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BIOLOGICAL RESOURCES REPORT UPDATE

ON

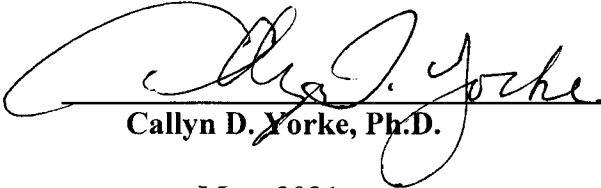
APN 3150-21-028 & 029

35th Street East and Lancaster Blvd.
Lancaster, CA

PREPARED FOR

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PREPARED BY


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May, 2021

TABLE OF CONTENTS

Introduction and Description of Project Site.....	1
Materials and Methods	2
Results	2-3
Corridors of Dispersal	3
Impacts to Sensitive Species	4-11
General Cumulative Impacts	12
Mitigation Measures	12

Figure 1 USGS Topo Map Showing the Location of the Subject Property.

Figure 2 LACO Assessor's Parcel Map with Subject Property.

Figure 3,4 Ground-level Photos of Subject Property.

References

Appendices:

Floral Compendium
Faunal Compendium
Resume of Project Biologist

INTRODUCTION

DESCRIPTION OF THE PROJECT SITE

The project site, at the northeast corner of 35th Street East and Lancaster Blvd., an elevation of about 2,400 ft., consists of approximately 30 acres of heavily disturbed, ruderal vegetation on poorly drained, gravelly-clay soils (Figures 1-4). Vegetation on the site is largely non-native grasses (*Bromus spp.*) and herbs (*Sysimbrium altissimum*). Native shrubs are isolated as individuals or in clusters on the site, e.g. Rabbitbrush (*Ericameria nauseosa*) with the dried, skeletal remains of annuals, e.g. Fiddleneck (*Amsinckia tessellata*). Very little of the original vegetative community, i.e. ecotonal Shadscale Scrub – Joshua Tree Woodland, remains on the site (Figures 3 & 4). There are no Joshua Trees on the subject property. There was no surface water found on the site and no associated riparian vegetation. Drainage across the site appears to be generally northward by sheet flow.

Adjacent parcels appear similar in vegetative composition to the subject property and continue to be largely vacant; distant residential suburbs are to the west and north. The subject property is ecologically isolated from natural vegetation communities in the area (Shadscale Scrub and Joshua Tree Woodland) and appears to play a minor role in local wildlife corridors of dispersal.

This report is an update on our previous Biological Resources Report on the site, dated September, 2004.

MATERIALS AND METHODS

Field surveys of the of the subject property and adjacent land were completed on May 6, 2021 (0930-1015 hrs.) and May 11, 2021 (1800-1850 hrs.) by Callyn D. Yorke, Principal Biologist. The entire site was covered visually while on foot, first along the perimeter, then through the center sections. A binocular (10 x 40), DSLR camera and field notebook were used. Weather conditions were fair with air temperatures ranging from 83F to 90 F; winds were light from the west. Ground-level images of the site were obtained on May 6, 2021.

Attention was given to detection of sensitive plant and animal species known to occur in this region. A **CDFW-UCSC Phase I Burrowing Owl Survey** was completed by walking east-west transects spaced about 10 m apart across the entire site and adjacent property. Several active and abandoned California Ground Squirrel burrows were examined closely for sign of Burrowing Owl. The California Department of Fish & Wildlife (CDFW) Natural Diversity Data Base (CNDDDB Rare Find) was reviewed for information describing locations of sensitive species in the Antelope Valley area.

RESULTS

Overall, there appeared to be little change in the biological resources on the site since our initial surveys in September, 2004. The results of previous and current surveys of the site are comparable. Mitigation measures (see below) for possible impacts to sensitive species were retained from the original report.

Flora

A total of eleven species of plant, representing seven families, was found on and/or immediately adjacent to the site (see Floral Compendium). Although some native desert annuals occur on the site seasonally, there is significant competitive coverage by invasive exotic grasses and herbs (e.g. *Bromus* spp., *Sisymbrium altissimum*, *Erodium cicutarium*). The dried, skeletal remains of annuals were found throughout the site; most could not be assigned to species. No State or Federally listed endangered, rare or sensitive plant species was found on the site (see *Impacts to Sensitive Plants*).

cy/3

Fauna

Birds found on or adjacent to the site included, Mourning Dove, Horned Lark, Common Raven and House Finch. Mammal sign was predominantly Merriam's Kangaroo Rat and California Ground Squirrel. No rare, threatened or sensitive species of animal was found on the site. There did appear to be potential for the occurrence of certain sensitive species, e.g. wintering raptors (see *Impacts to Sensitive Species*).

Corridors of Dispersal

The project site has been severely degraded by brush clearing, and retains little of the native vegetation and wildlife associated with undisturbed desert in this region. There are no connecting corridors of wildlife dispersal between the subject property and natural habitats in the area.

Impacts to Sensitive Species - Overview

KEY TO ABBREVIATIONS

CDFW = California Department of Fish & Wildlife

USFWS = United States Fish & Wildlife Service

CNPS = California Native Plant Society

SSC = CDFW Species of Special Concern

FSC = USFWS Species of Special Concern

Special Status Species

Special status species include plants and animals that are either listed as endangered or threatened under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA), listed as rare under the California Native Plant Protection Act (Lists 1 & 2), or considered to be rare but not formally listed by resource agencies, professional organizations (e.g. California Native Plant Society [CNPS], and the scientific community. For the purposes of this Biological Resources Report, the term *sensitive species* refers to any of the following:

- Species listed as Endangered or Threatened under the Federal ESA (Title 50, Code of Federal Regulations [CFR] Parts 17.11 and 17.12);
- Species listed as Endangered, Threatened or Rare under the CESA (Sections 670.2 and 670.5, Title 14, California Code of Regulations [CCR]);
- Species without a formal listing status that meet definitions of *Endangered* or *Rare* under CEQA Guidelines, Section 15380, including CDFW *Species of Special Concern, Candidate, or Proposed* species for listing under the Federal Endangered Species Act;
- CDFW *Species of Special Concern* or *Fully Protected* by CDFW; or
- CNPS rare plant ranks:
 - List 1A: Species presumed extinct in California;
 - List 1B: Species considered rare or endangered in California and elsewhere;
 - List 2: Species considered rare or endangered in California but are more common elsewhere.

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Literature Review

A literature review was conducted to determine the potential for occurrence of special status plant and wildlife species in the Antelope Valley area. The online California Natural Diversity Database (CNDDDB) was reviewed for the Lancaster, Palmdale and surrounding USGS 7.5- minute quadrangles. Additionally, the following sources were reviewed:

- United States Fish and Wildlife Service (USFWS) list of endangered, threatened and proposed species.
- California Native Plant Society's (CNPS) online Inventory of Rare and Endangered Plants of California.
- Special Animals List (CDFW)
- Field Guides and other publications relevant to the distribution of plants and animals in the region.
- My field notes from hundreds of biological resources reports and field surveys conducted in this region (Yorke, C. 1984-2014; 2009-2021: <http://avconline.avc.edu/cyorke/fieldnotes/>).

Impacts to Sensitive Species - Discussion

FLORA

No CNPS, State or Federal listed plant was found on the site. Several listed species are known to occur in this region and are detectable in spring through early summer. Potential impacts to these species are considered below.

Kern County Evening Primrose (*Camissonia kernensis*) is listed as a rare species by the CNPS, but unlisted by State and Federal agencies. This plant is found in desert washes and canyons from 2500 to 6000 feet in elevation, and in Joshua Tree woodland. Flowering occurs in May. No individuals or remains of this species were found. Habitat on the site is inappropriate for this species and adverse impacts are unlikely.

Alkali Mariposa Lily (*Calochortus striatus*) is listed a Category 1B (locally endangered) species by the CNPS and as a Level 2 Candidate species by the USFWS. This attractive, relatively rare annual plant is found locally in this vicinity (Yorke, pers. observation) in alkali depressions supporting chenopod scrub vegetation (CNDDDB; Yorke pers. observ.). Flowering occurs from April to June, depending on adequate seasonal rainfall. Soils on

cy/6

the site are largely inappropriate for Alkali Mariposa Lily; adverse impacts are unlikely.

Desert Cymopterus (*Cymopterus deserticola*) is listed as a rare and highly restricted species by the CNPS and Level 2 Candidate species by USFWS. This plant occurs on Edwards AFB in creosote scrub. Flowering occurs in April. No evidence of this species was found in the surveyed areas. Very little potential exists for this species occurring on the site; project impacts are unlikely.

Sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*) is CDFW SSC and CNPS Category 2.2 (rare) species found in Great Basin scrub in sand dunes with clay slicks. No individuals of this plant were found on the site. Habitat on the site appears inappropriate; project impacts are unlikely.

Short-joint beavertail cactus (*Opuntia basilaris brachyclada*) is a FSC and CNPS Category 1B plant occurring in Joshua tree woodland and upland desert-chaparral. No individuals of this conspicuous species were found on the site; project impacts are unlikely.

Peirson's morning-glory (*Calystegia peirsonii*) is a CNPS Category 4 plant species found in chenopod scrub and foothill chaparral. This is a rhizomatous perennial with conspicuous white flowers that has been found in the foothills immediately south of the site. Habitat on the site appears largely inappropriate; project impacts are unlikely.

Peirson's lupine (*Lupinus peirsonii*) is a CNPS Category 4 plant that occurs in Joshua tree woodland and pinyon-juniper woodland. No individuals of this plant were found on the site. Habitat on the site is inappropriate. Project impacts are unlikely.

Pigmy poppy (*Canbya candida*) is a CNPS Category 1B plant found in Joshua tree woodland and desert scrub, in sandy places. No individuals of this plant were found on the site. Habitat on the site is inappropriate and project impacts are unlikely.

Parry's spineflower (*Chorizanthe parryi* var. *parryi*) is a CNPS Category 4 species found in chenopod scrub and creosote desert scrub. Flowering occurs from April to July. No individuals of this plant were found on the site. Habitat and soils on the site are marginally appropriate, however project impacts are unlikely.

Clokey's cryptantha (*Cryptantha clokeyi*) is a CNPS Category 1B annual found in upland desert scrub on rocky soils. Habitat on the site is inappropriate; project impacts are unlikely.

Crowned Muilla (*Muilla coronata*) is listed by the CNPS as a rare species that is endangered in part of its range, but as a taxonomically invalid species by USFWS. This plant is found in heavy soils in Joshua Tree woodland, between 3000 and 5000 feet in elevation. Flowering occurs from March through April. No sign of this plant was found on the site. Habitat for this species is inappropriate and project impacts are unlikely.

Barstow woolly sunflower (*Eriophyllum mohavense*) is a Federal Special Concern Species (FSC) and California Native Plant Society (CNPS) category 1B (rare, threatened or endangered throughout their range) species. It occurs in rises between sinks in xerophytic saltbush scrub. No evidence of this plant was found on the site. Habitat is marginally appropriate, however project impacts are unlikely.

Mason's neststraw (*Stylocline masonii*) is a FSC and CNPS 1B species that occurs in chenopod (e.g. saltbush) scrub. No sign of this plant was found on the site. Habitat on the site is largely inappropriate; project impacts are unlikely.

Palmer's grappling hook (*Harpagonella palmeri*) is a FSC and CNPS category 2 species (rare, threatened, or endangered in California, but more common in other states). It occurs in sage scrub and clay soils below 2,500 feet. No sign of this plant was found in the study area. Habitat on the site is inappropriate. Project impacts are unlikely.

Pale-yellow layia (*Layia heterotricha*) is a CNPS Category 1B annual herb found in valley grassland and riparian habitat, from 0-5,000 ft. in elevation. Habitat on the site is inappropriate; project impacts to this species are unlikely.

Lancaster milkvetch (*Astragalus preussi* var. *laxiflorus*) is a CNPS 1B species that occurs in chenopod scrub, alkaline clay flats or gravelly or sandy washes and along draws in gullied badlands. No sign of this conspicuous plant species was found in the surveyed area; habitat is marginally appropriate, however project impacts are unlikely.

Parish's alkali grass (*Puccinellia parishii*) is a CNPS Category 1B and CDFG S1.1 plant found in alkali springs and seeps in deserts. Habitat on the site is marginally appropriate, however impacts to this plant species are unlikely.

Lemmon's syntrichopappus (*Syntrichopappus lemmonii*) is a FSC and CNPS Category 4 species (species of limited distribution in California but whose existence does not appear to be susceptible to threat). This plant occurs in Joshua tree woodland with sandy

cy/8

or gravelly soil. No sign of this plant was found on the site. The habitat on the site is largely inappropriate and project impacts are unlikely.

Red rock poppy (*Eschscholzia minutiflora* ssp. *twisselmannii*) is a CDFW S2.2 and CNPS Category 1B.2 species found in Mojavean desert scrub, especially on volcanic tuff soils. Nearby records of this plant are from Edwards Air Force Base. No individuals of this plant were found on the site. Habitat on the site is largely inappropriate; project impacts are unlikely.

FAUNA

No listed species were found on the subject property. Several sensitive animal species are known to occur in this region; potential impacts to these are addressed below.

Mojave Desert Tortoise (*Gopherus agassizii*) is a CDFW and USFWS Endangered Species known to occur in this region, principally east of Highway 14. Absolutely no sign (e.g. burrows, scat, shell fragments) of desert tortoise was found on the subject property or adjacent parcels during our surveys. Nor was there any evidence found of historical occupation by tortoises. We recommend a DECLARATION OF NO SIGNIFICANT IMPACT on the Mojave Desert Tortoise.

Southern California Legless Lizard (*Aniella stebbinsi*) is a CDFW SSC that occurs in sandy to loamy soil in the vicinity of ground moisture and leaf-litter. Fallen branches, leaf-litter and other debris was overturned in search of these lizards. No legless lizards were found; the compacted soils on the site are inappropriate and project impacts are unlikely.

Mountain Plover (*Charadrius montanus*) is a CDFW "Species of Special Concern (SSC) and Category S2, S3 (Imperiled and Vulnerable) species which has declined as a winter resident. Although it prefers open, plowed fields and short grass, small flocks wander throughout the eastern Antelope Valley during winter and may occasionally use resources on the subject property (Yorke, pers. observ.). Adjacent land to the site appears similar and thus could serve as alternative, suboptimal wintering grounds for these birds. Land development in the eastern Antelope Valley contributes to an incremental loss of wintering habitat for the Mountain Plover (see Mitigation Measures).

Burrowing owl (*Athene cunicularia*) is a CDFW “Species of Special Concern” (SSC) in California. Several family groups of burrowing owls are still found in the open fields of the western Antelope Valley (e.g. along 110th Street West near Avenue I, and near 40th Street West and Avenue K; Avenue I to Avenue K, east of Challenger Way) though the population of this species in the Antelope Valley today is only a small fraction of its size fifteen years ago (Yorke, unpublished field notes). Abandoned farmland in the eastern Antelope Valley (i.e. between 60th Street East and 30th Street East, Avenues H-K) may also support burrowing owls (Yorke, pers. observation). Burrowing owls may be declining for a number of reasons, e.g., habitat loss, human encroachment, pesticides, and illegal hunting.

A Phase I (clearance) survey protocol for Burrowing Owl was completed on the site. No sign of burrowing owl was found on or adjacent to the subject property; potential for occurrence is relatively low due to frequent disturbances, small acreage of suitable habitat, and ecological isolation of the site; project impacts to nesting Burrowing Owl are unlikely. Additional surveys for nesting Burrowing Owl on the subject property appear unwarranted at this time. However, migratory, visitant and wintering Burrowing Owls on the site could be adversely impacted by the development (see Mitigation Measures).

Long-eared owl (*Asio otus*) is a CDFW SSC occasionally found in fall and winter months, in small groups. These owls prefer relatively isolated clusters of trees and shrubs in this vicinity (Yorke, pers. observ.). The number of sightings of this species has decreased over the past 20 years in the Antelope Valley. Reasons for the apparent decline of long-eared owls in this region may include habitat loss and encroachment. These owls are extremely shy and tend to avoid areas with human activity. No sign of long-eared owls was found on the site; the habitat on the site appears inappropriate; project impacts are unlikely.

Short-eared owl (*Asio flammeus*) is a CDFW and USFWS SSC occasionally found during migration in fall and spring in the western Mojave; there are no documented nesting records of this species in the immediate area (Yorke, pers. observation). Habitat on the site is largely unsuitable for this owl; project impacts are unlikely.

Prairie falcon (*Falco mexicanus*) is another CDFW SSC that appears to be declining in portions of its range. No individuals of this species were seen on the project site during the surveys. This is a wide ranging species that usually nests in remote canyons and forages throughout the region. It may be declining in response to cumulative impacts from loss of open fields for foraging. Direct project impacts to nesting prairie falcons are unlikely; possible project impacts to wintering falcons may result from a small, incremental loss of foraging opportunities (see Mitigation Measures).

cy/10

Golden eagle (*Aquila chrysaetos*) is a CDFW SSC that may also nest in the mountains and foothills bordering the Antelope Valley, foraging widely elsewhere. In winter months (November-February) the local population of golden eagles is augmented by migrants from other regions. At such times, individuals, particularly immature birds, commonly perch on power poles along roadways and may be struck by cars when they attempt to feed on roadkill. No eagles were found on or near the subject property; impacts to nesting eagles are unlikely. Direct project impacts on wintering golden eagles are possible (see Mitigation Measures).

Ferruginous hawk (*Buteo regalis*) is a CDFW SSC that winters in the Antelope Valley in relatively high numbers. Birds forage in open fields, often using power poles for lookouts. They rarely take roadkill and thus are seldom hit by automobiles. The cumulative loss of foraging habitat in the large open spaces of the western Mojave may be the greatest threat to this species in the region. Direct project impacts on wintering ferruginous hawks are possible (see Mitigation Measures).

Swainson's Hawk (*Buteo swainsoni*) is a State Threatened species known to have nested in the eastern Antelope Valley. A CNDDDB record indicates a pair of Swainson's hawks nested in a locust tree surrounded by agricultural fields near Avenue I and 50th Street East, in 1996 and 1999. Migrating Swainson's Hawk may occur almost anywhere in the region. However, no suitable nesting habitat occurs on the site; project impacts to Swainson's Hawk are unlikely.

Cooper's Hawk (*Accipiter cooperii*) is a CDFW SSC that nests locally in the western Mojave and is a passage migrant and winter visitor. No individuals of this species were seen on the project site. However, I have found Cooper's hawk to be one of the more common raptors in desert suburbs, e.g. the Antelope Valley; it is frequently found in and around suburban parks and yards with mature trees (Yorke, pers. observ). Habitat on the site is inappropriate and unlikely to support nesting Cooper's hawk; project impacts are unlikely.

LeConte's thrasher (*Toxostoma lecontei*) The San Joaquin Valley population of this species is a Federal Candidate for listing. This species has been found at several scattered localities in the western Mojave (e.g. east Palmdale and Edwards AFB). A small population possibly occurs in Jawbone Canyon north of Mojave and also (though not in recent years) in east Palmdale, near 40th Street East and Avenue No thrashers were found during the surveys of the study site; habitat on the site is inappropriate and project impacts are unlikely.

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Loggerhead shrike (*Lanius ludovicianus*) is another Federal Candidate for listing and a CDFW SSC. Habitat loss and pesticide poisoning are blamed for the decline of this bird. No individuals of this species were found on the subject property. Habitat adjacent to the site is marginal for shrikes; project impacts to nesting shrikes are unlikely.

Horned lark (*Eremophila alpestris actia*) is a CDFW SSC. Six horned larks (3 pair) were found on the site during the survey. Horned larks nest in the western Mojave and appear to have a relatively large, viable population in the Antelope Valley (Yorke, unpublished field notes). Presently, it is not known if this species nests on or adjacent to the study site. Since this subspecies is considered by CDFW to be relatively stable, (i.e., State S4), implementation of the proposed project will probably result in a small, incremental loss of habitat for the Horned Lark (*Eremophila alpestris actia*).

Bell's Sparrow (*Artemisiospiza belli belli*) is a CDFW SSC resident in Big Sage and alkaline sink areas of the extreme western Mojave. No sign of this subspecies species was found on the site (nor was it expected); project impacts to *A. belli belli* are unlikely.

Virtually all **Bats** in California are CDFW SSC. Consequently, any loss of foraging, roosting or breeding habitat caused by this project could have impacts on these nocturnal insectivores. Rocky outcrops in the central portion of the site are possible bat roosts, e.g. Western Mastiff Bat. However, no sign of this or any other bat species was found on the property. Old mine shafts and abandoned buildings may support bat colonies. If bats are using the subject property for feeding, implementation of the proposed subdivision will result in no loss of foraging habitat; nearby open land should also provide adequate foraging opportunities, in addition to increased insect availability in adjacent, well-watered developments with outdoor lighting.

Mojave ground squirrel (*Xerospermophilus mohavensis*) is a CDFW threatened species that occurs at scattered localities in the Mojave Desert, principally east of Highway 14, including nearby Edwards AFB. There are also records of MGS from east Palmdale. No sign of this species was found (or expected to be found without a trapping study) on the subject property. The disturbed soils, trash dumping and frequency of ATV's and free-ranging domestic dogs, renders the site inappropriate for MGS. We recommend a DECLARATION OF NO SIGNIFICANT IMPACT ON MGS.

American badger (*Taxidea taxus*) is a CDFW SCC that may occasionally be attracted to resources on the subject property. However, no sign of badger was found during the surveys. Badgers have occurred in this area, as one was reportedly seen in the western Mojave, e.g. crossing Highway 14 near Rosamond in 1993 (L. Uhazy, pers. communication). A badger's territory is seldom less than 100 acres, indicating that the present site contains inadequate spatial resources for one breeding pair. Project impacts to badgers are unlikely.



General Cumulative Impacts

Whenever wilderness is taken for development few native organisms benefit. This is because in the complex web of life everything is interconnected and dependent. Removing vegetation destroys habitat for countless microscopic organisms with larger species dependent on them for food. For example, the tiny moth *Tegeticula paradoxa* is the only known pollinator of the Joshua Tree; disappearance of either species results in extinction of both. And the overall result of loss of Joshua Trees, an ecological keystone species, is simplification of the food web to include a new assemblage of relatively few, hardy species. Consequently, exotic pests like Russian thistle, tumble mustard, stork's bill, brome grasses, Argentine fire ants, aphids, snails, Feral rock pigeons and European starlings become established.

The site has potential for use by wintering raptors, e.g. Golden Eagle, Ferruginous Hawk and Prairie Falcon. Mitigation Measures are recommended (see below).

MITIGATION MEASURES

The California Environmental Quality Act (CEQA) and subsequent amendments, require mitigation measures to be included in all development projects where immediate or probable impacts to Rare, Threatened, or Endangered species are expected. CEQA also requires mitigation measures for species (e.g. birds of prey) for which evidence exists that their populations are declining or threatened, yet have not received official designation (Section 15380).

In this project, there appears potential for adverse impacts on wintering raptors and possibly the Mountain Plover. The following mitigation plan is recommended.

- 1) A field survey shall be made by a qualified biologist prior to grading/vegetation removal, if the latter activities are conducted between the months of October and February.
- 2) If evidence of wintering raptors or Mountain Plover is found on the site, grading and vegetation removal shall be halted until it is determined by a qualified biologist, that such activities pose no direct threat to the aforementioned birds.

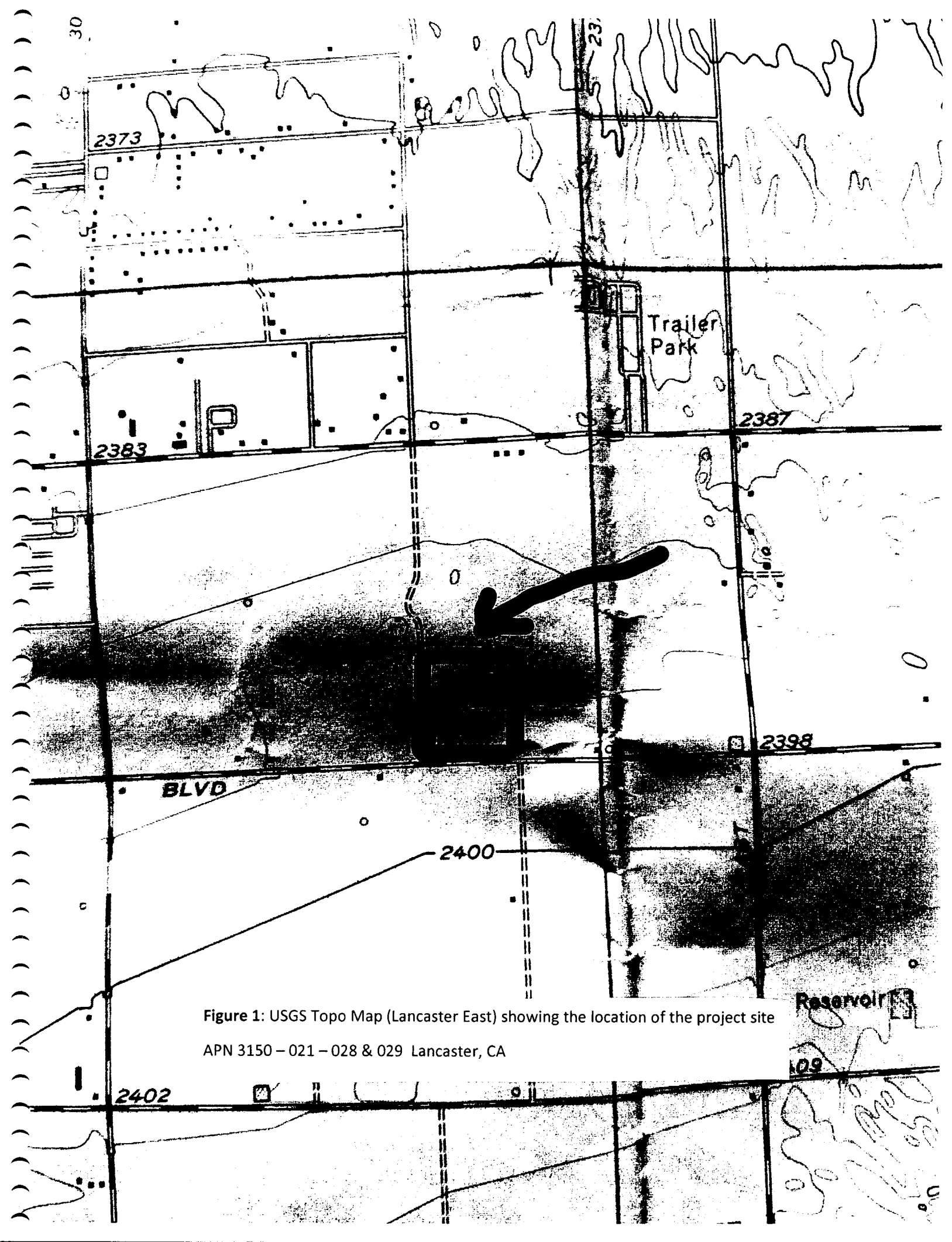


Figure 1: USGS Topo Map (Lancaster East) showing the location of the project site
APN 3150 – 021 – 028 & 029 Lancaster, CA

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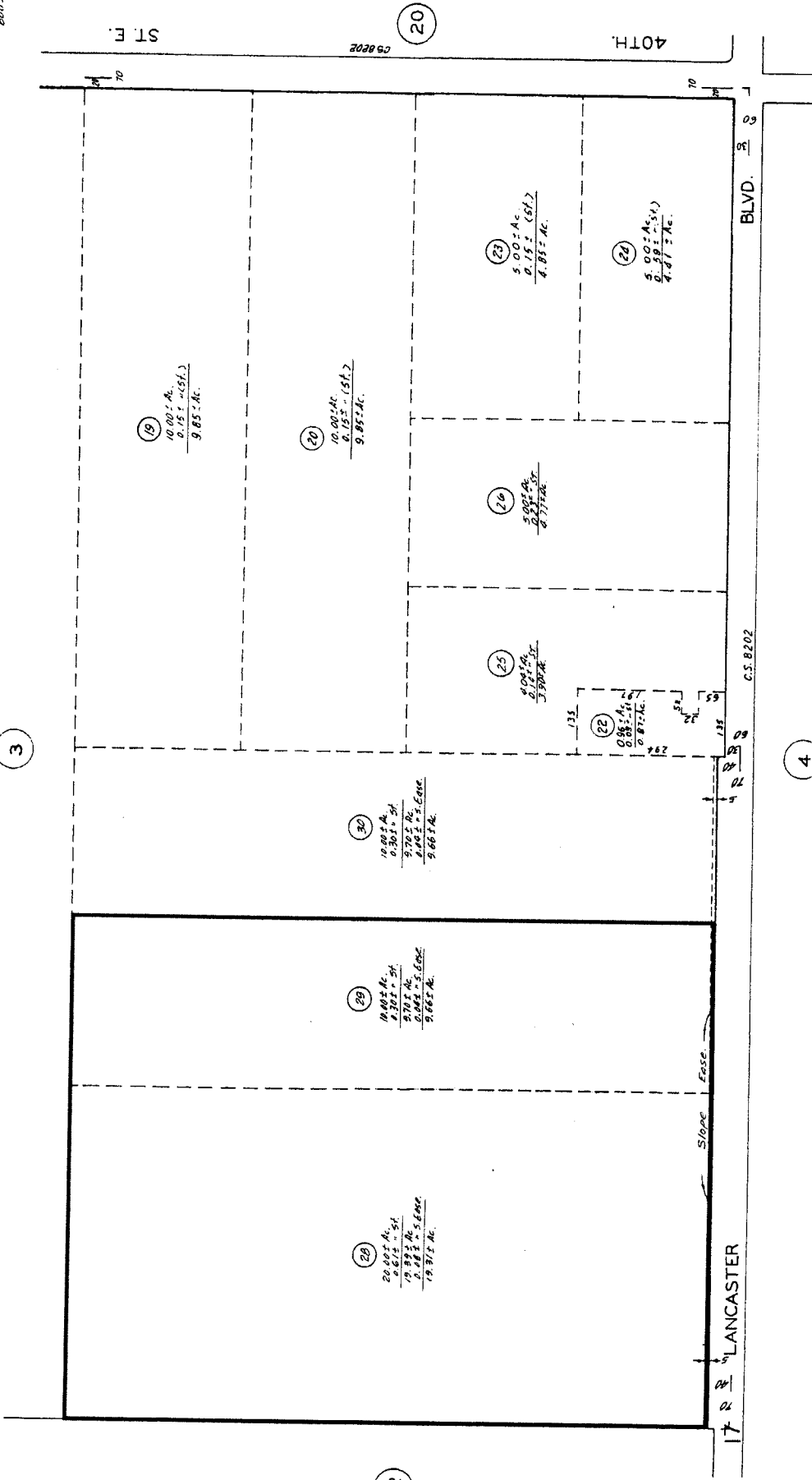
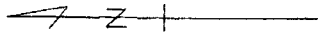
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Figure 2: LACO APN map showing the location of the project site
APN 3150-021-028 & 029 Lancaster, CA

COUNTY OF LOS ANGELES



Figure 3: Ground-level photo of the subject
Property (APN 3150-21-28, 29)
Viewing north from the SWC (5-6-21).



Figure 4: Ground-level photo of the subject
Property (APN 3150-21-28, 29)
Viewing east from the SWC (5-6-21).

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Floral Compendium

The following is a list of vascular plants found in the study area during the surveys. Relative abundances were estimated visually. Nomenclature generally follows Baldwin et. al. (2012) and Calflora (2013).

LEGEND

Frequency

A = more than 50 individuals

B = 25-50 individuals

C = 10-20 individuals

D = 1-10 individuals

Latin binomial names are italicized, followed by common names and frequencies.

ASTERACEAE

Ericameria nauseosa Rabbitbush A

BORAGINACEAE

Amsinckia tessellata Fiddleneck A

BRASSICACEAE

Sisymbrium altissimum Tumble Mustard A (exotic)

Descurainia pinnata Western Tansy Mustard C

CHENOPODIACEAE

Atriplex canescens Four-wing Saltbush C

Atriplex sp. cf spinifera Spiny Saltbush D

EUPHORBIACEAE

Eremocarpus setigerus Dove weed A

GERANIACEAE

Erodium cicutarium Red-stemmed Filaree (exotic) A

POACEAE

Bromus madritensis ssp. *rubens* Red Brome A (exotic)

Bromus tectorum Cheat Brome A (exotic)

Festuca microstachys Gray's fescue D

FAUNAL COMPENDIUM

Explanation of Symbols

Relative Frequency and Abundance

c -- common: observed or expected throughout the site in high numbers.

f -- fairly common: observed or expected in moderate numbers.

u -- uncommon: observed or expected in low numbers.

o -- occasional: observed or expected with low frequency.

s -- scarce: rarely observed or expected on the site.

Local Status

* Presence noted visually, vocally, or other sign. (1,2, etc. = maximum number of individuals found during a survey).

Museum/University Record: One or more records of this species in institutional collections from this region.

Note: This faunal species list includes animals observed or expected to occur on or in the immediate vicinity of the study site.

Butterflies

DANIDAE

- Monarch (*Danaus plexippus*) s
- Striated Queen (*D. gilippus strigosus*) u

NYMPHALIDAE

- Neumogen's Checkerspot (*Chlosyne acastus*) u
- Leanira Checkerspot (*Chlosyne leanira cerrita*) s
- Mylitta Crescent (*Phycoides mylitta*) s
- Painted Lady (*Vanessa cardui*) o

PIERIDAE

- Becker's White (*Pontia beckerii*) s
- California White (*P. sisymbrii*) u
- Checkered White (*P. protodice*) 2
- Southern Dogface (*Zerene cesonia*) o
- Nicippe Yellow (*Eurema nicippe*) s
- Dainty Sulphur (*Nathalis iole*) s
- Desert Orange-tip (*Anthocharis cethura cethura*) u
- Grinnell's Marble (*Anthocharis lanceolata australis*) u
- Desert Marble (*Euchloe hyantis lotta*) u

LIBYTHEIDAE

- Snout Butterfly (*Libythea bachmanii larvata*) s

RIODINIDAE

- Mormon Metalmark (*Apodemia mormo mormo*) u
- Cythera Metalmark (*A. mormo cythera*) u
- Behr's Metalmark (*A. virgulti*) u

LYCAENIDAE

- Grey hairstreak (*Strymon melinus*) s
- Marine Blue (*Leptotes marina*) s
- Pygmy Blue (*Brephidium exilis*) s
- Acmon Blue (*Plebejus acmon acmon*) u
- Bernardino Blue (*Euphilotes battoides bernardino*) u
- Elvira's Blue (*E. pallescens elvira*) u
- Mojave Blue (*E. mojave*) u
- Small Blue (*Philotiella speciosa*) s

MEGATHYMIDAE

- Martin's Giant Skipper (*Megathymus coloradensis martini*) u

HESPERIIDAE

- Saltgrass Skipper (*Polites sabuleti*) s
- Juba Skipper (*Hesperia juba*) u
- Sootywing (*Pholisora catullus*) o

Amphibians and Reptiles

BUFONIDAE

Western Toad (*Anaxyrus boreas halophilus*) s

HYLIDAE

Pacific Chorus Frog (*Hyla regilla*) u

GEKKONIDAE

Western Banded Gecko (*Coleonyx variegatus*) s

PHRYNOSOMATIDAE

Zebra-tailed Lizard (*Callisaurus draconoides*) s
Long-nosed Leopard Lizard (*Gambelia wislizenii*) o
Desert Horned Lizard (*Phrynosoma platyrhinos*) s
Desert Spiny Lizard (*Sceloporus magister*) c
Western Fence Lizard (*Sceloporus occidentalis*) u
Common Side-blotched Lizard (*Uta stansburiana*) 2

XANTUSIDAE

Desert Night Lizard (*Xantusia vigilis*) u

TEIIDAE

Western Whiptail (*Aspidoscelis tigris*) 1

LEPTOTYPHLOPIDAE

Western Blind Snake (*Leptotyphlops humilis*) s

COLUBRIDAE

Glossy Snake (*Arizona elegans*) u

Western Shovel-nosed Snake (*Chionactis occipitalis*) s
Night Snake (*Hypsiglena torquata*) u
Common Kingsnake (*Lampropeltus getulus*) u
Coachwhip (*Masticophis flagellum*) c
Gopher Snake (*Pituophis melanoleucus*) u
Long-nosed Snake (*Rhinccheilus lecontei*) u
California Black-headed Snake (*Tantilla planiceps*) s
Lyre Snake (*Trimorphodon biscutatus*) s

VIPERIDAE

Mojave Rattlesnake (*Crotalus scutulatus*) o

TESTUDINIDAE

Desert Tortoise (*Gopherus agassizii*) (see text)

Birds

Note

Numbers in parentheses following a species indicate the maximum number of individuals seen or heard during a survey. Taxonomy follows the 2013 AOU Checklist of Birds of North America, including the 54th Supplement.

ODONTOPHORIDAE

California Quail (*Callipepla californica*) f

CATHARTIDAE

Turkey Vulture (*Cathartes aura*) f

ACCIPITRIDAE

Northern Harrier (*Circus cyaneus*) u
Ferruginous Hawk (*Buteo regalis*) u (see text)
Red-tailed Hawk (*Buteo jamaicensis*) c
Swainson's Hawk (*Buteo swainsoni*) u (see text)
Golden Eagle (*Aquila chrysaetos*) u (see text)
Cooper's Hawk (*Accipiter cooperi*) u (see text)

CHARADRIIDAE

Killdeer (*Charadrius vociferus*) u

COLUMBIDAE

Rock Dove (*Columba livia*) 2 (adjacent developments)
Mourning Dove (*Zenaida macroura*) 5

CUCULIDAE

Greater Roadrunner (*Geococcyx californianus*) o



TYTONIDAE

Common Barn Owl (*Tyto alba*) u

STRIGIDAE

Great horned Owl (*Bubo virginianus*) o

Burrowing Owl (*Athene cunicularia*) s (see text)

Long-eared Owl (*Asio otus*) s

CAPRIMULGIDAE

Lesser Nighthawk (*Chordeiles acutipennis*) u

Common Poorwill (*Phalaenoptilus nuttallii*) s

APODIDAE

Vaux's Swift (*Chaetura vauxi*) s

TROCHILIDAE

Anna's Hummingbird (*Calypte anna*) u

Costa's Hummingbird (*C. costae*) u

Black-chinned Hummingbird (*Archilochus alexandri*) u

Rufous Hummingbird (*Selasphorus rufus*) s

PICIDAE

Ladder-backed Woodpecker (*Picoides scalaris*) s

Northern Flicker (*Colaptes auratus*) u

FALCONIDAE

American Kestrel (*Falco sparverius*) u

Prairie Falcon (*Falco mexicanus*) u (see text)

TYRANNIDAE

Black phoebe (*Sayornis nigricans*) u
Say's phoebe (*Sayornis saya*) c
Ash-throated flycatcher (*Myiarchus cinerascens*) u
Western Kingbird (*Tyrannus verticalis*) f

LANIIDAE

Loggerhead Shrike (*Lanius ludovicianus*) s (see text)

CORVIDAE

Western Scrub-jay (*Aphelocoma californica*) u
Common Raven (*Corvus corax*) 2

ALAUDIDAE

Horned Lark (*Eremophila alpestris*) 6 (see text)

HIRUNDINIDAE

Cliff swallow (*Petrochelidon pyrrhonota*) u
Violet green swallow (*Tachycineta thalassina*) s
Tree swallow (*Tachycineta bicolor*) s
Barn swallow (*Hirundo rustica*) 2
Rough-winged swallow (*Stelgidopteryx ruficollis*) s

REMIZIDAE

Verdin (*Auriparus flaviceps*) u

AEGITHALIDAE

Bushtit (*Psaltriparus minimus*) s

TROGLODYTIDAE

Cactus Wren (*Campylorhynchus brunneicapillus*) u

Rock Wren (*Salpinctes obsoletus*) u
Bewick's Wren (*Thryomanes bewickii* f
House Wren (*Troglodytes aedon*) u

REGULIDAE

Ruby-crowned Kinglet (*Regulus calendula*) u

TURDIDAE

Hermit Thrush (*Catharus guttatus*) s
Swainson's Thrush (*C. swainsoni*) s
American Robin (*Turdus migratorius*) u

MIMIDAE

Northern Mockingbird (*Mimus polyglottos*) 1
Le Conte's Thrasher (*Toxostoma lecontei*) s (see text)
California Thrasher (*Toxostoma redivivum*) u

STURNIDAE

European Starling (*Sturnus vulgaris*) 1



PARULIDAE

Orange-crowned Warbler (*Oreothlypis celata*) f
Nashville Warbler (*Oreothlypis ruficapilla*) s
Common Yellowthroat (*Geothlypis trichas*) u
MacGillivray's Warbler (*Geothlypis tolmiei*) s
Wilson's Warbler (*Cardellina pusilla*) s
Yellow-rumped Warbler (*Setophaga coronata*) c

ICTERIDAE

Western Meadowlark (*Sturnella neglecta*) s
Scott's Oriole (*Icterus parisorum*) s
Bullock's Oriole (*Icterus bullockii*) u
Black-throated Sparrow (*Amphispiza bilineata*) u
White-crowned Sparrow (*Zonotrichia leucophrys*) c
Bell's Sparrow (*Artemisospiza belli*) u
Lark Sparrow (*Chondestes grammacus*) u
Savannah Sparrow (*Passerculus sandwichensis*) u
Vesper Sparrow (*Pooecetes gramineus*) u
Golden-crowned Sparrow (*Zonotrichia atricapilla*) s
Song Sparrow (*Melospiza melodia*) s

FRINGILLIDAE

House finch (*Carpodacus mexicanus*) 5
American Goldfinch (*Spinus tristis*) s
Lesser Goldfinch (*Spinus psaltria*) u

PASSERIDAE

House sparrow (*Passer domesticus*) u

Mammals

Note

This is a largely hypothetical list of species based on very broad range boundaries which may include the present site. No attempt is made here to assess relative abundance.

GEOMYIDAE

Botta's Pocket Gopher (*Thomomys bottae*)

SORICIDAE

Crawford's Shrew (*Notiosorex crawfordi*)

PHYLLOSTOMIDAE

California Leaf-nosed Bat (*Macrotus californicus*)

VESPERTILIONIDAE

Little Brown Myotis (*Myotis lucifugus*)

Yuma Myotis (*M. yumanensis*)

Long-eared Myotis (*M. evotis*)

Fringed Myotis (*M. thysanodes*)

Long-legged Myotis (*M. volans*)

California Myotis (*M. californicus*)

Western Small-footed Myotis (*M. ciliolabrum*)

Western Pipistrelle (*Parastrellus hesperus*)

Big Brown Bat (*Eptesicus fuscus*)

Western Red Bat (*Lasiurus blossevillii*)

Hoary Bat (*Lasiurus cinereus*)

Townsend's Big-eared Bat (*Corynorhinus townsendii*)

Pallid bat (*Antrozous pallidus*)

MOLOSSIDAE

- Brazilian Free-tailed Bat (*Tadarida brasiliensis*)
- Pocketed Free-tailed Bat (*Nyctinomops femorosacca*)
- Western Mastiff Bat (*Eumops perotis*)

LEPORIDAE

- Desert Cottontail (*Sylvilagus audubonii*) sign
- Black-tailed Jack Rabbit (*Lepus californicus*) sign

SCIURIDAE

- White-tailed Antelope Squirrel (*Ammospermophilus leucurus*)
- California Ground Squirrel (*Otospermophilus beecheyi*) sign

HETEROMYIDAE

- Merriam's Kangaroo Rat (*Dipodomys merriami*) sign
- Panamint Kangaroo Rat (*D. panamintinus mohavensis*)

CRICETIDAE

- Deer Mouse (*Peromyscus maniculatus*) sign
- Desert Woodrat (*Neotoma lepida*)

CANIDAE

- Coyote (*Canis latrans*) sign
- Feral Domestic Dog (*Canis familiaris*) sign
- Desert Kit Fox (*Vulpes macrotis*)

PROCYONIDAE

Ringtail (*Bassariscus astutus*)

Raccoon (*Procyon lotor*)

MUSTELIDAE

Badger (*Taxidea taxus*) (see text)

Western Spotted Skunk (*Spilogale gracilis*)

Striped Skunk (*Mephitis mephitis*)

FELIDAE

Mountain Lion (*Puma concolor*)

Bobcat (*Lynx rufus*)

Domestic Cat (*Felis catus*)

CERVIDAE

Black-tailed Deer (*Odocoileus hemionus*)

EQUIDAE

Domestic Horse (*Equus caballus*)

HOMINIDAE

Human (*Homo sapiens*) sign

Callyn D. Yorke, Ph.D. Biological Resources Reports

Professional Work Experience

A Partial List of

Biological Resources Reports completed in the Antelope Valley Region
1989 - 2021

- 1) APN 3029-12-08: 80 Acres, L.A. County.
- 2) APN 3209-14-21: 10 Acres, L.A. County.
- 3) APN 3010 -002-003 8: 23 Acres, Palmdale.
- 4) APN 3022-25-10: 5 Acres, Palmdale.
- 5) APN 3056-12-31: 20 Acres, Palmdale.
- 6) APN 3053-009-004: 35 Acres, Palmdale.
- 7) APN 3053-009-007: 20 Acres, Palmdale.
- 8) APN 302-26-9;57: California City, Kern County.
- 9) APN 3114-13-001: 80 Acres, Lancaster.
- 10) APN 3126-19-024: 4 Acres, Lancaster.
- 11) APN 3176-002-021: 10 Acres, Lancaster.
- 12) APN 3128-003-036: 9.6 Acres, Lancaster.
- 13) APN 3001-001-035: 10 Acres, Palmdale.
- 14) APN 3109-002-099: 2.5 Acres, Lancaster.
- 15) APN 3109-001-36,37,38,39: 10 Acres, Lancaster
- 16) APN 3053-06-05;20: 20 Acres, Palmdale.
- 17) APN 3114-13-29: 3 Acres, Lancaster.
- 18) APN 3004-15-42,43: 12 Acres, Palmdale.
- 19) Sections 2,3,25,26,27, 35: 1500 Acres, Palmdale.
- 20) APN 359-03-002: 20 Acres: Kern County (Rasmussen: default)

- 21) APN 3064-16-10,22: 240 Acres, Llano, Los Angeles County.
- 22) APN 0419-091-10;12: 319 Acres, San Bernardino County.
- 23) APN 345-100-02-00-9: 100 Acres, Willow Springs, Kern County.
- 24) Proposed Fairmont and Antelope Buttes Reservoir, 1600 acres, Los Angeles County.
- 25) APN 3003-003-025,28,29: 15 acres, Palmdale, CA.
- 26) SE corner of L-8 and 45th Street West, 6 acres, Quartz Hill, Los Angeles County.
- 27) APN 3114-013-087,88,89: 35 acres, Lancaster, Los Angeles County.
- 28) 45th Street W and L-8: 6 acres, Quartz Hill, CA
- 29) MB 31-13, TR 2916, L 16: 20 Acres, Palmdale, CA
- 30) Fort Tejon Road and Union Pacific Railway: 59 Acres, Palmdale, CA
- 31) APN 3114-103-087,88,89: Avenue H-8 and 20th street West, 35 Acres, Lancaster, CA
- 32) APN 3150-014-006: 47 Acres, Avenue K and 30th Street East, Lancaster, CA
- 33) APN 3109-013-079,031 & 032, 8.2 Acres, 25th Street West & Ave M, Lancaster, CA
- 34) TTM 53869, 30 Acres, 55th Street West and California Aqueduct, Palmdale, CA
- 35) 80th Street West, between Ave. L and M, 800 Acres, Lancaster, CA
- 36) APN 3147-002-046, 10 Acres, NWC Lancaster Blvd. and 20th St. E. Lancaster, CA
- 37) APN 251-120-06, 32 Acres, SEC Orange St. and 25th St. W, Rosamond, CA
- 38) APN 3001-090-001 & 002, 9 Acres, SWC Entrar Drive and Ave. N-8, Palmdale, CA
- 39) TTM 61490, 80 Acres, NEC Ave J-8 and 50th Street West, Lancaster, CA
- 40) 12 Acres, Ave I and 20th Street West, Lancaster, CA
- 41) APN 3150-022-009, 5 Acres, Lancaster Blvd. and 30th Street East, Lancaster, CA

- 42) APN 386-100-034-9, 72 Acres, Grandview Drive, Lake Elsinore, Riverside Co. CA
- 43) APN 3203-018-086 & 087, 10 Acres, Avenue K and 65th Street West, Lancaster, CA
- 44) APN 3154-001-021 & 022, 10 Acres, NEC Ave. I and 37th Street East, Lancaster, CA
- 45) APN 3170-007-007, 29 Acres, Avenue K and 27th Street East, Lancaster, CA
- 46) APN 3109-001-061, 063 & 064, 15 Acres, 40th Street West and L-4, Lancaster, CA
- 47) APN 3204-16-56; 57;49, 15 Acres, SEC 70th Street W and Ave. L-12, Lancaster, CA
- 48) APN 3203-001-003 & 004; 3219-024-020, 120 Ac. Ave. I and 90th St. W, Lancaster
- 49) APN 3203-015-143 & 069, 13 Acres, Ave. J and 52nd St. West, Lancaster, CA
- 50) Avenue L and M, between 100th St W and 110th St. W, 768 Ac. Lancaster, CA
- 51) APN 3111-001-063, 10 Ac. NWC Ave. m-8 and 35th Street West, Lancaster, CA
- 52) APN 3150-029-003 & 004, 20 Acres, Ave. J and 37th Street East, Lancaster, CA
- 53) APN 394-031-011, 5 Acres, Amethyst Road and Tawny Ridge Lane, Victorville, CA
- 54) APN 3176-021-004, 005 & 062, 20 Acres, Ave I and 10th St. E, Lancaster, CA
- 55) APN 3150-003-001 & 002, 20 Acres, Ave I and 35th St. East, Lancaster, CA
- 56) Avenue J and 35th Street East, 30 Acres, Lancaster, CA
- 57) Avenue I and 12th Street East, 19 Acres, Lancaster, CA
- 58) APN 375-240-49, 2.3 Acres, 60th Street West and Willow Ave., Rosamond, CA
- 59) APN 3147-002-046, 10 Acres, Lancaster Blvd. and 20th Street East, Lancaster, CA
- 60) APN 3205-4-8; 3 & 0, 5 Acres, SWC 80th St, W and Elizabeth Lake Rd. L.A. Co.
- 61) APN 375-113-19, 2.5 Ac., Gaskell Road, 60th Street W, Rosamond, CA
- 62) Avenue J and 32nd St. West, 2 Acres, Lancaster, CA
- 63) APN 3024-8-14, 10 Acres, 60th Street East and Ave. R, Palmdale, CA
- 64) APN 3124- 013-010, 4.7 Acres, Ave J-8 and 20th St. West, Lancaster, CA



- 65) Lancaster Blvd. and 35th Street East, 16 Acres, Lancaster, CA
- 66) APN 3109-002-031; 032, 025 & 026, 34 Ac. Ave. M and 32nd St. W, Lancaster
- 67) APN 3150-010-030, 4.5 Acres, Ave J-6 and 22nd St. East, Lancaster, CA
- 68) APN 3111-012-056, 10 Acres, Ave M-12 and 45th St. West, Lancaster, CA
- 69) APN 3147-001-043,044,049, 050, 10 Acres, Ave. I and 15th St. E, Lancaster, CA
- 70) APN 3024-002-021;002-022, 20 Acres, Palmdale Blvd. and 75th St. E, Palmdale, CA
- 71) APN 3204-006-049,050,051, 8 Acres, Ave. K-12 and 57th St. West, Lancaster, CA
- 72) APN 472-10-025, 20 Acres, NEC Brabham and 35th St West, Rosamond, CA
- 73) APN 3133-016-011, 3.2 Acres, Genoa Ave. and Ave. J, Lancaster, CA
- 74) APN 3052-015-007;25;36;59;50;78, 106 Acres, Barrel Springs Road, Palmdale, CA
- 75) APN 3150-009-054, 10.5 Acres, Ave. J-4 and 22nd St. East, Lancaster, CA
- 76) APN 3150-012-025 & 026, 10 Acres, NWC Ave J-8 and 30th St. E, Lancaster, CA
- 77) APN 3153-012-014, 4 Acres, 32nd St. West And Ave J, Lancaster, CA
- 78) APN 3204-003-062 & 063, 157 Acres, SWC 72nd St West and Ave. L, Lancaster, CA
- 79) APN 3124-012-010, 3.25 Acres, NEC Ave. J-4 and 22nd St. West, Lancaster, CA
- 80) APN 3114-013-087,88,89, 35 Acres, 20th St. W and Ave. H-8, Lancaster, CA
- 81) APN 0394- 031-023 & 028, 17 Acres, Mojave Drive, Victorville, CA
- 82) APN 3203-003-006, 025 & 028, 15 Acres, SEC 40th St. E and Ave. Q, Palmdale, CA
- 83) APN 3153-025-003, 20 Acres, NEC Ave K and 50th Street West, Lancaster, CA
- 84) APN 3109-027-003, 004, 13 Acres, 40th St. West, Ave. L-6, Lancaster, CA
- 85) APN 3150-024-001; 008, 9,11 & 12, 20 Acres, Lancaster Blvd. and 25th St. E

- 86) APN 3109-020-023, 5 Acres, Ave. L-8 and 20th Street West, Lancaster, CA
- 87) APN 3204-008-031, 20 Acres, 60th Street West and Ave. L, Lancaster, CA
- 88) APN 3105-017-001 & 017, 20 Acres, Ave. H and 42nd St. West, Lancaster, CA
- 89) APN 3150-030-006;016 & 013, 8 Acres, Ave J-2 and 26th St East, Lancaster, CA
- 90) Challenger Way and Avenue K-6, 24 Acres, Lancaster, CA
- 91) APN 3204-023-182, 10 Acres, Ave. M-8 and 70th Street West, Lancaster, CA
- 92) APN 3109-012-024, 5 Acres, 28th St. West and Ave. L-10, Lancaster, CA
- 93) APN 3110-007-007, 10 Acres, 40th St. West and Ave. K-12, Lancaster, CA
- 94) TTM 060198, 40 Acres, 45th St. East and Avenue M-8, Lancaster, CA
- 95) APN 3123-005-042, 2 Acres, Ave. J and 20th St. West, Lancaster, CA
- 96) APN 3109-025-020, 2.5 Acres, Ave. L-8 and 10th St. West, Lancaster, CA
- 97) Avenue L and 10th St. West, 5 Acres, Lancaster, CA
- 98) APN 3111-002-001;2,24-26;16;17;62, 80 Acres, 40th St. W and Ave. N, Lancaster
- 99) APN 3150-012-033, 10 Acres, Ave. J-8 and 25th Street East, Lancaster, CA
- 100) APN 3109-001-065;066, 20 Acres, 35th St. West and Ave. L-4, Lancaster, CA
- 101) Avenue O and 10th Street West, 5 Acres, Palmdale, CA
- 102) APN 3111-002-050;052-054, 13 Acres, 45th Street West and Ave. M-14, Lancaster
- 103) APN 3023-040-018 & 062, 4 Acres, SEC 45th Street East and Ave. R., Palmdale
- 104) APN 3203-015-077, 5 Acres, SEC 55th Street West and Avenue J, Lancaster, CA
- 105) APN 3150-010-036, 2.4 Acres, Ave. J-6 and 22nd Street East, Lancaster, CA

Callyn D. Yorke

Project Manager/Principal Biologist

Dr. Callyn Yorke is a zoologist with international field research and teaching experience in Ornithology, Herpetology and Ecology. In addition to having completed several research projects overseas, he has been active in the study of the distribution of birds in Southern California for thirty-six years. Dr. Yorke has authored over 125 scientific professional biological resources reports and several peer-reviewed scientific journal articles. He is a retired Professor of Zoology at Antelope Valley College, Lancaster, California (1984-2020), and a part-time instructor at UCLA Extension, Dept. of Social and Biological Sciences.

EDUCATION

B.Sc. 1975. Biological Science. California State University, Hayward.

M.A. 1976. Biological Science. California State University, Hayward.

Ph.D. 1983. Zoology. University of Arkansas, Fayetteville.

PROFESSIONAL HISTORY

Ornithology Instructor 1976. University of California, Berkeley

Visiting Assistant Professor of Zoology 1977-80. National University of Malaysia, Kuala Lumpur.

Post-Doctoral Research in Avian Paleontology 1983-84. Smithsonian Institution, Washington, D.C..

Visiting Assistant Professor of Behavioral Biology 1984. Monterey Pen. College.
Professor of Zoology 1984 - present Antelope Valley College, Biology Dept, CA.

Post-Doctoral Research 1990. Point Reyes Bird Observatory, CA.

Research Associate, Vertebrate Paleontology 1987- present Los Angeles County Museum of Natural History, CA.

CEO/Project Manager 1987- present Callyn D. Yorke, Biological Resources Reports

Professor of Zoology (retired) 1984-2020, Antelope Valley College, Lancaster, CA

Ornithology Instructor, 2014- present UCLA Extension, Los Angeles

THESES AND PUBLICATIONS

- Yorke, C.D. 1976. Reproductive strategies in the Hylidae (New World treefrogs). Biology Dept., California State University, Hayward. 45 pp.
- Yorke, C.D. 1978. Reptiles of Pulau Tenggol (Malaysia): A new record of the Green Mangrove Snake (*Boiga cyanea*) and two new geckoes (*Gymnodactylus* spp.). *Nature Malaysiana* 3: 45-50.
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