.

THE AVERAGE SLOPE OF ALL FEASIBLE ACCESS ROUTES AND BUILDING SITES DOES NOT EXCEED 15%

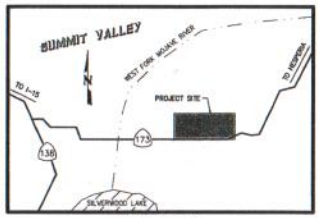
THERE IS NO GRADING PROPOSED.

NO PROTECTED PLANTS ARE EXISTING ON SITE.

THERE ARE NO WATER COURSES TRAVERSING THE PROPERTY, OTHER THAN SHOWN.

0 L.F. NEW STREETS

CONTOUR INTERVAL IS 2 FEET.



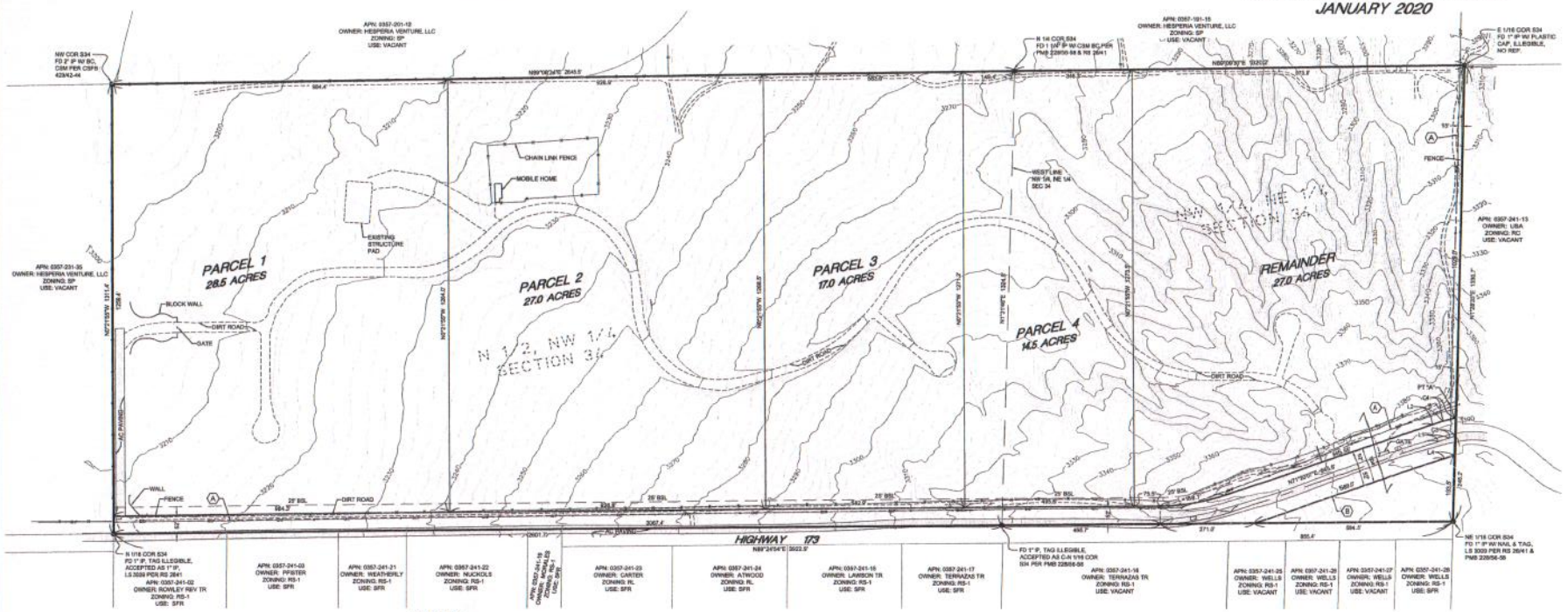
VICINITY MAP
N.T.S.

150' 75' 0' 150' 300'
1" = 150'

LINE DATA
L1 N70°50'08"E 33.0'
L2 N70°50'08"E 33.0'
L3 N70°50'08"E 32.8'

CURVE DATA
C1 Δ=90°13'11" R=35.0' L=55.1'
C2 Δ=18°54'43" R=650.0' L=205.1'
C3 Δ=95°02'28" R=200.0' L=117.6'
C4 Δ=98°17'31" R=252.0' L=36.3'

LEGEND
BSL INDICATES BUILDING SETBACK LINE
PP INDICATES POWER POLE
OHP INDICATES OVERHEAD POWER LINE
3320 INDICATES EXISTING CONTOUR
INDICATES PROPERTY LINE



APN: 0357-241-06
PARCEL MAP 20188
OWNER/APPLICANT:
SUMMIT LAS FLORES, LLC
C/O
WILLARD CHILCOTT
1581 C ORANGE AVE.
COSTA MESA CA 92627

PREPARED BY:
MERRELL JOHNSON COMPANIES
22221 HIGHWAY 18
APPLE VALLEY, CALIFORNIA 92307
(760) 240-8000

MAP PREPARATION DATE: 01/03/2020

EASEMENTS:

(A) AN EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES, RECORDED OCTOBER 10, 1968 AS BOOK 7108, PAGE 585 OF OFFICIAL RECORDS. IN FAVOR OF: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION.

(B) AN EASEMENT FOR PUBLIC HIGHWAY AND INCIDENTAL PURPOSES, RECORDED AUGUST 8, 2007 AS DOCUMENT NO. 2007-467803 OF OFFICIAL RECORDS. IN FAVOR OF: STATE OF CALIFORNIA

UTILITIES:

ELECTRIC: SOUTHERN CALIFORNIA EDISON COMPANY
12353 HESPERIA ROAD
VICTORVILLE, CALIFORNIA 92395
(760) 951-3190

TELEPHONE: FRONTIER COMMUNICATIONS
19166 LA PAZ DRIVE
VICTORVILLE, CALIFORNIA 92392
(760) 245-0894

WATER: PRIVATE WELL

GAS: PROPANE

SEWER: SEPTIC

CABLE: NO SERVICE

LEGAL DESCRIPTION:

REAL PROPERTY IN THE UNINCORPORATED AREA OF THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

THE NORTH 1/2 OF THE NORTHWEST 1/4 AND THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 34, TOWNSHIP 3 NORTH, RANGE 4 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF OF SAID LAND APPROVED BY THE SURVEYOR GENERAL, DATED NOVEMBER 13, 1885.

BASIS OF BEARINGS:

TAKEN FROM THE NORTH LINE OF SECTION 34, T3N, R4W, S.B.M. PER PARCEL MAP 13741, PMB 172/28-101.
BEING: N89°59'34"E

BENCHMARK:

NGS BENCHMARK "T739" (PID# EV1567)
BRASS DISK SET IN CONCRETE POST, UP 0.2', 20' SOUTH OF HWY 173.
3 MILES ± EAST ALONG HWY FROM OLD LAS FLORES RANCH SCHOOL.
ELEV= 3222.80 FT

REGISTERED LAND SURVEYOR CRAIG JOHNSON LS 7562 STATE OF CALIFORNIA
1/14/20

CRAIG JOHNSON L.S. 7562

Merrell Johnson COMPANIES
22221 HIGHWAY 18 APPLE VALLEY, CALIFORNIA 92307 (760) 240-8000 (760) 240-1400 FAX
16091 KIMANA RD APPLE VALLEY, CALIFORNIA 92307 (760) 256-2068 (760) 530-6572 FAX

TENTATIVE
PARCEL MAP NO. 20188
APN: 0357-241-06
HIGHWAY 173
SUMMIT VALLEY, CALIFORNIA
FOR:
SUMMIT LAS FLORES, LLC

DRAWN BY: MM
DATE: 01/03/2020
JOB NO. 3050.002
SHEET 1 OF 1

Figure 1

FIGURE 2: REGIONAL EXHIBIT

RCA ASSOCIATES, INC.
SOURCE: GOOGLE EARTH PRO

FIGURE 3: VICINITY EXHIBIT

RCA ASSOCIATES, INC.
SOURCE: GOOGLE EARTH PRO

CENTER OF SITE LOOKING WEST

CENTER OF SITE LOOKING EAST

FIGURE 4
PHOTOGRAPHS OF SITE

CENTER OF SITE LOOKING SOUTH

CENTER OF SITE LOOKING NORTH

FIGURE 4, cont.
PHOTOGRAPHS OF SITE

2.0 ENVIRONMENTAL SETTING

A mobile home is currently located in Parcel 2 and a single-dwelling is currently under construction on Parcel 1. The site is about 114-acres in size and is located directly north of the Highway 173, San Bernardino County, California (Appendix A: Figures 1, 2 and 3). The eastern part of the property, which is relatively undisturbed, supports a moderately dense woodland and is dominated by oak (*Quercus wislizeni*). The herbaceous layer is dominated by yerba santa (*Eriodictyon californicum*), poa grass (*Poa annua*), brome grass (*Bromus* sp.), and erodium (*Erodium* sp.). The western portion of the property supports a mixed desert scrub habitat dominated by California goldfields (*Lasthenia californica*) and erodium (*Erodium* sp.).

The site supports a variety of wildlife given the presence of relatively undisturbed native plant communities throughout the property. The woodland and mixed desert scrub communities provide a wide variety of nesting and foraging habitat for numerous wildlife species. Mammals observed included jackrabbits (*Lepus californicus*) and California ground squirrels (*Spermophilus beecheyi*). Numerous coyote (*Canis latrans*) and mule deer (*Odocoileus hemionus*) tracks also criss-cross the site. Desert cottontails (*Sylvilagus auduboni*) were not observed but are known to occur in the area and likely to inhabit the site.

No reptiles were observed during the field investigations; although species common in the area and which are expected to inhabit the site include gopher snake (*Pituophis catenifer*), California striped racer (*Coluber larteralis*), California king snake (*Lampropeltis getula*), and side-blotched lizards (*Uta stansburiana*). Bird species observed during field investigations included mourning dove (*Zenaida macroura*), western scrub jay (*Aphelocoma californica*), common raven (*Corvus corax*), and western meadowlark (*Sturnella neglecta*). Table 2 provides a comprehensive compendium of wildlife observed in the area and which are known to occur in the region (Appendix A).

Drainage swales are located in the eastern portion of the site within the Remainder Parcel (Figures 1 and 5). These swales traverse the site in a north-south direction with water flowing primarily in a northerly direction from the southeast to the northwest (Figures 1 and 5).

3.0 METHODOLOGIES

General biological surveys were conducted on April 14, 2020 during which biologists from RCA Associates, Inc. walked pedestrian transects throughout the site to collect data on the plant and wildlife communities. Each plant and animal species observed was recorded and samples of different plants were collected for further identification in the lab. The field investigations were performed on the site and in the surrounding area from approximately 0800 to about 1200 hours on April 14, 2020. Weather conditions during the surveys consisted of winds ranging from 0 to 5 mph, temperatures from the low 60's (F) (AM) to mid-60's (PM) (°F) with 5 percent cloud cover. All plants and wildlife detected during the field investigations were recorded and are provided in Tables 1 & 2 along with other species that have been documented in the area (Appendix A).

3.1 General Plant and Animal Surveys: Meandering transects were walked throughout the site at a pace that allowed for careful documentation of the plants and wildlife present on the site. All plants observed were identified in the field and wildlife species were identified through visual observations and/or by vocalizations. Tables 1 and 2 (Appendix A) provide a comprehensive compendium of the plant and animal species observed and those expected to occur on the site and in the region. Zone of Influence (ZOI) surveys were not conducted due to the presence of private property and existing single-family dwellings.

4.0 LITERATURE SEARCH

As part of the environmental process, a search of the California Natural Diversity Database (CNDDB, 2020) was performed. The database search included the USGS Silverwood Lake, California quadrangle to evaluate the existing conditions in the region in regards to special status species. Based on this review, it was determined that seventeen special status wildlife species and eleven special status plants have been documented within the general area out to a distance of approximately five miles. The following tables provide data on each special status species.

Table 4-1: Special status plant species documented in the region (Source: CNDDB, 2020)

NAME	STATUS	HABITAT REQUIREMENTS	PRESENCE/ ABSENCE ON PROPERTY
PLANTS			
Within Silverwood Lake USGS Quadrangle			
Palmer's mariposa -lily *(Calochortus palmeri var. palmeri)*	Federal: None State: None CNPS: 1B.2	Wetlands, meadows and seeps.	Suitable habitat absent from the site.
Plummer's mariposa-lily *(Calochortus plummerae)*	Federal: None State: None CNPS: 4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland.	Suitable habitat present but none observed during the field investigations.
White pygmy-poppy *(Canbya candida)*	Federal: None State: None CNPS: 4.2	Joshua tree woodland, Mojave Desert scrub, pinyon and juniper woodland.	Suitable habitat absent from site.
San Bernardino mountains owl's-clover *(Castilleja lasiorhyncha)*	Federal: None State: None CNPS:1B.2	Riparian woodland.	Suitable habitat absent from the site. Not expected to occur on the site.
Mojave tarplant *(Deinandra mohavensis)*	Federal: None State: Endangered CNPS: 1B.3	Chaparral, coastal scrub, riparian scrub.	Suitable habitat absent from site. Not expected to occur on the site.
Booth's evening-primrose *(Eremothera boothii ssp. boothi)*	Federal: None State: None CNPS: 2B.3	Joshua tree woodland, pinyon and juniper woodland.	Suitable habitat absent from the site. Not expected to occur on the site.
Parish's desert-thorn *(Lycium parishii)*	Federal: None State: None CNPS: 2B.3	Coastal scrub and Sonoran Desert scrub.	Not expected to occur on the site, and none observed during the field investigations.
Short-joint beavertail *(Opuntia basilaris var. brachyclada)*	Federal: None State: None CNPS: 1B.2	Chaparral, Joshua tree woodland, Mojavian Desert scrub.	Suitable habitat absent from site. Not expected to occur on site.

Beaver Dam breadroot *(Pediomelum castoreum)*	Federal: None State: None CNPS: 1B.2	Sandy washes and readouts, Joshua tree woodland and Mojavian Desert	Not expected to occur on the site, and none observed during the field investigations.
Southern mountains skullcap *(Scutellaria bolanderi ssp. austromontana)*	Federal: None State: None CNPS: 1B.2	Chaparral, cismontane woodland, lower montane coniferous forest.	Not expected to occur on the site, and none observed during the field investigations.
Southern Sycamore Alder Riparian Woodland *(Southern Sycamore Alder Riparian Woodland)*	Federal: None State: None	N/A	Southern sycamore alder riparian woodland habitat absent from the site.

CNPS: California Native Plant Society

Table 4-2: Special status wildlife and insects documented in the region or likely to occur in the region (Source: CNDDB, 2020).

NAME	STATUS	HABITAT REQUIREMENTS	PRESENCE/ABSENCE ON PROPERTY
ANIMAL			
Within Silverwood Lake USGS Quadrangle			
Arroyo toad *(Anaxyrus californicus)*	Federal: Endangered State: None CDFW: SSC	Rivers and medium to large streams, and riparian and upland habitats.	Suitable habitat absent from the site. Not expected to occur on the site.
Crotch bumble bee *(Bombus Crotchii)*	Federal: None State:Candidate Endangered	Warm to dry scrubland and grassland.	Not likely to occur on the site. Most observations have been documented in coastal areas.
San Bernardino ringneck snake *(Diadophis punctatus modestus)*	Federal: None State: None	Moist habitats, woodlands, forests, grasslands and chaparral.	Suitable habitat present on the site but none were observed during field investigations.
Western pond turtle *(Emys marmorata)*	Federal: None State: None CDFW: SSC	Aquatic habitats (ponds, streams, rivers, lakes)	Suitable habitat absent from the site.
Quino checkerspot butterfly *(Euphydryas editha quino)*	Federal: Endangered State: None	Scrubland	Suitable habitat present; however, low probability the species occurs on the site.
San Bernardino flying squirrel *(Glaucomys oregonensis californicus)*	Federal: None State: None CDFW: SSC	Jeffrey pine dominated coniferous forests in high elevations	Suitable habitat absent from site. Not expected to occur on the site.
Bald eagle (Haliaeetus leucocephalus)	Federal: Delisted State: Endangered CDFW: Fully Protected	Found near bodies of water.	Not expected to occur on the site given the absence of any waterbodies on the site.
Andrew's marble butterfly *(Euchloe hyantis andrewsi)*	Federal: None State: None	Valleys, hillsides and meadows.	Suitable habitat present but not observed during field investigations.
Westfork shoulderband *(Helminthoglypta taylori)*	Federal: None State: None	Riparian habitat.	Suitable habitat absent from site. Not expected to occur on the site.
Osprey *(Pandion haliaetus)*	Federal: None State: None CDFW: Watch List	Found near bodies of water.	Suitable habitat absent from the site. Not expected to occur on the site.
Coast horned lizard *(Phrynosoma blainvillii)*	Federal: None State: None CDFW: SSC	Scrubland, grassland and lowlands along sandy washes.	Suitable habitat present but none observed during field investigations.
California red-legged frog *(Rana draytonii)*	Federal: T State: None CDFW: SSC	Near water in humid forests, woodlands and grasslands.	Suitable habitat absent from site. Not expected to occur on the site.
Southern mountain yellow-legged frog *(Rana muscosa)*	Federal: Endangered State: Endangered CDFW: Watch List	Mountain creeks, streams and lakes.	Suitable habitat absent from site. Not expected to occur on the site.
Yellow warbler *(Setophaga petechia)*	Federal: None State: None CDFW: SSC	Wetlands, brushy habitat along water.	Suitable habitat absent from site. Not expected to occur on the site.

Mohave tui chub *(Siphateles bicolor mohavensis)*	Federal: Endangered State: Endangered CDFW: Fully Protected	Ponds and wetland areas.	Suitable habitat absent from site. Not expected to occur on the site.
American badger *(Taxidea taxus)*	Federal: None State: None CDFW: SSC	Grasslands and open areas.	Suitable habitat present on the site, but none observed during the field investigations
Two-striped gartersnake *(Thamnophis hammondii)*	Federal: None State: None CDFW: SSC	Near streams with rocky beds and oak woodlands.	Suitable habitat absent from site. Not expected to occur on the site.

E = Endangered
T = Threatened
SSC = Species of Special Concern

5.0 RESULTS

5.1 General Biological Resources

The eastern part of the property supports a moderately dense woodland community dominated by oak (*Quercus wislizeni*) (Figure 5). Co-dominants in the herbaceous layer included yerba santa (*Eriodictyon californicum*), bush poppy (*Dendromecon rigida*), poa grass (*Poa annua*), brome grass (*Bromus* sp.), and erodium (*Erodium texanum*) (Figures 3). The western part of the property supports a mixed desert scrub habitat with 90-95 percent of the vegetation exceeding no more than 3 feet in height and is dominated by California goldfields (*Lasthenia californica*). Co-dominants included dwarf lupin (*Lupines* sp.), erodium (*Erodium texanum*), fiddleneck (*Amsinckia tessellata*), and brome grasses (*Bromus* sp.). Table 1 provides a compendium of all plants identified on the site and in the surrounding region (Appendix A).

As noted above, the site supports relatively undisturbed native vegetation populations throughout the property which provide a variety of habitats for wildlife species. Birds frequently observed on the eastern side of the property during the field investigations included California quail (*Callipepla californica*) and the western kingbird (*Tyrannus verticalis*). Other wildlife observed in the eastern portion of the site included western meadowlark (*Sturnella neglecta*), Anna's hummingbird (*Calypte anna*), western scrub jay (*Aphelocoma californica*), and northern flicker (*Colaptes auratus*). Other bird species observed during the field investigations included mourning dove (*Zenaida macroura*) and common raven (*Corvus corax*). Nesting behavior (i.e., nest building) was also observed in the eastern portion.

A few California ground squirrels (*Spermophilus beecheyi*) and one jackrabbit (*Lepus californicus*) were seen during the field investigations. Wildlife observed in the western side of the property included western honey bee (*Apis mellifera*) house finches (*Haemorhous mexicanus*) and California quail (*Callipepla californica*). Multiple Botta's

FIGURE 5: BIOLOGICAL RESOURCES EXHIBIT

RCA ASSOCIATES, INC.
SOURCE: GOOGLE EARTH PRO

RCA ASSOCIATES, INC.

pocket gopher (*Thomomys bottae*) mounds were located within the western part of the property. Numerous coyote (*Canis latrans*) and mule deer (*Odocoileus hemionus*) tracks also crisscross the site. Mule deer are commonly observed in the area traveling from feeding to bedding areas. Coyotes are common in the area and frequently traverse the site during hunting activities.

Reptiles common to the region which are expected to inhabit the property include western whiptails (*Cnemidophorus tigris*), desert spiny lizards (*Sceloporus magister*), desert night lizards (*Xantusia vigilis*), and side-blotched lizards (*Uta stansburiana*) even though no reptile species were observed in the surveys. Table 2 provides a comprehensive compendium of wildlife which have been observed in the area or which are known to occur in the region (Appendix A). There are a few drainage swales which dissect the property in the eastern portion of the side (Figures 1 and 5).

5.2 State and Federally Listed Species

Eight federal or state listed species have been documented in the surrounding areas of the project site, including seven animal species and one plant. Mojave tarplant (*Deinandra mohavensis*) is listed by the state as endangered with a rare plant rank of 1B.3 (Table 4-1). This plant species occurs in chaparral and riparian habitats which are absent from the site; consequently, the Mojave tarplant is not expected to occur on the site.

Seven listed wildlife species occur in the area including arroyo toad (*Anaxyrus californicus*), Crotch bumble bee (*Bombus crotchii*), quino checkerspot butterfly (*Euphydryas editha quino*), bald eagle (*Haliaeetus leucocephalus*), California red-legged frog (*Rana draytonii*), southern mountain yellow-legged frog (*Rana muscosa*), and Mohave tui chub (*Siphateles bicolor mohavensis*). California Natural Diversity Database (CNDDB, 2020) recognizes all seven of these species in the Silverwood Lake, California quadrangle as either state or federally endangered. All of these listed species have very specific habitat requirements (See Table 4-2) and are therefore not expected to inhabit the site, nor were any of these species observed during the field investigations.

5.3 Species of Special Concern

There are nine wildlife species of special concern which have been documented within about 5-miles of the site (Table 4-1). These species include San Bernardino ringneck snake (*Diadophispunctatus modestus*), western pond turtle (*Emys matmorata*), Andrew's marble butterfly (*Euchloe hyantis andrewsi*), San Bernardino flying squirrel (*Glaucomys oregonensis californicus*), osprey (*Pandion haliaetus*), arroyo toad (*Anaxyrus californicus*), coast horned lizard (*Phrynosoma blainvillii*), yellow warbler (*Setophaga petechia*), American badger (*Taxidea taxus*), and two-striped gartersnake (*Thamnophis hammondii*).

Of these species, four have potential to inhabit the site including the coast horned lizard, yellow warbler, American badger, and two-striped gartersnake. During the field investigations, special attention was given to surveying for these species; however, none of these animals were observed.

There are ten additional plant species of special concern which have been documented in the USGS Silverwood Lake, California topographic quadrangle according to the CNDDB (2020). These species are provided in Table 4-1 and only one species could potentially occur on the site. Plummer's mariposa lily (*Calochortus plummerae*) occurs in foothill grasslands and woodland areas. The species could be present on the site given the presence of woodland and grassland habitats; however, the probability of the species occurring on the property is relatively low.

6.0 IMPACTS AND RECOMMENDATIONS

6.1 General Biological Resources

Potential impacts to the general biological resources in the region and on the site are expected to be negligible due to the minimal amount of vegetation which will be impacted during construction of the single-family dwellings and the access roads (Figure 1). In addition, the anticipated minimal loss of habitat will have a negligible impact on wildlife which inhabit the site or which utilize the property infrequently.

6.2 Special Status Species

Minimal loss of vegetation which will occur during future development is expected to have no impact on any special status plant or animal species could potentially inhabit the property. As noted in Section 5.3, only four wildlife species and one plant species could occur on the property; although, the probability is very low. Given the size of the property there will be minimal loss of grassland and oak woodland habitat during the construction process.

6.3 Recommendations

1. Development plans for the individual lots should allow for minimal disturbance to the native vegetation, wherever possible.

2. Conduct pre-construction surveys as necessary and as required by CDFW, USFWS, and the County.

3. If any special status species are observed during the pre-construction surveys, CDFW and USFWS should be contact to discuss implementation of appropriate mitigations.

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U.S. Fish and Wildlife Service
2010 Desert Tortoise Survey Protocol.

Whitaker, John O.
The Audubon Society Field Guide to North American Mammals. Alfred A Knopf, Inc. 1980.

CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or other biologists under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: April 18, 2020 Signed: Randall Arnold

Field Work Performed By: Randall Arnold
Principal Biologist

Ryan Hunter
Biologist

Lisa Cardoso
Biologist

Appendix A

Tables

Table 1 - Plants observed on the site and known to occur in the immediate surrounding area.

Common Name	Scientific Name	Location
Brome grass	*Bromus* sp.	On-site & surrounding area
Juniper	*Juniperus californica*	Surrounding area
Annual Bursage	*Ambrosia acanthicarpa*	"
Buckwheat	*Eriogonum fasiculatum*	On-site & surrounding area
Schismus	*Schismus barbatus*	On-site & surrounding area
Rabbitbrush	*Chrysothamnus nauseosus*	Surrounding area
Ephedra	*Ephedra nevadensis*	"
Lycium	*Lycium cooperi*	On site
Anderson's thornbush	*Lycium andersonii*	"
Burrobush	*Ambrosia dumosa*	"
Yerba santa	*Eriodictyon californicum*	"
Fiddleneck	*Amsinckia tessellata*	On-site & surrounding area
California Poppy	*Eschscholzia californica*	On site
Bush Poppy	*Dendromecon rigida*	"
Sagebrush	*Artemisia californica*	"
Poa Grass	*Poa annua*	"
Interior Live Oak	*Quercus wislizeni*	On site & surrounding area
Erodium	*Erodium* sp.	On site
Holly		
Chamise	*Adenostoma fasciculatum*	On site
Dwarf Lupin	*Lupines* sp.	"
California Goldfields	*Lasthenia californica*	On site & surrounding area
Beard Tongues	*Penstemon* sp.	On site
Wild Cucumber	*Marah macrocarpus*	"
Sumac	*Rhus* sp.	"

Note: The above list is not intended to be a comprehensive list of every plant which may occur on the site or in the surrounding area.

Table 2 - Wildlife observed on the site during the field investigations.

Common Name	Scientific Name	Location
Common raven	*Corvus corax*	Seen on site and in surrounding area
California ground squirrel	*Spermophilus beecheyi*	"
California Quail	*Callipepla californica*	"
Little Brown Job		Seen on site
Northern Flicker	*Colaptes auratus*	"
Mourning dove	*Zenaida macroura*	Seen on site and in surrounding areas
House finch	*Haemorhous mexicanus*	Seen on site
Song Sparrow	*Melospiza melodia*	"
White-crowned sparrow	*Zonotrichia leucophrys*	"
Western Scrub Jay	*Aphelocoma californica*	"
Anna's Humminbird	*Calypte anna*	"
Western Meadowlark	*Sturnella neglecta*	"
Turkey Vulture	*Cathartes aura*	Surrounding area
Red- Tail Hawk	*Buteo jamaicensis*	"
Western Kingbird	*Tyrannus verticalis*	Seen on site
Gopher Snake	*Pituophis catenifer*	Known to occur in the area
California Striped Racer	*Coluber larteralis*	"
California King Snake	*Lampropeltis getula*	"
Side Blotched Lizard	*Uta stansburiana*	"
Desert cottontail	*Sylvilagus auduboni*	Seen on site
Jackrabbit	*Lepus californicus*	Seen on site and in surrounding area
Bobcat	*Lynx rufus*	Known to occur in the area
Coyotes	*Canis latrans*	Tracks seen on site
Mule Deer	*Odocoileus hemionus*	"
Botta's Pocket Gopher	*Thomomys bottae*	On site burrows observed
Western Honey Bee	*Apis mellifera*	Seen on site

Note: The above Table is not a comprehensive list of every animal species which may occur in the area, but is a list of those common species which were identified on the site or which have been observed in the region by biologists from RCA Associates, Inc.

APPENDIX B

Regulatory

REGULATORY

The following provides a summary of federal and state regulatory jurisdiction over biological and wetland resources. Although most of these regulations do not directly apply to the site, given the general lack of sensitive resource, they provide important background information.

Federal Endangered Species Act

The USFWS has jurisdiction over federally listed threatened and endangered plant and animal species. The federal Endangered Species Act (ESA) and its implementing regulations prohibit the take of any fish or wildlife species that is federally listed as threatened or endangered without prior approval pursuant to either Section 7 or Section 10 of the ESA. ESA defines "take" as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Federal regulation 50CFR17.3 defines the term "harass" as an intentional or negligent act that creates the likelihood of injuring wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, or sheltering (50CFR17.3). Furthermore, federal regulation 50CFR17.3 defines "harm" as an act that either kills or injures a listed species. By definition, "harm" includes habitat modification or degradation that actually kills or injures a listed species by significantly impairing essential behavior patterns such as breeding, spawning, rearing, migrating, feeding, or sheltering (50CFR217.12).

Section10(a) of the ESA establishes a process for obtaining an incidental take permit that authorizes nonfederal entities to incidentally take federally listed wildlife or fish. Incidental take is defined by ESA as take that is "incidental to, and not the purpose of, the carrying out of another wise lawful activity." Preparation of a habitat conservation plan, generally referred to as an HCP, is required for all Section 10(a) permit applications. The USFWS and National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) have joint authority under the ESA for administering the incidental take program. NOAA Fisheries Service has jurisdiction over

anadromous fish species and USFWS has jurisdiction over all other fish and wildlife species.

Section 7 of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any species listed under the ESA, or result in the destruction or adverse modification of its habitat. Federal agencies are also required to minimize impacts to all listed species resulting from their actions, including issuance or permits or funding. Section 7 requires consideration of the indirect effects of a project, effects on federally listed plants, and effects on critical habitat (ESA requires that the USFWS identify critical habitat to the maximum extent that it is prudent and determinable when a species is listed as threatened or endangered). This consultation results in a Biological Opinion prepared by the USFWS stating whether implementation of the HCP will result in jeopardy to any HCP Covered Species or will adversely modify critical habitat and the measures necessary to avoid or minimize effects to listed species.

Although federally listed animals are legally protected from harm no matter where they occur, Section 9 of the ESA provides protection for endangered plants by prohibiting the malicious destruction on federal land and other "take" that violates State law. Protection for plants not living on federal lands is provided by the California Endangered Species Act.

California Endangered Species Act

CDFW has jurisdiction over species listed as threatened or endangered under Section 2080 of the California Fish and Wildlife Code. Section 2080 prohibits the take of a species listed by CDFW as threatened or endangered. The state definition of take is similar to the federal definition, except that Section 2080 does not prohibit indirect harm to listed species by way of habitat modification. To qualify as take under the state ESA, an action must have direct, demonstrable detrimental effect on individuals of the species. Impacts on habitat that may ultimately result in effects on individuals are not considered take under the state ESA but can be considered take under the federal ESA.

Proponents of a project affecting a state-listed species must consult with CDFW and enter into a management agreement and take permit under Section 2081. The state ESA consultation process is similar to the federal process. California ESA does not require preparation of a state biological assessment; the federal biological assessment and the CEQA analysis or any other relevant information can provide the basis for consultation. California ESA requires that CDFW coordinate consultation for joint federally listed and state-listed species to the extent possible; generally, the state opinion for the listed species is brief and references provisions under the federal opinion.

Clean Water Act, Section 404

The COE and the U.S. Environmental Protection Agency regulate the placement of dredged or fill material into "Waters of the United States" under Section 404 of the Clean Water Act. Waters of the United States include lakes, rivers, streams, and their tributaries, and wetlands. Wetlands are defined for regulatory purposes as "areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 Code of Federal Regulations [CFR] 328.3, 40 CFR 230.3).

The COE may issue either individual permits on a case-by-case basis or general permits on a program level. General permits are pre-authorized and are issued to cover similar activities that are expected to cause only minimal adverse environmental effects. Nationwide permits (NWP's) are general permits issued to cover particular fill activities. All NWP's have general conditions that must be met for the permits to apply to a particular project, as well as specific conditions that apply to each NWP.

Clean Water Act, Section 401

Section 401 of the Clean Water Act requires water quality certification and authorization of placement of dredged or fills material in wetlands and Other Waters of the United States. In accordance with Section 401 of the Clean Water Act, criteria for allowable

discharges into surface waters have been developed by the State Water Resources Control Board, Division of Water Quality. As such, proponents of any new project which may impair water quality as a result of the project are required to create a post construction storm water management plan to insure offsite water quality is not degraded. The resulting requirements are used as criteria in granting National Pollution Discharge Elimination System (NPDES) permits or waivers, which are obtained through the Central Valley Regional Water Quality Control Board (RWQCB). Any activity or facility that will discharge waste (such as soils from construction) into surface waters, or from which waste may be discharged, must obtain an NPDES permit or waiver from the RWQCB. The RWQCB evaluates an NPDES permit application to determine whether the proposed discharge is consistent with the adopted water quality objectives of the basin plan.

California Fish and Wildlife Code, Sections 1600-1616

Under the California Fish and Wildlife Code, Sections1600-1616, CDFW regulate projects that divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake. Proponents of such projects must notify CDFW and enter into streambed alteration agreement with them.

Section 1602 of the California Fish and Wildlife Code requires a state or local government agency, public utility, or private entity to notify CDFW before it begins a construction project that will: (1) divert, obstruct, or change the natural flow or the bed, bank, channel, or bank of any river, stream, or lake; (2) use materials from a streambed; or (3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. Once the notification is filed and determined to be complete, CDFW issues a streambed alteration agreement that contains conditions for construction and operations of the proposed project.

California Fish and Wildlife Code, Section 3503.5

Under the California Fish and Wildlife Code, Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders Falconiformes (hawks, eagles, and flacons) or

Strigiformes (owls). Take would include the disturbance of an active nest resulting in the abandonment or loss of young.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, or their eggs and nests. As used in the MBTA, the term "take" is defined as "to pursue, hunt, shoot, capture, collect, kill, or attempt to pursue, hunt, shoot, capture, collect, or kill, unless the context otherwise requires." Most bird species native to North America are covered by this act.

Sensitive Natural Communities

The California Office of Planning and Research and the Office of Permit Assistance (1986) define project effects that substantially diminish habitat for fish, wildlife, or plants, or that disrupt or divide the physical arrangement of an established community as significant impacts under CEQA. This definition applies to certain natural communities because of their scarcity and ecological values and because the remaining occurrences are vulnerable to elimination. For this study, the term "sensitive natural community" includes those communities that, if eliminated or substantially degraded, would sustain a significant adverse impact as defined under CEQA. Sensitive natural communities are important ecologically because their degradation and destruction could threaten populations of dependent plant and wildlife species and significantly reduce the regional distribtion and viability of the community. If the number and extent of sensitive natural communities continue to diminish, the status of rare, threatened, or endangered species could become more precarious, and populations of common species (i.e., not special status species) could become less viable. Loss of sensitive natural communities also can eliminate or reduce important ecosystem functions, such as water filtration by wetlands and bank stabilization by riparian woodlands for example.

Protected Plants

The California Desert Native Plant Act was passed in 1981 to protect non-listed California desert native plants from unlawful harvesting on both public and privately-owned lands. Harvest, transport, sale, or possession of specific native desert plants is prohibited unless a person has a valid permit. The following plants are under the protection of the California Desert Native Plants Act:

- Dalea spinosa (smoketree)
- All species of the genus Prosopis (mesquites)
- All species of the family Agavaceae (century plants, nolinas, yuccas)
- All species of Cactus
- Creosote Rings, ten feet in diameter or greater
- Joshua Trees

No plants were observed during the field investigations which are protected under the California Desert Native Plants Act and the County of San Bernardino Desert Native Plant Protection Ordinance.