DOCKETED	
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APPENDIX 5.2A

Special-Status Species

Appendix 5.2A: Potential Special-Status Plant and Wildlife Species

Species	Listing Status	Habitat Requirements	Potential for Occurrence
Plants			
Horn's milk-vetch *Astragalus hornii* var. *hornii*	Federal: None State: None CRPR: 1B.1	Annual herb found in alkali soils along lake margins, meadows and seeps, and playas. Blooms: May-Oct Elevation: 60-300 m	**Presumed absent.** Although a single CNDDB record of this species occurs within the eastern portion of the Survey Area, the record is from 1931. No additional records of this species occur within 10 miles of the Project. Additionally, surveys were conducted during the blooming period of this species and would have been identified on the site if present.
Alkali mariposa-lily *Calochortus striatus*	Federal: None State: None CRPR: 1B.2	Perennial herb that usually occurs in wetlands. Found in meadows within shadscale scrub, chaparral, and wetland-riparian communities. Blooms: April-June Elevation: 800-1,400 m	**Low.** Numerous CNDDB records for this species occur within the eastern portion of the Survey Area; however, surveys were conducted during the blooming period of this species and would have been identified one the site if present under optimal conditions. However, drought conditions likely reduced detectability.
Clokey's cryptantha *Cryptantha clokeyi*	Federal: None State: None CRPR: 1B.2	Annual herb that occurs within rocky to gravelly slopes, ridge crests, desert woodland, and creosote bush scrub. Blooms: April-May Elevation: 850-1,650m	**Presumed absent.** Suitable habitat for this species occurs in portions of the Survey Area; however, surveys were conducted during the blooming period of this species and would have been identified on the site if present under optimal conditions. However, drought conditions likely reduced detectability. Additionally, the single CNDDB record of this species occurs approximately 8.5 miles south of the Project.
Recurved larkspur *Delphinium recurvatum*	Federal: None State: None CRPR: 1B.2	Perennial herb that occurs in poorly drained, fine, alkaline soils within shadscale scrub, foothill woodland, and valley grassland communities. Blooms: March-June Elevation: 30-600 m	**Presumed absent.** No suitable habitat for this species occurs in or adjacent to the Survey Area.
Rosamond eriastrum *Eriastrum rosamondense*	Federal: None State: None CRPR: 1B.1	Annual herb that occurs within hard-packed, sandy cryptogamic soil among low hummocks with dry pools. Blooms: May Elevation: <710 m	**Presumed absent.** No suitable habitat for this species occurs in or adjacent to the Survey Area.

Species	Listing Status	Habitat Requirements	Potential for Occurrence
Tejon poppy *Eschscholzia lemmonii* ssp. *kernensis*	Federal: None State: None CRPR: 1B.1	Annual herb that occurs in valley and open grassland. Distribution of this species is limited to the southwestern Tehachapi Mountains and Western Transverse Ranches. Blooms: March-April Elevation: 200-1,000 m	**Presumed absent.** No suitable habitat occurs in or adjacent to the Survey Area, and the single CNDDB record of this species within 10 miles is occurs in the Tehachapi Mountains.
Pale-yellow layia *Layia heterotricha*	Federal: None State: None CRPR: 1B.1	Annual herb that occurs in open clayey or sandy soil within foothill woodland, valley grassland, pinyon- juniper woodland, and wetland-riparian communities. Blooms: April-June Elevation: 200-1,800 m	**Presumed absent.** No suitable habitat for this occurs in or adjacent to the Survey Area.
Madera leptosiphon *Leptosiphon serrulatus*	Federal: None State: None CRPR: 1B.2	Annual herb that occurs in openings within yellow pine forest, foothill woodland, and chaparral communities. Blooms: April-May Elevation: 300-1,300 m	**Presumed absent.** No suitable habitat for this species occurs in or adjacent to the Survey Area.
Sagebrush loeflingia *squarrosa* var. *artemisiarum*	Federal: None State: None CRPR: 2B.2	Annual herb that occurs in sand, gravel of hills, mesas, dunes, and disturbed areas within sagebrush and creosote bush scrub communities. Blooms: April-May Elevation: <1,200 m	**Presumed absent.** Although suitable habitat occurs within the Survey Area, the single CNDDB record of this species within 10 miles of the Project is from 1932. Additionally, surveys were conducted during the blooming period of this species and would have been identified on the site if present.
Tehachapi monardella *linoides* ssp. *oblonga*	Federal: None State: None CRPR: 1B.3	Perennial herb that occurs in gravelly, dry slopes and flats within yellow pine, red fir, and lodgepole forests. Blooms: June-August Elevation: 1,500-2,600 m	**Presumed absent.** No suitable habitat for this species occurs in or adjacent to the Survey Area.
Aparejo grass *Muhlenbergia utilis*	Federal: None State: None CRPR: 2B.2	Perennial glasslike herb that typically occurs in wet sites along streams and ponds within coastal sage scrub, creosote bush scrub, and wetland-riparian communities. Blooms: October-March Elevation: 250-1,000 m	**Presumed absent.** No suitable habitat for this species occurs in or adjacent to the Survey Area.

Species	Listing Status	Habitat Requirements	Potential for Occurrence
Spreading navarretia *Navarretia fossalis*	Federal: **FT** State: None CRPR: 1B.1	Annual herb that occurs in vernal pools and depressions and ditches in areas that once supported vernal pools in saline and alkaline soils. Typically found in chenopod scrub, marshes and swamps (assorted shallow freshwater), and playas. Blooms: April-June Elevation: 30-655 m	**Presumed absent.** No suitable habitat for this species occurs in or adjacent to the Survey Area.
Latimer's woodland- gilia *Saltugilia latimeri*	Federal: None State: None CRPR: 1B.2	Annual herb that occurs along dry desert slopes within coarse sand to rocky soils. Blooms: March-June Elevation: 400-1,900 m	**Presumed absent.** The single CNDDB record of this species occurs approximately 8 miles north of the Project. Additionally, surveys were conducted during the blooming period of this species and would have been identified on the site if present under optimal conditions.
Grey-leaved violet *Viola pinetorum* ssp. *grisea*	Federal: None State: None CRPR: 1B.2	Perennial herb that occurs in alpine zones within red fir, lodgepole, and subalpine forest communities. Blooms: June-July Elevation: 1,980-3,700 m	**Presumed absent.** No suitable habitat for this species occurs in or adjacent to the Survey Area.
Joshua tree *Yucca brevifolia*	Federal: None State: **SCT** CRPR: None	Perennial succulent that occurs in creosote bush scrub and pinyon-juniper woodlands with a low to moderately dense community of shrubs found in desert scrub habitats. Requires well-drained soils. Blooms: April-May Elevation: 400-2,000 m	**Present.** This species was documented throughout the Survey Area with moderate to high concentrations occurring along both the Project ROW and within the proposed energy storage facility parcels. A total of 1,290 individuals were mapped in the Project site.
Insects			
Crotch's bumble bee *Bombus crotchii*	Federal: None State: **SCE**	Inhabits open grassland and scrub habitats. Food plants include *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia,* and *Salvia*. Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees.	**Low.** Suitable habitat is found in portions of the Survey Area; however, only one CNDDB record for this species from 1976 occurs approximately 10 miles southwest of the Project.

Species	Listing Status	Habitat Requirements	Potential for Occurrence
Reptiles			
Northern California legless lizard *Anniella pulchra*	Federal: None State: SSC	Occurs in moist warm loose soil with plant cover within vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes and suburban gardens in southern California. Lives mostly underground, burrowing in loose sandy soil. Often can be found under surface objects such as rocks, boards, driftwood and logs.	**Presumed Absent.** Due to soil lacking moisture, which is essential for this species, there is no potential for this species to occur within or adjacent to the Survey Area.
Desert tortoise *Gopherus agassizii*	Federal: **FT** State: **ST,** SCE	Found in canyon lands, sandy flats, desert washes, alluvial fans and rocky foothills of the Sonoran and Mojave Deserts, this long- lived species spends 95% of its time underground in burrows, shelters, and pallets. Peak activity levels occur after seasonal rains when fresh foraging opportunities present themselves. This herbivorous species consumes a wide variety of plant matter.	**Presumed absent.** Suitable habitat is found throughout the Survey Area and there are no barriers to exclude tortoises from the Project. This species is known to occur in the Project vicinity; however, the most recent CNDDB record within 10 miles of the Project is from 2013. Additionally, no tortoises or tortoise sign were found within the Survey Area, indicating it is unlikely the Project or its immediate vicinity is currently occupied by desert tortoise. While three suitable burrows were found within the Survey Area in suitable habitat, the lack of tortoise sign indicated burrow usage by wildlife other than tortoises.
Coast horned lizard *Phrynosoma blainvillii*	Federal: None State: SSC	Occurs widely in sage scrub, woodlands, grasslands, and chaparral communities within microhabitats of loose granitic soils and open areas for sunning and foraging. This species is commonly associated with the presence of native harvester ants.	**Presumed absent.** Due to the absence of suitable habitat, and the location of the Project away from the coastal slope, there is no potential for this species to occur within or adjacent to the Survey Area.
Birds			
Tricolored blackbird *Agelaius tricolor* (nesting colony)	Federal: BCC State: **ST**, SSC	Nests in colonies and prefers freshwater marshes dominated by cattails or bulrushes and occasionally in willows, blackberries, thistles, and nettles. Breeding habitat now	**Presumed absent.** No suitable habitat occurs within or adjacent to the Project. Additionally, the only CNDDB record of a foraging flock was documented five miles southeast of the

Species	Listing Status	Habitat Requirements	Potential for Occurrence
		includes diverse upland and agricultural areas. Small breeding colonies in southern California occur at lakes, reservoirs, and parks surrounded by urban development. Adults from such colonies may forage in nearby undeveloped uplands.	Project. There are no suitable nesting substrates for this species on the Project site.
Golden eagle *Aquila chrysaetos* (nesting & wintering)	Federal: BCC State: **FP**	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Typically nests on rock outcrops and ledges.	**Moderate (wintering/foraging)/ Presumed absent (nesting).** Suitable foraging habitat occurs throughout the Survey Area; however, no suitable nesting habitat occurs within the Project site. Potentially suitable nesting habitat occurs east of and outside of the Survey Area.
Burrowing owl *Athene cunicularia* (nesting & wintering)	Federal: None State: SSC	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	**Present.** This species was observed on April 16, 2021 within the Survey Area, and numerous CNDDB records exist within 10 miles of the Project site. In addition, suitable habitat, with suitable burrows, is found on and adjacent to the Project site. There is **high potential for this species to nest** within the Project.
Ferruginous hawk *Buteo regalis* (wintering)	Federal: BCC State: None	Winters in open grasslands, fields, open desert scrub and savannah habitats. Forages on a variety of mammals.	**High.** Suitable foraging and wintering habitat occurs throughout and adjacent to the Survey Area.
Swainson's hawk *Buteo swainsoni* (nesting)	Federal: BCC State: **ST**	Prefers open habitats including plains, dry grasslands, agricultural fields, and ranchlands with nearby stands of trees for nesting sites.	**Present.** This species was observed on April 5, 14, and 15, and May 18, 2021. A pair was observed nesting within a Joshua tree approximately 810 feet south of the nearest potion of the Project ROW; however, the nest was unsuccessful. Due to a documented nesting attempt, availability of suitable habitat, and numerous CNDDB records within the vicinity, there is **high potential for this species to nest again** in and adjacent to the Project.
Western snowy plover *Charadrius alexandrinus nivosus* (nesting)	Federal: **FT**, BCC State: SSC	Breeds above the high tide line on coastal beaches, sand splits, dune-backed beaches sparsely vegetated dunes, beaches at creek and river mouths and salt pans at lagoons and estuaries.	**Presumed absent.** Due to the absence of suitable habitat, there is no potential for this species to occur within or adjacent to the Survey Area.

Species	Listing Status	Habitat Requirements	Potential for Occurrence
Mountain plover *Charadrius montanus* (wintering)	Federal: BCC State: SSC	Wintering habitats include desert flats and fallowed or plowed agricultural fields.	**Low.** No suitable wintering habitat occurs within the Survey Area; however, potentially suitable wintering habitat is present in the vicinity of the Project to the north and south.
Prairie falcon *Falco mexicanus* (nesting)	Federal: BCC State: None	Distributed from annual grasslands to alpine meadows, but associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas. Requires sheltered cliff ledges for cover. Usually, nests in a scrape on a sheltered ledge of a cliff or steep canyon wall overlooking a large, open area. Sometimes nests on old raven or eagle stick nest on cliff, bluff, or rock outcrop.	**Present.** This species was observed on March 31 and April 13 and 14, 2021. Suitable foraging habitat occurs throughout Survey Area; however, no suitable nesting habitat occurs within the Project site. Potentially suitable nesting habitat occurs east of and outside of the Project.
California condor *Gymnogyps californianus*	Federal: **FE** State: **SE**, FP	Permanent resident of semi- arid, rugged mountain ranges that includes the Tehachapi Mountains and southern Sierra Nevada. Forages over rangeland, grassland, and foothill chaparral. Nests in caves, crevices, or large ledges on high sandstone cliffs.	**Low.** Limited foraging habitat is present within the Survey Area and the Tehachapi Mountains occur approximately 8 miles to the northwest, therefore there is low potential for this species to forage in or adjacent to the Project site; however, due to a lack of suitable nesting substrate, there is no potential for this species to nest within the Project.
Loggerhead shrike *Lanius ludovicianus* (nesting)	Federal: BCC State: SSC	Inhabits open country with short vegetation and well- spaced shrubs or low trees, particularly those with spines or thorns. Frequents agricultural fields, pastures, old orchards, riparian areas, desert scrublands, savannas, prairies, golf courses and cemeteries.	**Present.** This species was observed numerous times within the Survey Area. Due to the presence of suitable nesting substrate and an ample availability of prey, there is **high potential for this species to nest** in and adjacent to the Project.
Le Conte's thrasher *Toxostoma lecontei*	Federal: BCC State: SSC	Found in desert scrub with areas of sparse saltbush and/or creosote bush, typically with interspersed mesquite or cholla cactus.	**Present.** This species was observed on April 29 and May 5, 2021. Suitable habitat occurs throughout the Survey Area, and there is a **high potential for this species to nest** in and adjacent to the Project.
Mammals			
Townsend's big-eared bat	Federal: None State: SSC	Found in a variety of habitats from scrub deserts to pine and piñon-juniper forests, prefers mesic	**Low (foraging)/Presumed absent (roosting).** Overall habitat quality for this species is low within the Survey Area,

Species	Listing Status	Habitat Requirements	Potential for Occurrence
Corynorhinus townsendii		habitats. Roosts in caves, mines, tunnels, flumes, buildings, bridges, and large tree cavities. Preferred foraging is among the foliage of trees and shrubs in mosaics of forested and edge habitats, including riparian zones, but tends to avoid open grasslands.	although this species was recorded in the vicinity of the Project. There is no suitable roosting habitat in or immediately adjacent to the Project.
Tulare grasshopper mouse *Onychomys torridus tularensis*	Federal: None State: SSC	Typically inhabits hot, arid grassland and shrubland associations that include blue oak woodlands, upper sonoran scrub, alkali sink and mesquite scrub, and sloping grassland. Prefers compact soils with sparse perennial grass.	**Presumed absent.** No suitable habitat typically associated with this species occurs in or adjacent to the Survey Area. Additionally, CNDDB records indicate that this species is associated with the foothills of the Tehachapi Mountains.
Tehachapi pocket mouse *Perognathus alticola inexpectatus*	Federal: None State: SSC	Historically found in isolated, montane areas in the Tehachapi and San Bernardino Mountains. Scarce resident in ponderosa and Jeffrey pine habitats, and uncommon in mixed chapparal and sagebrush habitats. Burrows constructed in loose sand.	**Presumed absent.** No suitable habitat typically associated with this species occurs in or adjacent to the Survey Area. According to species accounts, this species is isolated to the Tehachapi Mountains northwest of and outside of the Project.
American badger *Taxidea taxus*	Federal: None State: SSC	Prefers open areas, in flat terrain to moderate slopes, in grasslands, alluvial fans, meadows and deserts.	**Moderate.** Suitable habitat occurs throughout the Survey Area and large burrows suitable for this species were documented during the 2021 surveys.
Mohave ground squirrel *Xerospermophilus mohavensis*	Federal: None State: **ST**	Occurs in open desert scrub, alkali desert scrub, Joshua tree, and annual grasslands with preference for sandy to gravelly soils. Uses burrows at the base of shrubs for cover and nests are built within a burrow system.	**Presumed absent.** Suitable habitat and numerous burrows appropriate for this species occur throughout the Survey Area; however, the only CNDDB record within 10 miles of the Project is from 1973.

Source: Blackhawk 2021.
Notes:

Plant Species Listing Status Codes: California Native Plant Society CRPR = California Rare Plant Rank, 1B.1 = Rare, threatened or endangered in California or elsewhere, and seriously threatened in California, 1B.2 = Rare, threatened or endangered in California or elsewhere, and moderately threatened in California, 1B.3 = Rare, threatened or endangered in California or elsewhere, and not very threatened in California, 2B.2 = Rare, threatened or endangered in California but more common elsewhere, and moderately threatened in California, SCT = State Candidate Threatened.

Wildlife Species Listing Status Codes: FE = Federally Endangered, FT = Federally Threatened, BCC = Bird of Conservation Concern, SE = State Endangered, SCE= State Candidate Endangered, ST = State Threatened, FP = State Fully Protected, SSC = Species of Special Concern.

APPENDIX 5.2B

Observed Species

Appendix 5.2B: Observed Species List

Plant Species List	
Scientific Name	**Common Name**
Gymnosperms	
EPHEDRACEAE	**Ephedra Family**
Ephedra nevadensis	Mormon tea
PINACEAE	**Pine Family**
Pinus sp.	Pine
Monocots	
AGAVACEAE	**Agave Family**
Yucca brevifolia	Joshua tree
POACEAE	**Grass Family**
**Bromus diandrus*	Ripgut brome
**Bromus madritensis*	Red brome
Dicots	
AMARANTHACEAE	**Amaranth Family**
Krascheninnikovia lanata	Winterfat
APOCYNACEAE	**Dogbane Family**
**Nerium oleander*	Oleander
ASTERACEAE	**Aster Family**
Ambrosia dumosa	White bursage

Plant Species List	
Scientific Name	**Common Name**
Ericameria cooperi	Cooper's goldenbush
Ericameria nauseosa	Rubber rabbitbrush
Gutierrezia sarothrae	Matchweed
Tetradymia stenolepis	Mojave cottonthorn
Xylorhiza tortifolia	Mojave woodyaster
BORAGINACEAE	**Borage Family**
Amsinckia tessellate	Bristly fiddleneck
BRASSICACEAE	**Mustard Family**
**Hirschfeldia incana*	Short-pod mustard
Stanleya pinnata	Desert princesplume
CACTACEAE	**Cactus Family**
Cylindropuntia bigelovii	Teddybear cholla
Opuntia basilaris	Beavertail cactus
CHENOPODIACEAE	**Goosefoot Family**
Atriplex canescens	Fourwing saltbush
Atriplex confertifolia	Shadscale saltbush
Atriplex polycarpa	Allscale saltbush
**Salsola tragus*	Russian thistle
EUPHORBIACEAE	**Spurge Family**
Croton setiger	Doveweed

Plant Species List	
Scientific Name	**Common Name**
GERANIACEAE	**Geranium Family**
**Erodium cicutarium*	Redstem filaree
LAMIACEAE	**Sage Family**
Salvia columbariae	Chia sage
OLEACEAE	**Olive Family**
Forestiera pubescens	Desert olive
ONAGRACEAE	**Evening Primrose Family**
Eremothera boothii ssp. *desertorum*	Booth's desert primrose
PLANTAGINACEAE	**Plantain Family**
Penstemon incertus	Mojave beardtongue
POLEMONIACEAE	**Phlox Family**
Eriastrum eremicum	Desert woolystar
POLYGONACEAE	**Buckwheat Family**
***Chorizanthe spinosa*	Mojave spineflower
Eriogonum angulosum	Anglestem buckwheat
Eriogonum fasciculatum var. *polifolium*	California buckwheat
Eriogonum inflatum	Desert trumpet
Mucronea perfoliata	Perfoliate spineflower

Plant Species List	
Scientific Name	**Common Name**
SALICACEAE	**Willow Family**
Populus fremontii	Fremont cottonwood
SOLANACEAE	**Nightshade Family**
Datura wrightii	Jimsonweed
TAMARICACEAE	**Tamarisk Family**
**Tamarix ramosissima*	Tamarisk
ZYGOPHYLLACEAE	**Caltrop Family**
Larrea tridentata	Creosote bush

Wildlife Species List	
Scientific Name	**Common Name**
REPTILIA	**REPTILES**
COLUBRIDAE	**Colubrid Snakes**
Masticophis flagellum piceus	Red racer
Pituophis catenifer catenifer	Pacific gopher snake
Salvadora hexalepis mojavensis	Mohave patch-nosed snake
CROTAPHYTIDAE	**Collared Lizards**

Wildlife Species List	
Scientific Name	**Common Name**
Gambelia wislizenii	Long-nosed leopard lizard
IGUANIDAE	**Iguanas & Allies**
Dipsosaurus dorsalis	Desert iguana
PHRYNOSOMATIDAE	**North American Spiny Lizards**
Callisaurus draconoides	Zebra-tailed lizard
Sceloporus uniformis	Yellow-backed spiny lizard
Uta stansburiana	Common side-blotched lizard
TEIIDAE	**Whiptails & Racerunners**
Aspidoscelis tigris tigris	Great Basin whiptail
AVES	**BIRDS**
ACCIPITRIDAE	**Kites, Hawks, Eagles and Allies**
Buteo jamaicensis	Red-tailed hawk
****Buteo swainsoni*	Swainson's hawk
ALAUDIDAE	**Larks**
Eremophila alpestris	Horned lark
APODIDAE	**Swifts**
Chaetura vauxi	Vaux's swift
ARDEIDAE	**Herons**
Ardea alba	Great egret
CAPRIMULGIDAE	**Nightjars**

Wildlife Species List	
Scientific Name	**Common Name**
Chordeiles acutipennis	Lesser nighthawk
CARDINALIDAE	**Cardinals & Allies**
Pheucticus melanocephalus	Black-headed grosbeak
Piranga ludoviciana	Western tanager
CATHARTIDAE	**New World Vultures**
Cathartes aura	Turkey vulture
CORVIDAE	**Jays, Magpies and Crows**
Corvus brachyrhynchos	American crow
Corvus corvax	Common raven
COLUMBIDAE	**Pigeons & Doves**
Columba livia	Rock pigeon
Columbina passerina	Common ground dove
**Streptopelia decaocto*	Eurasian collared-dove
Zenaida macroura	Mourning dove
CUCULIDAE	**Cuckoos, Roadrunners and Allies**
Geococcyx californianus	Greater roadrunner
FALCONIDAE	**Falcons & Caracaras**
****Falco columbarius*	Merlin
****Falco mexicanus*	Prairie falcon
Falco sparverius	American kestrel
FRINGILLIDAE	**Finches & Allies**

Wildlife Species List	
Scientific Name	**Common Name**
Haemorhous mexicanus	House finch
HIRUNDINIDAE	**Swallows & Martins**
Petrochelidon pyrrhonota	Cliff swallow
Stelgidopteryx serripennis	Northern rough-winged swallow
ICTERIDAE	**Blackbirds & Orioles**
Euphagus cyanocephalus	Brewer's blackbird
Icterus cucullatus	Hooded oriole
Icterus parisorum	Scott's oriole
Sturnella neglecta	Western meadowlark
LANIIDAE	**Shrikes**
****Lanius ludovicianus*	Loggerhead shrike
MIMIDAE	**Mockingbirds & Thrashers**
Mimus polyglottos	Northern mockingbird
****Toxostoma lecontei*	LeConte's thrasher
MOTACILLIDAE	**Wagtails, Longclaws and Pipits**
Anthus rubescens	American Pipit
ODONTOPHORIDAE	**New World Quails**
Callipepla gambelii	Gambel's quail
PARULIDAE	**New World Warblers**
Cardellina pusilla	Wilson's warbler
Setophaga coronata	Yellow-rumped warbler

Wildlife Species List	
Scientific Name	**Common Name**
Setophaga nigrescens	Black-throated gray warbler
****Setophaga petechia*	Yellow warbler
Vermivora celata	Orange-crowned warbler
PASSERELLIDAE	**New World Sparrows**
Artemisiospiza nevadensis	Sagebrush sparrow
Chondestes grammacus	Lark sparrow
Melospiza lincolnii	Lincoln's sparrow
Passerculus sandwichensis	Savannah sparrow
Spizella breweri	Brewer's sparrow
Zonotrichia leucophrys	White-crowned sparrow
PASSERIDAE	**Old World Sparrows**
**Passer domesticus*	House sparrow
PICIDAE	**Woodpeckers & Allies**
Colaptes auratus	Northern flicker
REMIZIDAE	**Penduline Tits**
Auriparus flaviceps	Verdin
SCOLOPACIDAE	**Sandpipers & Allies**
Numenius phaeopus	Whimbrel
STRIGIDAE	**True Owls**
****Asio otus*	Long-eared owl
****Athene cunicularia*	Burrowing owl

Wildlife Species List	
Scientific Name	**Common Name**
Bubo virginianus	Great horned owl
STURNIDAE	**Starlings & Mynas**
**Sturnus vulgaris*	European starling
TROCHILIDAE	**Hummingbirds**
Calypte anna	Anna's hummingbird
Calypte costae	Costa's hummingbird
TROGLODYTIDAE	**Wrens**
Campylorhynchus brunneicapillus	Cactus wren
TYRANNIDAE	**Tyrant Flycatchers**
Myiarchus cinerascens	Ash-throated flycatcher
Sayornis nigricans	Black phoebe
Sayornis saya	Say's phoebe
Tyrannus verticalis	Western kingbird
VEREONIDAE	**Vireos & Allies**
Vireo cassinii	Cassin's vireo
MAMMALIA	**MAMMALS**
BOVIDAE	**Sheep, Goats and Domestic Cattle**
**Capra hircus*	Domestic goat
**Ovis aries*	Domestic sheep
CANIDAE	**Foxes, Wolves and Allies**
**Canis familiaris*	Domestic dog

Wildlife Species List	
Scientific Name	**Common Name**
***Canis latrans*	Coyote
Vulpes macrotis arsipus	Desert kit fox
FELIDAE	**Cats & Allies**
Lynx rufus	Bobcat
HETEROMYIDAE	**Kangaroo Rats, Pocket Mice and Allies**
Dipodomys merriami	Merriam's kangaroo rat
LEPORIDAE	**Rabbits & Hares**
Lepus californicus	Black-tailed jackrabbit
Sylvilagus audubonii	Audubon's cottontail
SCIURIDAE	**Squirrels & Allies**
Ammospermophilus leucurus	White-tailed antelope squirrel
Otospermophilus beecheyi	California ground squirrel
Xerospermophilus tereticaudus	Round-tailed ground squirrel

Notes:

*Non-native species

**CRPR 4.2 species

Source: Blackhawk 2021.

APPENDIX 5.2C

Biologist Resume

Kris Alberts
Principal Biologist

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Trainings & Permits:

- **USFWS Permit TE-039640-5.1** -2001- present
  - California Gnatcatcher
  - Southwestern Willow Flycatcher
  - Fairy Shrimp
  - Quino Checkerspot Butterfly
- **Arroyo Toad Handler** -USFWS Approved 2010 – present
- **Least Bell's Vireo and California Gnatcatcher Nest Monitor** -USFWS Approved 2001 – present
- **CEQA Consultants Rotation List** -County of San Diego, 2013 -present
- **CDFW Memoranda of Understanding**
- **CDFW Scientific Collecting Permit #SC-192940005** -2007-present
- **Brown-Headed Cowbird Trapping**
- **BLM Flat-tailed Horned Lizard Handler** -2011 to present
- **Desert Tortoise Council Survey Techniques Workshop** -Certified 2007
- **Wetland Training Institute USACE Wetland Delineator Training** -Certified, 2007
- **Belk Vernal Pool *Branchiopods* Natural History and Identification Training** –2018
- **40-Hour HAZWOPER** -2020 - present
- **Strategic Growth Planning for Entrepreneurs** - SDSU Lavin Entrepreneurship Center, 2013

Skills and Proficiencies

- Environmental compliance monitoring
- Nesting bird and raptor surveys
- Threatened and endangered species surveys
- Rare plant surveys
- Habitat assessments and mapping
- Biological assessment reporting
- Impacts analysis and mitigation

Education

BS, Natural Resources and Environmental Sciences, May 1996
University of Illinois at Urbana/Champaign

Background

Kris Alberts is the Principal Biologist and Vice President of Blackhawk Environmental. He is a well-rounded biologist, environmental consultant, project manager, botanist, water resources and compliance specialist with over 23 years of experience and numerous state and federal permits. His comprehensive background includes many endangered and sensitive species surveys, flora and fauna surveys, large and small project management, excellent writing capabilities, wetland and native habitat restoration, jurisdictional delineations, SWPPP/BMP implementation, environmental compliance, regulatory agency consultations, CEQA/NEPA documentation and creative mitigation approaches. His people skills, adaptability, intuition, resourcefulness and leadership through positive reinforcement invariably lead to project success. He has been directly responsible for saving millions of dollars of mitigation on several projects and is well respected for his sensibilities toward simultaneously satisfying project goals, regulatory agency requirements and species conservation.

Project Experience

Energy

SDG&E Sunrise Powerlink Project, **San Diego & Imperial Counties, CA** - Project Manager / Lead Biologist/ Lead Avian Biologist / Botanist / Restoration Ecologist. Sunrise Powerlink was a new transmission line project that extended over 117 miles from near El Centro to the Scripps-Poway area of San Diego. The Project included several existing substation upgrades and reconductoring work along several existing distribution lines. Responsible for project management, monitor scheduling, nesting raptor/bird lead & surveys, lead author of draft habitat restoration & management plan (HRMP), USFS Biological Assessment (BA) and Management Indicator Species (MIS) report preparation, construction monitoring, California gnatcatcher habitat reassessments, MMCRP compliance, helicopter coordination, agency coordination, reporting, California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, burrowing owl & golden eagle nest surveys, arroyo toad & Quino checkerspot butterfly surveys, flat-tailed horned lizard handling & monitoring, peninsular bighorn sheep monitoring, Safe Worker & Environmental Awareness Program (SWEAP) training, QA/QC, and technical lead.

SDG&E Environmental Compliance Master Services Agreement, subs to AECOM and Chambers Group, San Diego & Imperial Counties, CA - Principal Biologist / Senior Scientist / Aquatic Resources Specialist. Numerous SDG&E projects include capital, wood to steel, pole set, new installations and renewable energy projects. Responsibilities include environmental compliance, construction monitoring, constraints analyses, mapping, Pre-activity Survey Report (PSR), Verification Report, Post-construction Report (PCR) Biotechnical Report (BTR), Biological Assessment/Biological Evaluation (BA/BE) & Request for Environmental Impact Review (REIR) report production, sensitive species flagging, water & cultural support for NCCP-related projects, biological components of Proponents Environmental Assessment/Permits to Construct (PTC), agency coordination, reporting, permitting, jurisdictional assessments/delineations, nesting raptor/bird surveys, threatened & endangered species surveys, flat-tailed horned lizard handling

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& monitoring, peninsular bighorn sheep monitoring, and other as-needed on-call services.

SDG&E South Bay Substation Relocation Project, sub to Black & Veatch, Chula Vista, San Diego County, CA - Environmental Inspector. Responsible for multidisciplinary personnel understanding & coordination, California Public Utilities Commission (CPUC) compliance, agency & project proponent coordination, meeting attendance, technical guidance & leadership, creative mitigation approaches and as-needed services for this substation in 2014.

SDG&E Artesian Substation Project, sub to Chambers Group, San Diego, San Diego County, CA - Principal Biologist. In 2016, this Project included significant substation upgrades, as well as wood to steel pole replacement and reconductoring activities. Conducted a full suite of 12 weekly protocol Quino checkerspot butterfly (QCB) surveys before, during and after the coastal QCB flight season. Served in a QA/QC capacity as the principal biologist overseeing the quality of the 45-Day Report submitted to the US Fish & Wildlife Service.

SDG&E Wood to Steel Pole Replacement Projects: Tie Lines 637, 682, 685, 6910, 6914, 6923, 6926 and Circuits 442, subs to RECON, LSA Associates, Chambers Group & Busby Biological Services, San Diego County, CA - Principal Biologist / Senior Biologist / Botanist/ Avian Biologist / Aqutic Resources Monitor / Technical Lead. Since 2008, responsibilities have included Pre-activity Survey Reports (PSR), existing conditions & sensitive species analyses, photographic documentation, impact area calculations, construction, biological & aquatic resources monitoring, daily reporting, nesting raptor/bird surveys, focused rare plant surveys, California gnatcatcher & least Bell's vireo presence/absence & nesting surveys, USFWS report production, cacti salvage & transplanting, project variance plan preparation, environmental awareness trainings, and served as a technical lead. Successfully identified numerous biological constraints present on these lines, including nesting birds, southwestern willow flycatcher, arroyo toad, Stephen's kangaroo rat, bald eagle, golden eagle, California gnatcatcher, least Bell's vireo, Quino checkerspot butterfly, fairy shrimp and endemic plant species.

SDG&E FiRM Projects, sub to AMEC and AECOM, Julian, Pine Valley, Santa Ysabel, Wynola, Lakeside, Fallbrook, De Luz & Ramona, San Diego County, CA - Principal Biologist / Botanist. In an effort to provide safe and reliable energy while also reducing fire risk, SDG&E is analyzing conductors and wood poles throughout its service territory to determine if maintenance or replacement is required for its FiRM (Fire Risk Management) program. Responsible for site walks, pre-activity survey reporting (PSR), existing conditions & sensitive species analyses, photographic documentation, impact area calculations, nesting bird surveys & reporting, construction monitoring, environmental tailboards, variance reporting, arroyo toad monitoring, weekly spot-check monitoring, and Contract Administrator and foremen coordination for multiple separate tie line sections on Circuits 971, 520, 444, 441, CPE1, 240 and 222 in 2014 and 2015.

SDG&E Cleveland National Forest Master Use Permit Project, sub to Chambers Group, sub to Crux SubSurface, Inc., San Diego County, CA - Senior Biologist / Botanist / Technical Lead / Environmental Scientist. This Project covers all the power transmission and distribution lines in and through the Cleveland National Forest (CNF), and was pursued by SDG&E to streamline permitting needs and documentation for all the lines in the CNF for Wood to Steel and Operations & Maintenance work, for a programmatic wood pole to steel pole replacement program. Conducted focused rare plant surveys, arroyo toad, Quino checkerspot butterfly, southwestern willow flycatcher, and least Bell's vireo & California gnatcatcher surveys in 2010 and 2016. Served as a technical lead and was responsible for contractor compliance assistance.

SDG&E Del Mar Reconfiguration Project, sub to AECOM, San Diego & Del Mar, San Diego County, CA - Principal Biologist. Condcuted USFWS protocol presence/absence surveys for the federally threatened coastal California gnatcatcher during the 2017 CAGN breeding season along the biological study area (BSA) of the proposed SDG&E Del Mar Reconfiguration Project to remove from service Transmission Lines (TL) 666D and 674A (Project). The BSA crosses several areas of intact open space in San Dieguito Lagoon and Torrey Pines State Natural Reserve, including a portion of the Los Peñasquitos marsh. The BSA is roughly defined as the 300-foot-wide transmission corridor along an approximately 7-mile stretch of TL 674A and TL 666D, with a minimum 100-foot buffer around each project feature. Prepared a USFWS 45-day report of findings that incorporated all survey results.

Southern California Edison San Dieguito Wetlands Restoration Project, sub to Chambers Group, Del Mar, San Diego County, CA - Principal Biologist. As mitigation for environmental impacts associated with the San Onofre Nuclear Generating Station (SONGS), this Southern California Edison project consisted of restoring, enhancing or creating various types of wetland and upland habitats in the San Dieguito basin. Responsible for biological construction monitoring, nesting bird surveys, threatened/endangered species surveys, California gnatcatcher nest surveys, clearance surveys, wildlife relocation activities, daily reporting, specialized reporting and other as-needed services in 2014.

Southern California Edison Coolwater to Lugo Transmission Project, sub to Aspen Environmental Group, San Bernardino County, CA - Principal Biologist / Botanist. This Project consists of the construction of a new 220 kV double-circuit transmission line from the existing

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Coolwater switchyard to the new Desert View substation, and a 500 kV single circuit transmission line that would run from the new Desert View substation to the existing Lugo substation. Various other project upgrades include new telecommunication lines installed between the Pisgah and Gale substations as well as new telecommunication lines between the existing Apple Valley substation and new Desert View substation. Assisted with the preparation of the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) by conducting field verification surveys, habitat evaluations and presence/absence surveys for desert tortoise, burrowing owl, golden eagle, desert kit fox and several listed plant species that are known to occur along the proposed alignment in 2014.

Southern California Edison Moorpark to Pardee 230 kV Transmission Line Project, sub to SWCA, Moorpark, Santa Clarita and Pardee, Los Angeles & Ventura Counties, CA - Principal Biologist. This Project includes the proposed installation of a new 230kV transmission line on existing tower and access road infrastructure from Moorpark to Pardee in Ventura and Los Angeles County. The Project extends for approximately 30 miles in both natural and developed habitats. Conducted breeding season and non-breeding season USFWS-protocol coastal California gnatcatcher surveys and reporting. During the 2018 breeding season, surveys occurred within mapped Critical Habitat while non-breeding season surveys occurred in 2018 and 2019 in suitable gnatcatcher habitat outside of mapped Critical Habitat.

Suncrest Substation Project, Alpine, San Diego County, CA -Project Manager / Senior Biologist. The Suncrest Substation was the primary new substation integral to the functioning of the Sunrise Powerlink project. This substation was the point at which 500kV were converted to 230kV. The Project impacted over 20 acres of previously natural land, including numerous cuts and fills and a substantial access road improvement. Served in project management, biological lead, MMCRP compliance, mitigation strategy identification, bullfrog abatement, and monitor scheduling capacities.

SDG&E Tie Line 649 Quino Checkerspot Butterfly Surveys, sub to Chambers Group, Otay Mesa to Chula Vista, San Diego County, CA - Principal Biologist. Conducted a full suite of USFWS protocol Quino checkerspot butterfly assessments and surveys in 2015 for SDG&E Transmission Tie Line 649 from Otay Mesa to Chula Vista. The surveys were conducted to support a pending wood to steel pole replacement project along approximately 7 miles of undeveloped land.

SDG&E Murphy Canyon Housing Restoration Area Weed Management, sub to AECOM, San Diego, San Diego County, CA - Principal Biologist. Conducted a pre-activity survey and report (PSR) and non-focused sensitive plant species survey on federal land within the Murphy Canyon Vernal Pool Preserve in the City of San Diego in 2015. The survey and PSR were conducted to support weed species removal and treatment practices undertaken annually by US Marine Corps contractors.

SDG&E Plaza Bonita Wood to Steel Pole Replacement and Undergrounding Project, sub to AECOM, Bonita, San Diego County, CA - Principal Biologist. This Project involved the replacement of a number of existing wood poles with steel poles and a section of undergrounded transmission line adjacent to the east side of Intersate 5 in the City of Bonita. Led aquatics reources monitoring efforts, nesting bird surveys and environemental tailboards.

Arizona Power Service Tower Relocation Project, sub to Resource Sciences & Planning, Black Canyon City, Yavapai County, AZ - Project Manager. This Project included access road grading and transmission tower relocation efforts in 2015 and 2016 just outside of Black Canyon City, Arizona. The Project was within desert tortoise habitat, and specifications required the presence of a desert tortoise monitoring biologist during construction. Facilitated communications between the monitor, the contractor, and the client while managing the project for budget and schedule.

Water Resources

Sierra Conservation Center Effluent Disposal Pipeline Project, **Tuolumne County, CA** -Project Manager. The Project involved the construction of an 8-mile pipeline from existing effluent ponds behind the Sierra Conservation Center to an 18-acre reservoir and over 300 acres of spray fields east of the Center. From 2007 through 2012, responsibilites included project management, regulatory agency coordination & mitigation negotiations, landowner access & conservation preserve negotiations, habitat restoration & management plan (HRMP) preparation for oak woodlands, wetland/riparian habitats, visual aesthetics screening & vernal pool deconstruction/ reconstruction & creation, rare plant surveys, sensitive fish species surveys, nesting bird surveys, tree counts & surveys, variance plan preparation, Caltrans coordination, construction monitoring, daily reporting, monitor scheduling, Mr. Alberts was also responsible for Environmentally Sensitive Area (ESA) designation, California Conservation Corps (CCC) coordination, prison staff coordination, and California tiger salamander assessments.

Palo Verde Wastewater Treatment Plant & Collection System Project, Palo Verde, Imperial County, CA - Principal Biologist. The proposed project is to replace failing septic systems in Palo Verde, California, with new sewer lines, a wastewater collection system and treatment plant. Since the systems have degraded over time, poor water quality in the Palo Verde Lagoon has become a

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public health issue for Palo Verde's residents, as well as the people of Mexico, with lagoon connectivity to the Colorado River that flows through Mexico. Responsible for agency coordination, mitigation ratio negotiations, sensitive fish species impact avoidance study, protocol burrowing owl surveys, southwestern willow flycatcher habitat mitigation plan, and report preparation in 2013.

New River Water Quality Improvement Project, sub to Micheal Baker International (MBI), Calexico, Imperial County, CA - Principal Biologist. The purpose of this Project is to reduce and remove pollution from the New River as it passes into the U.S. from Mexico by installing a new trash screen, a bypass encasement to divert the New River into a treatment area, and a 5-million gallon per day (GPD) pump back system to replace the treated water back into the river alignment just past the point of diversion. Perfromed a literature review, biological reconnaissance survey, vegetation mapping, photographic documentation, special-status species habitat assessment, formal jurisdictional delineation and report, biological technical report production.

Nestle Waters Southwestern Willow Flycatcher & Least Bell's Vireo Surveys, sub to Chambers Group, San Bernardino County, CA - Principal Biologist. This Project included a series of biological surveys, as well as threatened and endangered species surveys, in the large watershed that historically supplied water for the Arrowhead Springs Company, now owned by Nestle Waters. Conducted USGS protocol southwestern willow flycatcher and USFWS protocol least Bell's vireo surveys during the 2015 breeding season.

USACE Beach Sand Replenishment Project, Orange County, CA -Senior Biologist. This Project involved ongoing operations and maintenance activities to restore sand volume to eroded areas of public beaches for flooding and erosion protection purposes, while minimizing impacts to biological and aquatic resources on and adjacent to selected sites. Conducted grunion surveys and data collection on various public beaches along the Orange County coastline during the 2010 and 2011 spawning seasons.

CDFW Natural Resources Damage Assessment Oil Spill Response Project, sub to Industrial Economics, Inc., Carlsbad, San Diego County, CA - Principal Biologist. Served as part of a team of cross-disciplinary personnel to be trained on oil spill response protocols established by CDFW and other egulatory agencies in 2019. Obtained a 24-Hour HAZWOPER certification and oil spill response protocol training via in-field applications.

Crafton Hills Reservoir Expansion & Pipeline Project, sub to Environmental Science Associates (ESA), San Bernardino County, CA - Project Manager / Senior Biologist / Botanist / Wetland Scientist. This Project proposed to expand the capacity of an existing reservoir by building an additional dam, pipeline extension and linkage channel to a new reservoir addition in the adjacent canyon. The Project would involve the conversion of wild lands to a flooded valley in perpetuity, to serve additional water demands for planned housing developments in the region. Responsible for project management, literature reviews, jurisdictional delineations & report preparation, focused rare plant surveys, San Bernardino kangaroo rat trapping, vegetation mapping, baseline biological surveys, and Biological Technical Report (BTR) production.

East Branch Extension Phase II Project, sub to ESA, San Bernardino County, CA - Project Manager / Senior Biologist / Botanist / Wetland Scientist. This Project involved the construction of new waterlines to connect various portions of existing waterlines, in order to increase the capacity and efficiency of the existing systems in the Santa Ana River and Mill Creek floodplains in Redlands and Mentone. Responsible for project management, literature reviews, jurisdictional delineations & report preparation, protocol California gnatcatcher presence/absence surveys, focused rare plant surveys, vegetation mapping, baseline biological surveys, and Biological Technical Report (BTR) production from 2007 to 2009.

SDG&E Aquatic Resources On-Call Services, subs to RECON and AMEC, San Diego & Imperial Counties, CA - Principal Biologist. Performed as-needed jurisdictional assessments, delineations, construction monitoring, reporting and permit compliance.

South Bay Reclaimed Water Truck Fill Station Project, San Diego, San Diego County, CA - Project Manager / Lead Biologist. This Project involved the construction of a new filling station, driveway truck turnaround, and associated appurtenant feature upgrades necessary to supply reclaimed water to trucks for construction projects. Subject properties included both City of San Diego and County of San Diego lands. Served in project management and as lead monitor. Conducted protocol California gnatcatcher & least Bell's vireo presence/absence & nest surveys, devised noise mitigation strategies, provided environmental awareness trainings and weekly summary reporting.

Olivenhain Water District Trunk Sewer Project, sub to Rocks Biological Consulting, Encinitas, San Diego County, CA - Principal Biologist. Conducted USFWS/CDFW protocol-level surveys for Belding's savannah sparrow, southwestern willow flycatcher, least Bell's vireo & California gnatcatcher at San Elijo Lagoon and Escondido Creek in the Encinitas/Olivenhain area of San Diego County. The area surveyed included the trunk sewer centerline up to 500 feet on either side, arterial sewer lines and the entire lagoon area from Interstate 5 eastward.

Santa Ana River Parkway & Open Space Plan, San Bernardino, sub to Placeworks, Riverside, Los Angeles & Orange Counties, CA - Principal Biologiist. The Santa Ana River Parkway & Open Space Plan is a regional land use plan centered on the Santa Ana River

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from its headwaters to the Pacific Ocean and includes a one-mile buffer from its banks. The Project crosses four counties in southern California, encompassing dozens of habitat types, many of them sensitive. Served in an advisory capactiy to assist in habitat restoration prioritization.

Sorrento Valley/Los Penasquitos Lagoon Restoration Project, sub to ESA, sub to Burns & McDonnell, San Diego, San Diego County, CA - Principal Biologist / Project Manager. The Sorrento Valley/Los Penasquitos Lagoon Restoration Project is proposed by the City of San Diego as a result of localized flooding of light industrial spaces along the Los Penasquitos Creek in the 2015/2016 rainy season. The project would restore historic salt marsh habitat, increase tidal inundation, remove exotic plant species, restore degraded habitats, reduce mosquito breeding habitat and facilitate fresh water flows during the rainy season and low flow regimes. The project would be among the largest marshland restoration efforts ever conducted in California. In 2016, conducted USFWS protocol least Bell's vireo and southwestern willow flycatcher surveys for ESA in Phases A and B of this Project during the 2016 breeding season and served in a QA/QC capacity to oversee the final 45-Day Report for USFWS submittal. In spring and summer of 2020, Blackhawk and Mr. Alberts conducted focused rare plant surveys, jurisdictional delineation surveys, updated vegetation mapping surveys and City of San Diego Biological Survey Report preparation, utilizing all previous surveys and reports completed for this project. Stand-alone rare plant and jurisdictional delineation reports were completed and incorporated into the Biological Survey Report. Thirteen rare plant species were documented, accounting for over 2,000 individuals, and approximately 160 acres of jurisdictional wetlands were mapped. Twenty-four vegetation communities were mapped in great detail to aid in project design.

Federal

Marine Corps Air Station Miramar Non-Time Critical Removal Action at IR Site 19 Project, sub to AECOM Marine Corps Air Station Miramar, San Diego County, CA - Principal Biologist. Monitored a lead shot and clay pigeon remediation project on approximately 30 acres of a decommissioned gun range on MCAS Miramar during the summer and fall of 2020. The project occurred adjacent to a vernal pool system occupied by the federally-endangered San Diego fairy shrimp and coastal sage scrub occupied by the federally threatened California gnatcatcher. The primary role was to ensure that all vernal pools occupied by fairy shrimp were not affected by the project.

Marine Corps Air Station Miramar Quino Checkerspot Butterfly Survey, sub to Huffman Environmental, Marine Corps Air Station Miramar, San Diego County, CA - Principal Biologist. Conducted U.S. Fish & Wildlife (USFWS) protocol-level Quino checkerspot butterfly (QCB) surveys at MCAS Miramar during the 2018 USFWS protocol survey season. Host plant assessments and mapping efforts were completed to map host plant distribution on a base-wide level, while QCB presence/absence surveys were conducted to ascertain base-wide QCB distribution.

Angeles National Forest Sand Fire Restoration Project, sub to Geomorphis LLC, Angeles National Forest, Los Angeles County, CA - Principal Biologist. Produced a wildlife-oriented biological evaluation/biological assessment (BA/BE) report to address impacts associated with habitat restoration procedures proposed at several dozen pre-selected plots within the Angeles National Forest that were burned during the Sand Fire.

Naval Air Station North Island (NASNI) Building 651 Demolition Project, sub to RQ Construction, Inc., NASNI, San Diego County, CA - Principal Biologist. Conducted nesting passerine and nesting gull surveys on and within the Building 651 warehouse on North Island Naval Air Station prior to and during the demolition of the building in 2015. Obtained a Special Use Permit through USFWS to support the collection of the young of several species thought most likely to nest on or in the building, including western gull, house finch, mourning dove, great horned owl, and barn owl.

Ysidora Basin Restoration Project, sub to Apex Contracting & Consulting, Marine Corps Base Camp Pendleton, San Diego County, CA - Principal Biologist. Conducted NEPA Categorical Exclusion (CATEX) compliance activities, arroyo toad clearance surveys, arroyo toad fence monitoring, nesting bird surveys, construction monitoring and daily reporting in support of ongoing large-scale habitat restoration activities in 2015, within the Ysidora Basin area of Camp Pendleton.

Naval Base Point Loma Building 400 Redevelopment Project, sub to DLF Construction, Inc., San Diego, San Diego County, CA - Principal Biologist / Project Manager. Conducted nesting bird surveys and provided construction monitoring, in addition to nest survey reports and strategizing nest avoidance methods with the Contractor for the Naval Base Point Loma Building 400 Redevelopment and Fencing Security Project in 2019.

Miramar National Cemetery Natural Resources Managament Consulting Services, Department of Veterans Affairs, San Diego, San Diego County, CA - Principal Biologist. Oversaw natural resources mangagement, preserve management, quarterly and annual monitoring reports, and addressed remedial measures to enhance natural resources within preserved lands within and around

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Miramar National Cemetery on MCAS Miramar in 2019. Unique biological resources present include vernal pools, San Diego fairy shrimp, California gnatcatchers, drainage features, hundreds of acres of natural vegetation communities, rare plants and nesting birds.

Chollas Grove Childhood Development Center Project, sub to T.B. Penick & Sons, Inc., San Diego, San Diego County, CA -Senior Biologist. This Project involved the construction of a new childhood development facility, daycare and parkland adjacent to military housing within the City of San Diego. The Project was adjacent to natural canyonlands that were known to contain several pairs of California gnatcatcher. Responsible for NEPA CATEX complance, conducted California gnatcatcher nest surveys, nesting bird surveys, noise and construction monitoring.

US Navy Mountain Warfare Training Camp Michael Monsoor Quino Checkerspot Butterfly Surveys, sub to KMEA, San Diego County, CA - Principal Biologist / Project Manager. Managed subcontractors Cooper Biological Services and Victor Novik, who conducted a basewide protocol Quino checkerspot butterfly survey on Camp Michael Monsoor in east San Diego County.

Thread-leaved Brodiaea Surveys, Marine Corps Base Camp Pendleton, sub to Klutz Biological, San Diego County, CA -Botanist. Conducted protocol-level surveys for the federally threatened, State-endangered thread-leaved brodiaea in the Santa Margarita Mountains within Camp Pendleton in 2015.

Basewide Infrastructure Upgrade Project: P1093 and P1094 12kV Wood to Steel Pole Replacement Project, sub to URS, Marine Corps Base Camp Pendleton, San Diego County, CA - Principal Biologist. This wood to steel pole replacement project is a part of Marine Corps Base (MCB) Camp Pendleton's Base-wide Infrastructure Upgrade project. Tie Lines P1093 and P1094 include many primary and arterial distribution lines throughout Camp Pendleton, essential to support Base operations. The alignment traverses habitats of numerous sensitive, threatened and/or endangered wildlife species, including California gnatcatcher, California least tern, least Bell's vireo, southwestern willow flycatcher, Pacific pocket mouse, Stephen's kangaroo rat, arroyo toad, fairy shrimp, southwestern pond turtle and burrowing owl, among others. In addition to monitoring for these species, conducted arroyo toad presence/absence surveys and relocated arroyo toads found inside fenced areas around poles slated for replacement prior to construction to safe areas away outside the work areas in 2013.

Riparian Restoration, Enhancement & Monitoring Plan, Santa Margarita River Flood Plain, U.S. Navy, sub to Insight Environmental, Engineering & Construction, Inc., Marine Corps Air Station Pendleton, San Diego County, CA -Senior Biologist / Botanist. Designed and oversaw installation of nearly 50 acres of riparian woodland at the Marine Corps Air Station, Camp Pendleton from 2006 to 2007. The comprehensive design included resource protection, weeding, plant and seed lists, planting methods and care after planting, including irrigation inspections. Provided monitoring, instructions and advice to the landscape contractor, and assistance with topics, including weed control and endangered species avoidance, throughout the growing period. Monitored ground water, tree height related to aircraft safety, and various wildlife monitoring functions. Performed nest clearance surveys with a focus on least Bell's vireo prior to weed eradication.

Quino Checkerspot Butterfly Surveys, United States Fish & Wildlife Service (USFWS), San Diego County, CA - Principal Biologist. Conducted U.S. Fish & Wildlife (USFWS) protocol-level Quino checkerspot butterfly (QCB) surveys at two documented QCB reference sites on BLM-managed land in southern San Diego County during the 2013 and 2014 seasons - western Otay Mountain & the Dulzura Occurrence Complex.

United States Army Corps of Engineers Santa Ana River Restoration Project, sub to Chambers Group and Ultrasystems, Norco, Riverside County, CA - Principal Biologist. This multi-year project involves the removal of large stands of non-native vegetation, primarily giant reed (*Arundo donax*), from the Santa Ana River floodplain in order to improve habitat for threatened and endangered, or otherwise sensitive, bird species known to breed in the area. Conducted protocol surveys for least Bell's vireo and southwestern willow flycatcher.

Arroyo Toad Survey of the Santa Margarita River at Fallbrook Naval Ordnance Detachment, Department of the U.S. Navy, sub to Varanus Biological, San Diego County, CA -Biologist. The study area included the entire Santa Margarita River along the north border of the Fallbrook Naval Ordnance Detachment. Assisted with protocol level arroyo toad surveys, bullfrog eradication activities, and bullfrog gut content analyses in 2003.

Monument Fuels Management Project, BLM Palm Springs-South Coast Field Office, sub to Labat Environmental, Snow Creek and Pinyon, Riverside County, CA -Project Manager / Senior Biologist / Botanist. This Project included a new literature review, field surveys, and a report updating an Environmental Assessment (EA) for the Monument Fuels Management Project of the Bureau of Land Management (BLM). Led a small team of biologists and botanists in conducting a standard bio-reconnaissance survey, with a focus

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on potentially occurring sensitive plants or animals in the area, including peninsular bighorn sheep, and produced a report of the findings in 2008. Co-wrote the Environmental Assessment and ensured quality control.

International Border Fuel Break Project, BLM Palm Springs-South Coast Field Office, sub to Labat Environmental, San Diego County, CA - Project Manager / Senior Biologist / Botanist. This Project included a new literature review, field surveys, and a report updating an Environmental Assessment (EA) for the International Border Fuel Break Management Project of the Bureau of Land Management (BLM). The Project was along the international border over 60 miles in length from West Otay Mountain to east of Campo, California, and covered numerous undisturbed lands harboring dozens of sensitive plant and animal species, including arroyo toad, Quino checkerspot butterfly, California gnatcatcher, burrowing owl, Mexican flannelbush, and Otay ceanothus, among others. Conducted standard bio-reconnaissance surveys and vegetation mapping services, with a focus on potentially-occurring sensitive plants or animals in the area, and produced a report of the findings in 2008 and 2009. Co-wrote the Environmental Assessment and ensured quality control.

BLM International Border Fuel Break 2019 Project, BLM, CALFIRE, sub to Aspen, San Diego & Imperial Counties, CA - Principal Biologist. Conducted baseline biological surveys, vegetation communities mapping, sensitive species analyses, datasheet completion and photo-documentation of BLM-owned areas along the US/Mexico border scheduled for vegetative fuel reduction measures, as well as BLM-owned parcels west of the Salton Sea for tamarisk removal procedures in 2019.

Groundwater Monitoring Wells Replacement Project, Marine Corps Base Camp Pendleton, U.S. Navy, Naval Facilities Engineering Command, Southwest (NAVFAC SW), sub to CDM Constructors, San Diego County, CA -Senior Biologist. CDM was contracted to replace and construct new groundwater monitoring wells in Areas 26 and 52 on Camp Pendleton. This process involved drilling, developing and testing the wells, in addition to constructing the surrounding building and associated structures. Construction took place in areas with suitable habitats for four federally threatened or endangered species: arroyo toad, least Bell's vireo, southwestern willow flycatcher and California gnatcatcher. Inspected the enclosure fence and suggested repairs, performed clearance surveys for arroyo toads and conducted compliance monitoring to satisfy conditions outlined in the NEPA Categorical Exclusion (CATEX) document on an as-needed daily basis in 2010 and 2011. Conducted nest clearance surveys and performed noise mitigation/monitoring.

Groundwater Well Project, Marine Corps Air Station Pendleton, U.S. Navy, Naval Facilities Engineering Command, Southwest (NAVFAC SW), sub to Chambers Group, San Diego County, CA - Principal Biologist. This Project involved exploratory and final well drilling and installation for additional groundwater capabilities to serve the projected water needs of Marine Corps Air Station Pendleton**.** Served as lead construction monitor in 2014 and 2015, advising the foreman and work crews on arroyo toad avoidance strategies as they pertained to the Categorical Exclusion document specific for the Project, per the National Environmental Policy Act (NEPA).

Water Pipeline Installation Project, sub to Orion, Marine Corps Base Camp Pendleton, San Diego County, CA -Senior Biologist / Botanist. This Project involved the installation of 5.5 miles of fiber optic backbone on Marine Corps Base (MCB) Camp Pendleton. Backbone installation involved Horizontal Directional Drilling (HDD) under the Santa Margarita River. Conducted focused surveys for southwestern willow flycatcher, least Bell's vireo, and arroyo toad, as well as pre-construction nesting bird surveys and vegetation removal monitoring.

Base-wide Least Bell's Vireo Presence/Absence Surveys, sub to Griffith Wildlife Biology, Marine Corps Base Camp Pendleton, San Diego County, CA -Biologist. Surveyed stretches of the Santa Margarita River, San Mateo River, Pilgrim Creek, and several tributary drainages as part of the base-wide least Bell's vireo survey crew in 2000 and 2001.

The Effects of Helicopter Noise on the Reproductive Success of the Coastal California Gnatcatcher, Department of the U.S. Navy, Marine Corps Air Station Miramar, San Diego County, CA -Field Manager / Biologist / Botanist. Hubbs-Sea World Research Institute conducted a five-year study on the potential effects of helicopter noise on the reproductive success of the California gnatcatcher (CAGN) that covered all 23,065 acres of the Station, utilizing CAGN nest-based vegetation transects annually, as well as permanent vegetation transects, regardless of CAGN suitability, established over a grid pattern on the Station. Served as a surveying CAGN biologist during the CAGN breeding season and as lead botanist during the non-breeding season from 1997 through 2002. As field manager, responsibilities included scheduling, survey assignments, QA/QC, document preparation, data management, while conducting daily surveying responsibilities. Botanical activities involved data collection on six line and belt transects centered around all CAGN nest sites as well as 70 permanent vegetation transects throughout the remainder of the Station.

he Effects of Helicopter Noise on Least Bell's Vireo, Department of the U.S. Navy, Marine Corps Base Camp Pendleton, San Diego County, CA -Field Manager / Biologist / Botanist. Hubbs-Sea World Research Institute, in cooperation with Griffith Wildlife Biology, conducted an extended five-year study on the potential effects of helicopter noise on the reproductive success of the least Bell's

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vireo (LBVI) on Marine Corps Base Camp Pendleton (Pendleton). The study focused on the riparian floodplain of the Santa Margarita River in the flight path of Marine Corps Air Station Pendleton (Air Station), utilizing LBVI nest-based vegetation transects annually, as well as permanent vegetation transects, regardless of LBVI suitability, established over a grid pattern on Pendleton. Served as surveying LBVI biologist during the LBVI breeding season and as lead botanist during the non-breeding season from 1999 through 2002. As field manager, responsibilities included scheduling, survey assignments, QA/QC, document preparation and data management, all while conducting daily surveying responsibilities. Botanical activities involved data collection on line transects using the stacked cube methodology centered around all LBVI nest sites as well as permanent vegetation transects throughout the remainder of the study area.

Effects of Fixed-Wing Military Aircraft Noise on Nesting Passerines, San Diego State University (SDSU) Foundation, Marine Corps Air Station (MCAS) Miramar, San Diego County, CA -Ornithologist. Conducted passerine nest search surveys in MCAS Miramar for a study to assess nesting bird responses to overhead helicopter flights from various altitudes in 1997. Results were used as baseline data for the "Effects of Fixed-Wing Military Aircraft Noise on California Gnatcatcher Reproduction" study.

Marine Corps Air Station Miramar Bat Use and Relative Abundance Study, Hubbs-Sea World Research Institute, Marine Corps Air Station (MCAS) Miramar, San Diego County, CA -Biologist. Assimilated data gathered on bat species usage of the various habitats within and adjacent to MCAS Miramar from 1999 to 2001. Assisted on diurnal and nocturnal bat surveys and studied occupied bat roosts in several areas of the Station. Produced Station-specific range maps for a variety of bat species and wrote a highly detailed report on bat usage of the Station.

Fallbrook Naval Ordnance Detachment Bat Exclusion Project, San Diego State University (SDSU) Foundation, San Diego County, CA -Biologist. A public health hazard was identified at the Fallbrook Naval Ordnance Detachment's gymnasium in 1997, when Mexican free-tailed bats were observed roosting by the hundreds in the same facility that contained a café. Conducted diurnal and nocturnal surveys to determine roost locations, installed exclusion netting, built and installed bat houses, and conducted monitoring of bat boxes to gauge usage.

Vertebrate Species Report of Marine Corps Air Station (MCAS) Miramar, San Diego State University (SDSU) Foundation, San Diego County, CA -Technical Writer. Assumed writing duties for retiring professor Dr. George Cox in 1997, on an unfinished comprehensive report documenting all known vertebrate species of MCAS Miramar and their habitat suitability indices.

Development

Santa Catalina Island Company Development Projects, Santa Catalina Island Company, sub to Sage Environmental Group, City of Avalon, Los Angeles County, CA - Principal Biologist / Project Manager. Three distinct development projects are proposed in and adjacent to the City of Avalon on Catalina Island: Kite Hill Country Club, Cliffs Hotel and the Master Plan Phase I Residential Development. Performed literature reviews, field surveys and data collection services for all three projects from 2014 to present. Field surveys consisted of vegetation mapping, general wildlife surveys, habitat assessments for special status wildlife species, habitat assessments for the Santa Catalina Island fox and focused rare plant surveys. Assessed potentially jurisdictional water bodies. Completed the Biological Technical Report (BTR) for the Kite Hill Country Club Project and is awaiting approval to proceed with the preparation of the other two project BTRs.

Torrey Brooke II Housing Development Project, Williams Group LLC, San Diego, San Diego County, CA -Project Manager / Principal Biologist. This Project involved the construction of two new single-family homes on previously undeveloped lands in Carmel Valley of north-central San Diego. Oversaw environmental compliance activities pursuant to the City of San Diego guidelines and its CEQA Mitigated Negative Declaration in 2015. Coordinated planned monitoring methods, conducted compliance reporting and SWPPP compliance, nesting bird surveys, environmental training, monitor scheduling, and construction monitoring.

Magnolia Tank Farm Development Project, Shopoff Realty, Huntington Beach, Orange County, CA - Principal Biologist / Project Manager. The proposed project is to convert a previously existing oil tank farm into a hotel and/or high-density residential development on the coast of Huntington Beach, adjacent to the preserved area of Magnolia Marsh. Conducted literature reviews, biological reconnaissance surveys, special-status species habitat assessments, a jurisdictional delineation, and a nesting bird suitability analysis. Produced a highly vetted biological letter report, complete with mitigation strategies proposed by Blackhawk with input from the project team.

Victoria Park Subdivision Development Project, CRS GC Inc., Brawley, Imperial County, CA - Principal Biologist / Project Manager. The proposed Project is a phased, residential development project in Brawley, CA. Completed literature review, conducted a biological reconnaissance survey, special-status species habitat assessment, vegetation mapping, jurisdictional assessment,

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focused burrowing owl survey and report, biological letter report, and project management tasks to support the project in 2017.

El Portal Subdivision Development Project, CRS GC Inc., Calexico, Imperial County, CA - Principal Biologist. Completed a literature review, conducted a biological reconnaissance survey, special-status species habitat assessment, vegetation mapping, jurisdictional assessment, photographic documentation, focused burrowing owl surveys and report, biological letter report, and project management tasks to support the project in 2018.

California Department of Motor Vehicles Field Office Project, sub to LSA Associates, Inc., Santa Maria, Santa Barbara County, CA - Principal Biologist. This Project was proposed to construct a new DMV office and testing facility on currently vacant land within the City of Santa Maria. Completed a literature review, conducted a biological reconnaissance survey, vegetation mapping, special-status species habitat assessment, jurisdictional assessment, photographic documentation, biological technical letter report production, and Initial Study/Mitigated Negative Declaration (ISMND) biological section production tasks in support of the proposed project.

City of Industry Development Project, sub to Sage Environmental Group, Los Angeles County, CA - Project Manager. Served as project manager for nesting bird surveys and nesting least Bell's vireo surveys for an ongoing commercial development project along State Routes 57 and 60 in the City of Industry in 2015.

Diamond & Melrose Pending Development Project, Hunter Irrigation, Thomas Martin, San Marcos, San Diego County, CA - Principal Biologist / Project Manager. Conducted USFWS protocol least Bell's vireo surveys in riparian habitats on 23 acres of undeveloped land in the City of San Marcos in 2015. The Project as proposed would develop a 5-8 acre commercial space, parking lot, street extension, and infrastructure upgrades while leaving the rest as open space. Participated in site walks, mitigation strategy identification, site re-assessments from outdated surveys, sensitive plant and wildlife species identification, jurisdictional waters assessments and related tasks to assess the development feasibility.

Rose Hills Memorial Park Expansion Project, sub to Sage Environmental Group, Whittier, Los Angeles County, CA - Principal Biologist / Project Manager. Performed California gnatcatcher and nesting bird surveys, reporting, and coordination with landscape maintenance crews to avoid adverse impacts to nesting birds and gnatcatchers during the 2015 nesting season. Administered basic project management activities.

Marblehead Coastal Development Project, sub to Chambers Group, Inc., San Clemente, Orange County, CA - Principal Biologist. Marblehead is the largest coastal development project from northern Los Angeles County to the US/Mexico border. The Project as designed includes a commercial district and several hundred new single-family homes and condominiums situated on the Pacific Coast in San Clemente, CA. Conducted an onsite gull survey to develop nuisance avoidance strategies and prepared a letter report of recommendations from 2007 to 2008. Conducted weekly California gnatcatcher nest surveys in large coastal sage scrub restoration plots situated on the slopes and canyons immediately adjacent to the residential and commercial development sites and provided biological monitoring during construction in 2014.

Corona Lake Development Project, sub to WRA, Inc., Corona, Riverside County, CA - Principal Biologist. Conducted USGS protocol surveys for the federally endangered southwestern willow flycatcher (SWFL) at the Lee Lakes properties site surrounding Corona Lake as part of a project permitting update process under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) in 2014. Prepared a biological survey letter report for agency submittal to support permitting of the proposed project.

Paradise Valley Specific Plan Development Project, sub to Aspen Environmental Group and GLC Enterprises, LLC, Riverside County, CA - Wetland Scientist / Senior Biologist. This large-scale jurisdictional delineation systematically covered approximately 5,000 acres of a large alluvial fan system and desert foothills north of the Salton Sea and east of the Coachella Valley in unincorporated Riverside County. Interstate 10 bisected the Project site, proposed for residential and commercial development. Worked with Aspen Environmental to map and measure all drainage features, collect upstream and downstream photographs, and record sub-metric GPS locations for every drainage feature. Stream widths were collected for US Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB) and California Department of Fish & Wildlife (CDFW) jurisdictional limits, following the latest protocols and court rulings, including the Arid West Supplement and Rapanos and Carabell court cases.

First Avenue Residential Development Project, Private Landowner, San Diego, San Diego County, CA - Principal Biologist. The Project involved vacant land development within the City of San Diego, with a multi-dwelling residential property and an art studio. Recorded all observed plant and wildlife species, characterized existing conditions and land uses, mapped vegetation communities, collected representative photographs, and assessed the potential for the Project site to harbor any threatened, endangered or otherwise sensitive species, as well as any species covered by the City of San Diego's MSCP and Narrow Endemic list (as adopted by the City council). Prepared a Biological Survey Letter Report in accordance with the City's Biological Guidelines.

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Onondaga Street Development Project, Private Landowner, San Diego, San Diego County, CA - Principal Biologist. The Project included the proposed development of a large outdoor deck behind a single-family home adjacent to City of San Diego-designated Multiple Species Conservation Plan (MSCP) Open Space. Provided project management, conducted sensitive species literature review, baseline biological survey, focused plant survey, vegetation mapping, photographic documentation, impact analysis, and produced a MSCP Biological Letter Survey Report.

Pine Hills Egg Ranch Project, sub to Michael Baker International, Ramona, San Diego County, CA - Principal Biologist. As a County of San Diego-approved CEQA Consultant for Biological Resources, completed a report review on behalf of Michael Baker International for a proposed egg ranch expansion project located in Ramona, California.

Jamul Commercial Development Project, Woodcrest Companies, Jamul, San Diego County, CA - Principal Biologist. This Project was proposed to construct a new Tractor Supply Company and self-storage units on an old olive orchard and disturbed lands in Jamul, CA. Conducted a literature review, biological reconnaissance survey, special-status species habitat assessment, focused rare plant survey, sensitive species mapping survey, and jurisdictional assessment of the Project site in 2017 and 2018. Produced a County of San Diego Biological Resource Letter Report and submitted the report to the County of San Diego for review and approval.

D Street Mixed Use Development Project, Woodcrest Companies, Ramona, San Diego County, CA - Principal Biologist. This Project, beginning in 2018, includes the proposed development of two vacant lots in the City of Ramona into a mixed-use single family residential/light industrial use. A custom motorcycle shop is proposed within the light industrial portion. Conducted a biological reconnaissance survey and jurisdictional assessment. Prepared a due diligence memo report stating that the proposed project would not have any impacts on any special-status species or sensitive biological resources.

City of San Diego Cavallo Twinhomes Development Project, K.C. Yellapu, San Diego, San Diego County, CA - Principal Biologist. This Project involved the biological assessment of two parcels located within the City of San Diego Multiple Species Conservation Plan (MSCP) Subarea Plan Northern Subarea. Conducted a full review of biological resources and habitat evaluation for MSCP-covered, narrow endemic and otherwise sensitive species, vegetation mapping, aquatic resources assessment and general constraints analysis for the proposed development of approximately 1.4 acres for private residences on previously undeveloped land in Carmel Valley. Coordinated the completion of a Biological Letter Survey Report per City guidelines.

Village 605 Center Freeway Pylon Sign Project, sub to EPD Solutions, Inc., Long Beach, Los Angeles County, CA - Principal Biologist. A large pylon billboard was proposed in 2016 as part of the Village 605 Center in Long Beach off Interstate 605. Provided an expert opinion on the anticipated absence of significant avian impacts in the form of a business letter.

Randy Lane Residential Development Project, sub to Klein-Edwards Professional Services, Bonita, San Diego County, CA - Principal Biologist. The proposed Project would redevelop an existing home and surrounding natural lands on a two-acre parcel in Bonita, California into four new single-family residential homes. Mapped host plant patch locations suitable for the potential presence of the federally endangered Quino checkerspot butterfly and existing vegetation types, conducted protocol California gnatcatcher surveys, and provided reports for the butterfly assessment and the gnatcatcher surveys.

Edina Court Residential Development Project, Private Landowner, Poway, San Diego County, CA - Principal Biologist. The proposed Project involves the development of a single-family residence on an undeveloped one-acre parcel of land. Conducted an initial site visit in 2014 to catalog all observed plant and wildlife species, characterize existing conditions and vegetation communities, collect representative photographs and assess the potential for the site to harbor any threatened, endangered or otherwise sensitive species, as well as any species covered by the Poway Subarea Habitat Conservation Plan. Assessed the site for potentially jurisdictional waters of the US Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or the California Department of Fish & Wildlife (CDFW). Prepared a biological resources survey technical report in accordance with the Poway Subarea Habitat Conservation Plan.

Washburn Invasive Plant Species Removal Project, Private Landowner, Poway, San Diego County, CA - Principal Biologist. This Project involved invasive plant removal in order to enhance open space on privately owned land in the City of Poway. Conducted an initial site visit in 2014 to catalog all observed plant and wildlife species, characterize existing conditions and vegetation communities, collect representative photographs and assess the potential for the site to harbor any threatened, endangered or otherwise sensitive species, as well as any species covered by the Poway Subarea Habitat Conservation Plan. Assessed the site for potentially jurisdictional waters of the US Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or the California Department of Fish & Wildlife (CDFW). Prepared a letter report in accordance with the Poway Subarea Habitat Conservation Plan.

Marlow Residential Development Project, Private Landowner, Poway, San Diego County, CA - Principal Biologist. This Project involved

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the construction of a large single-family residence in the outskirts of Poway, CA. Provided project management, photo-documentation, conducted nesting bird surveys, California gnatcatcher presence/absence surveys, permit compliance, City consultation & coordination and meeting tasks on behalf of the landowner before and during construction in 2018.

Corona Masters Residential Development Project, NI Associates, Corona, Riverside County, CA - Senior Biologist / Wetland Scientist. A housing development was proposed for an undeveloped area of Corona within and adjacent to existing housing. performed general wildlife surveys, burrowing owl surveys, vegetation mapping services, and a jurisdictional delineation of the approximate 20-acre site in 2007. Provided a constraints analysis of the site to aid in the construction schedule and permitting needs.

Rosamond Residential Development Project, Capital Pacific Homes Inc., Rosamond, Kern County, CA - Senior Biologist. Consulted Capital Pacific Homes on coordination and negotiations with regulatory and planning agencies with jurisdiction over this proposed residential development. Conducted or assisted on protocol-level surveys for the Mohave ground squirrel, burrowing owl and the desert tortoise on this Mojave Desert site.

Brookfield Cleveland Avenue Residential Development Project, Ontario, San Bernardino County, CA - Senior Biologist. Conducted field surveys on the Project site prior to construction activities in 2007, involving heavy equipment and windrow tree removal to determine if active nests of species protected by the Migratory Bird Treaty Act (MBTA) and/or by the California Department of Fish and Game (CDFG) were present in the construction zone or within a buffer of 500 feet.

Senior Living Community Development Project, Canyon Creek Development, Inc., Highland, San Bernardino County, CA - Senior Biologist. Canyon Creek Development, Inc. proposed to develop a senior living community on an approximately 5-acre area in the City of Highland, San Bernardino County, California. Extensive grading is expected to be required prior to construction. Served as technical lead on bat and avian issues on and adjacent to the site in 2008. Led and conducted burrowing owl surveys per the Western Riverside County MSHCP protocol.

Sun City Commercial Development Project, Hollander Management, LLC., Sun City, Riverside County, CA - Senior Biologist. Conducted a habitat assessment for burrowing owl and sensitive plants on a 3.07-acre site according to Western Riverside County MSHCP guidelines. A Bio-Technical Report (BTR) was prepared based on these findings and submitted to the County.

Rancho Las Flores Development Project, Rancho Las Flores Development, Hesperia and Rancho Las Flores, San Bernardino County, CA - Senior Biologist. Worked with the client to keep biological data up to date on a stalled development project. Conducted surveys for arroyo toad, southwestern pond turtle, and least Bell's vireo on this site in 2003. In 2006 and 2007, worked with GIS analysts and a host of biologists to evaluate a large land area represented on a cadre of maps, in pre-burn and post-burn conditions. Biological data had to be updated based on these changed site conditions and listing statuses of sensitive plant and animal species known to occupy or that could occupy the area.

Copper Meadows Administrative Permit Project, Woodcrest Real Estate Ventures, Ramona, San Diego County, CA - Principal Biologist. Led biological and water resources disciplinary efforts in 2014 on behalf of the private landowner of Copper Meadows Event Training equine facility in their pursuit of an Administrative Permit pursuant to Tier 3 of the County of San Diego's Equine Ordinance. Conducted a site visit, literature review, sensitive species habitat & jurisdictional waters assessment, equine ordinance compliance, letter report production, and permit assistance to facilitate the permit process.

Egson Residential Development Site CEQA Review, sub to Victor Novik Consulting, Bonita, San Diego County, CA - Principal Biologist. The Egson Residential Development Project proponent proposes to construct two single-family residences on currently vacant land adjacent to the Sweetwater River in Bonita, CA. In 2016, Victor Novik conducted a biological survey and prepared a biological letter report, per County of San Diego MSCP guidelines. After being retained by Victor Novik, conducted a County of San Diego CEQA Consultant review of the biological letter report; provided feedback and comments to Mr. Novik for his use in preparing a final version, and also prepared a cover letter for the County to acknowledge the review and approval of the document in its final version.

Brodiaea Avenue Commercial Development Site Project, sub to EPD Solutions, Inc., Moreno Valley, Riverside County, CA - Principal Biologist / Project Manager. This Project involved the buildout of a commercial warehouse facility with associated parking, loading docks, offices, landscaping and other features on 6.71 acres of disturbed, vacant land in Moreno Valley, CA. Conducted a literature review, focused burrowing owl burrow survey, baseline biological resources inventory, GIS analysis, sensitive species suitability analysis, vernal pool/riparian/riverine presence/absence survey, photo-documentation and jurisidctional waters assessment of the Project site, per Western Riverside County MSHCP guidelines in 2016. Prepared a Habitat Assessment Report (HAR) per MSHCP guidelines that included burrowing owl survey results.

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Class Leasing Commercial Development Site Project, sub to EPD Solutions, Inc., San Jacinto, Riverside County, CA - Principal Biologist / Project Manager. This Project involved the buildout of a commercial manufacturing facility with associated parking, office buildings, storage areas, landscaping and other features on 14 acres of disturbed, vacant land in San Jacinto, CA. Conducted a literature review, focused burrowing owl burrow survey, baseline biological resources inventory, GIS analysis, sensitive species suitability analysis, vernal pool/riparian/riverine presence/absence survey, photo-documentation and jurisidctional waters assessment of the Project site, per Western Riverside County MSHCP guidelines in 2020. Assisted in the preparation of a Habitat Assessment Report (HAR) per MSHCP guidelines that included burrowing owl survey results.

Tige Watersports Commercial & Retail Development Project, Private Landowner, Lake Elsinore, Riverside County, CA - Principal Biologist / Project Manager. This Project was proposed for the construction of a light industrial and retail facility on a previously graded and vacant pad to customize and sell motorboats in Lake Elsinore, CA. Conducted a literature review, focused burrowing owl burrow surveys, focused rare plant survey, baseline biological resources inventory, GIS analysis, sensitive species suitability analysis, vernal pool/riparian/riverine presence/absence survey, photo-documentation and jurisidctional waters assessment of the Project site, per Western Riverside County MSHCP guidelines in 2017. Prepared a Habitat Assessment Report (HAR), Focused Burrowing Owl Survey Report and Focused Rare Plant Survey Report per MSHCP guidelines. Worked directly with Riverside County and Lake Elsinore staff to address all mitigation measures and design features to facilitate the project while minimizing and avoiding impacts to adjacent open space riparian habitat.

City of Claremont General Plan Housing Element Update, sub to EPD Solutions, Inc., Claremont, Los Angeles County, CA - Principal Biologist. A General Plan update was proposed to facilitate the development of several vacant land parcels within the City of Claremont; Project adversaries were opposed to redevelopment. Contracted by CEQA consultant EPD Solutions, Inc. to complete literature reviews, fieldwork and reports necessary to support the biological discipline in 2017. Conducted a biological records search, literature review, special-status species habitat assessment, biological reconnaissance survey, photographic documentation and vegetation mapping services for inclusion in the biological technical letter report that was prepared by Blackhawk.

Jurupa Valley Medical Center Project, sub to EPD Solutions, Inc., Jurupa Valley, Riverside County, CA - Principal Biologist / Project Manager. This Project involved the buildout of a medical services facility with associated parking, landscaping and other features on four acres of disturbed, vacant land in Jurupa Valley, CA. Conducted a literature review, focused burrowing owl burrow survey, baseline biological resources inventory, GIS analysis, sensitive species suitability analysis, vernal pool/riparian/riverine presence/absence survey, photo-documentation and jurisidctional waters assessment of the Project site, per Western Riverside County MSHCP guidelines in 2016. Prepared a Habitat Assessment Report (HAR) per MSHCP guidelines that included burrowing owl survey results.

South Corona Commerce Center Project, sub to EPD Solutions, Inc., Corona, Riverside County, CA - Principal Biologist / Wetland Scientist / Project Manager. This Project involved the buildout of a commercial warehouse facility with associated parking, street upgrades, driveway entries, loading docks, offices, landscaping and other features on 9.21 acres of disturbed, vacant land in Corona, CA. Conducted a literature review, focused burrowing owl burrow survey, baseline biological resources inventory, GIS analysis, sensitive species suitability analysis, vernal pool/riparian/riverine presence/absence survey, photo-documentation and jurisdictional delineation of the Project site, per Western Riverside County MSHCP guidelines and USACE Arid West wetland delineation methodology in 2016. Prepared a Habitat Assessment Report (HAR) per MSHCP guidelines that included burrowing owl survey results.

Rancho Highlands Residential Subdivision Development Project, RTA Rancho Highlands LLC, Temecula, Riverside County, CA - Principal Biologist / Project Manager. This Project is part of a multi-phased residential subdivision development project in the City of Temecula, CA. Completed a Western Riverside County MSHCP Habitat Assessment Report (HAR), Habitat Acqusition Negotiation Strategy (HANS), Determination of a Biologically Equivalent or Superior Plan (DBESP), literature review, focused burrowing owl burrow surveys and report, baseline biological resources inventory, GIS analysis, sensitive species suitability analysis, vernal pool/riparian/riverine presence/absence survey, photo-documentation, jurisidictional delineation and report and project management tasks in 2018.

Menifee Industrial Park Project, sub to EPD Solutuions, Inc., Menifee, Riverside County, CA - Principal Biologist / Project Manager. This project includes the development of an industrial park and associated parking, stormwater conveyance system and other features on approximately 12 acres of former pasture land project in the City of Menifee, CA. Completed a Western Riverside County MSHCP Habitat Assessment Report (HAR), jurisdictional delineation survey and report, Determination of a Biologically Equivalent or Superior Plan (DBESP) report, literature review, focused burrowing owl surveys and report, baseline biological resources inventory, GIS analysis, sensitive species suitability analysis, vernal pool/riparian/riverine presence/absence survey, photo-documentation, and project management tasks in 2019 and 2020. Also attended meetings with the Western Riverside County Regional Conservation Authority

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to discuss and approve off-site mitiation strategies for impacts to an ephermeral drainage feature that would be fully impacted by the project. Mr. Alberts advised the ultimate client that impacting the drainage to facilitate full project buildout would be more cost effective than avoidance of the drainage, as portions of the drainage would have been impacted under any scenario, requiring USACE, RWQCB and CDFW permits and mitigation.

Nittobo Facility Expansion Project, sub to EPD Solutions, Inc., Murrieta, Riverside County, CA - Principal Biologist / Project Manager. This project involves the expansion and redevelopment of existing failities on the Nittobo bio-pharmaceutical faclity that researches goat plasma for medicinal uses. Conducted a pre-construction burrowing owl and nesting bird survey of the prject site and its 150-meter buffer in summer 2020 prioir to ground-disturbing activities; no owls were found.

City of San Diego Native Habitat Restoration Plan and Implementation Project, Private Landowner, Del Mar, San Diego County, CA - Restoration Ecologist / Project Manager. This Project involved perennial non-native plant species removal and native habitat restoration on less than 0.2 acre of land behind a private residence. The area was illegally graded several years ago, and the City of San Diego is requiring that restoration must be undertaken in order to return the land closer to its original state. Conducted an initial meeting with key City personnel in 2014, prepared the draft and final habitat restoration & management plan (HRMP), performed non-native plant removal oversight, provided native plant and irrigation installation oversight, monthly and bi-monthly maintenance monitoring, annual quantitative vegetation sampling studies, and annual/final reporting.

Murrieta Hospitality Commons Project, sub to EPD Solutions, Inc., Murrieta, Riverside County, CA - Principal Biologist / Wetland Scientist. This Project involved the buildout of a Holiday Inn hotel and two restaurants, plus associated parking, street upgrades, water and sewer connections, driveway entries, landscaping and other features on 6.95 acres of vacant land in Murrieta, CA. Conducted a literature review, focused burrowing owl burrow survey, burrowing owl surveys, baseline biological resources inventory, GIS analysis, sensitive species suitability analysis, vernal pool/riparian/riverine presence/absence survey, photo-documentation and jurisdictional delineation of the Project site, per Western Riverside County MSHCP guidelines and USACE Arid West wetland delineation methodology in 2016. Prepared a Habitat Assessment Report (HAR) per MSHCP guidelines that included burrowing owl survey results. A stand-alone jurisdictional delineation report was prepared for a jurisdictional drainage feature that bisects the Project site.

Cardinal Glass Facility Expansion Project, sub to EPD Solutions, Inc., Moreno Valley, Riverside County, CA - Principal Biologist. This Project involved the 1.14-acre expansion of an existing glass manufacturing facility with associated parking, loading docks, landscaping, retention basin and other features on an 18.37-acre parcel in Moreno Valley, CA. Conducted a literature review, focused burrowing owl burrow survey, pre-construction burrowing owl survey, baseline biological resources inventory, GIS analysis, sensitive species suitability analysis, vernal pool/riparian/riverine presence/absence survey, photo-documentation and jurisidctional waters assessment of the Project site, per Western Riverside County MSHCP guidelines in 2015. Prepared a Habitat Assessment Report (HAR) per MSHCP guidelines that included burrowing owl survey results.

Scottish Village Residential Development Project, sub to EPD Solutions, Inc., Moreno Valley, Riverside County, CA - Principal Biologist. The proposed Project is a planned residential development of 194 residential units on a 26.12-acre site. The Scottish Village proposes three planning areas providing detached condominiums, attached condominiums, and senior condominiums. The proposed Project also includes four common recreation areas, three water quality basins, off-site improvements on Bremen Street and Baywood Drive, and completion of linear bikeway/greenbelt improvements along the California Aqueduct right-of-way between Dracaea Avenue and Pan Am Boulevard. conducted a Western Riverside County MSHCP consistency analysis that included a literature review, burrowing owl assessment, baseline biological resources inventory, GIS analysis, sensitive species suitability analysis, vernal pool/riparian/riverine presence/absence survey and photo-documentation in 2019.

Spring Mountain Residential Development Project, sub to Sage Environmental Group, Riverside, Riverside County, CA - Principal Biologist. The Project is a multi-lot single-family home subdivision of an approximately 87.7-acre vacant property located to the north of Pigeon Pass Road and east of Stockyard Road in the City of Riverside, California. The proposed Project includes new street layouts, lot layouts, and sewer, gas and electrical infrastructure. The proposed Project includes an extension of Center Street easterly through to the site, with new streets branching within the site and off of Pigeon Pass Road from the south. Completed focused burrowing owl surveys and the corresponding burrowing owl survey report in 2019.

Palm Springs Care Clinic Project, Sunquitz EMC LLC, Palm Springs, Riverside County, CA - Principal Biologist / Project Manager. The project includes the full buildout of 4.2 acres of undeveloped desert scrub in the City of Palm Springs to support a new medical facility on land owned by the Agua Caliente Tribal Reservation. Conducted four burrowing owl surveys of the site and 150 meters surrounding the site in June 2020 and produced a focused burrowing owl survey report. No owls or owl sign were found onsite.

Renewable Energy

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Seville Solar Project, Kruger Energy and Duke Energy, Imperial County, CA - Principal Biologist / Project Manager. The solar array encompassed 640 acres on former agricultural land. Contracted in 2014 and 2015 to oversee all environmental compliance activities on the Seville Solar array site just east of Ocotillo Wells in Imperial County, CA. Utilized Blackhawk's paleontological monitoring subcontractor (the San Diego Natural History Museum) and its cultural resources specialist (Petra Resource Management) to round out its complete team of specialists. Served as project manager, conducted nesting bird surveys and reports, burrowing owl surveys and burrow exclusions, flat-tailed horned lizard assessment, nesting bird management plan production, construction monitoring, monitor scheduling, agency liaison, budget management, proposal production, bat surveys, CDFW coordination, Imperial County coordination, Environmental Awareness Training presentation production and instruction, and wallet card design and production tasks.

Titan I Solar Project, Imperial County Planning & Development Services, Imperial County, CA - Principal Biologist / Project Manager. The solar array encompassed 380 acres on former agricultural land. Contracted in 2020 to oversee all environmental compliance activities on the Titan Solar I array site just east of Ocotillo Wells in Imperial County, CA, adjacent to and immediately south of the previously constructed Seville Solar Project. Utilized Blackhawk's preferred paleontological monitoring subcontractor (the San Diego Natural History Museum), its preferred cultural resources specialist (Petra Resource Management) and its preferred storm water professionals (Geosyntec Consultants) to round out its complete team of specialists. Served as project manager and principal biologist, oversaw nesting bird surveys and reports, conducted burrowing owl surveys and flat-tailed horned lizard assessments, oversaw nesting bird management plan and Bird and Bat Conservation Strategy (BBCS) production, construction monitoring, monitor scheduling, agency liaison, budget management, proposal production, CDFW and USFWS coordination, Imperial County coordination, Environmental Awareness Training presentation production and instruction, and wallet card design and production tasks. Several flat-tailed horned lizards were observed and passively relocated east of the project.

Wistaria Solar Project, Calexico, Imperial County Planning & Development Services, Imperial County, CA - Third Party Environmental Inspector / Project Manager. The Wistaria Solar Project is part of a larger development of up to 17 individual solar projects or clusters of multiple solar projects on 32 parcels totaling approximately 2,793 acres. Ensured that the Project complied with the Mitigation, Monitoring & reporting Program (MMRP), CUPs and all other Project-specific plans and permits, such as the Bird and Bat Conservation Strategy and Burrowing Owl Exclusion Plan. Conducted pre-construction document and permit reviews, conducted weekly to twice-weekly onsite inspections and issued daily reports to the Project team via an e-mail distribution list from 2016 to 2018.

Midway III Solar Project, Imperial County Planning & Development Services, Calipatria, Imperial County, CA - Third Party Environmental Inspector / Project Manager. This Midway III Solar Project is a renewable energy project employing photovoltaic (PV) or concentrated photovoltaic (CPV) technology. The Project is part of a larger development of up to totaling approximately 1,738 acres. County-issued Conditional Use Permits (CUPs) have been granted for the subject parcels, each of which is approximately 20 megawatts (MW). The entire Project is anticipated to generate 275 MW. Ensured that the Project complied with the Mitigation, Monitoring & reporting Program (MMRP), CUP and all other Project-specific plans and permits, such as the Bird and Bat Conservation Strategy and Burrowing Owl Exclusion Plan. Conducted pre-construction document and permit reviews, conducted weekly to twice-weekly onsite inspections and issued daily reports to the Project team via an e-mail distribution list in 2018.

Mount Signal III Solar Project, Imperial County Planning & Development Services, Calexico, Imperial County, CA - Third Party Environmental Inspector / Project Manager. The Mount Signal III Solar Project is a renewable energy project employing photovoltaic (PV) or concentrated photovoltaic (CPV) technology. The Project covers approximately 1,920 acres. The entire Project is anticipated to generate 252 MW. Ensured that the Project complied with the MMRP, CUPs and all other Project-specific plans and permits, such as the Bird and Bat Conservation Strategy and Burrowing Owl Exclusion Plan. Conducted pre-construction document and permit reviews, conducted weekly to twice-weekly onsite inspections and issued daily reports to the Project team via an e-mail distribution list in 2017 and 2018.

Mount Signal II Solar Project, Imperial County Planning & Development Services, Calexico, Imperial County, CA - Third Party Environmental Inspector / Project Manager. The Mount Signal II Solar Project is a renewable energy project employing photovoltaic (PV) or concentrated photovoltaic (CPV) technology. The Project covers approximately 1,360 acres. County-issued Conditional Use Permits (CUPs) have been granted for the subject parcels, each of which is approximately 20 megawatts (MW). The entire Project is anticipated to generate 275 MW of AC power and 199 MW of DC power. Ensured that the Project complied with the Mitigation, Monitoring & reporting Program (MMRP), CUP and all other Project-specific plans and permits, such as the Bird and Bat Conservation Strategy and Burrowing Owl Exclusion Plan. Conducted pre-construction document and permit reviews, conducted weekly to twice-weekly onsite inspections and issued daily reports to the Project team via an e-mail distribution list in 2018.

Citizens Solar Project, Imperial County Planning & Development Services Calipatria, Imperial County, CA - Third Party Environmental Inspector / Project Manager. This Project, completed in 2019, was initiated by the Imperial Irrigation District (IID) with the intent of providing locally sourced renewable energy to lower income residents of the Imperial Valley. The 30-megawatt (MW) project was constructed on approximately 223 acres across two parcels of former agricultural lands adjacent to the west side of the East Highline

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Canal near Calipatria, California. Conducted thorough Mitigation Monitoring & Reporting Program (MMR)P/Conditional Use Permit (CUP) compliance inspections while also ensuring that operations were abiding by other approved documents, such as the Bat and Brid Conservation Strategy, Stormwater Pollution Prevention Plan (SWPPP), Dust Control Plan and Pest Management Plan. Weekly reports were compiled and sent to an email distribution group following each site visit.

Rugged Solar Project, sub to Soil Ecology, Inc., Boulevard, San Diego County, CA - Principal Biologist. This proposed project would convert existing pasture lands in eastern San Diego County to a 400-acre solar facility. Updated the literature review, updated the field survey, and produced a CEQA addendum letter report, complete with an updated effects analysis and impact projections in order to issue a permit extension for the proposed project in 2017.

McCain Valley Solar Project Quino Checkerspot Butterfly Surveys Project, sub to Greenskies Renewables LLC, **Boulevard, San Diego County, CA** - Principal Biologist / Project Manager. This proposed project would convert existing pasture lands in eastern San Diego County to a 416-acre solar facility. In 2020, coordinated and completed a full suite of 12 USFWS protocol presence/absence surveys for the federally endangered Quino checkerspot butterfly on the proposed footprint, plus 100 feet beyond the boundaries. Survey areas were divided into five sections, and a team of permitted biologists handled the surveys according to protocol guidelines. All host plant patches were mapped, and a 45-day report was produced; no Quino checkerspot butterflies were observed.

Donovan State Prison Solar Project, sub to EPD Solutions, Inc., **San Diego, San Diego County, CA** - Principal Biologist / Project Manager. This Project includes the development of a new solar facility to provide renewable energy to the RJ Donovan State Prison in San Diego, California. The proposed Project includes the installation of solar arrays, a perimeter security fence, and an underground electrical collection system; the Project Area will be graded to provide a level surface for the array. Conducted literature reviews, vegetation mapping, special-status species habitat assessments, photographic documentation, focused burrowing owl surveys and reporting, including a CEQA Addendum Letter Report and a Focused Burrowing Owl Survey Report in 2019 and 2020. During the construction phase, conducted pre-construction surveys and served as the County of San Diego-approved CEQA Consultant.

Dixieland East & West Solar Project, sub to AES/Blue Oak Energy, Centinela, Imperial County, CA - Principal Biologist / Project Manager. This Project was commenced and completed within 2016. The Project involved the development and operation of a photovoltaic (PV) electric generation facility in Imperial County, CA. The overall acreage of the Project is 53 acres: 24 acres, referred to as Dixieland East, and 29 acres, referred to as Dixieland West. Completed Mitigation Monitoring & Reporting Program (MMRP) compliance, an ambient conditions/drill hammer noise analysis, construction monitoring, project management, scheduling, pre-construction nesting bird and burrowing owl surveys, burrowing owl mitigation plan, dust compliance, spot-check monitor reporting and photo-documentation in support of the Project.

Chino Institute for Women Solar Project, sub to EPD Solutions, Inc., **Chino, San Bernardino County, CA** - Principal Biologist. This Project was proposed by the California Department of Corrections and Rehabilitation (CDCR) to generate renewable solar power on State-owned prison grounds for the prison. Conducted literature reviews, vegetation mapping, special-status species habitat assessments, photographic documentation, focused burrowing owl surveys, focused rare plant surveys and reporting in 2017 and 2018. A Biological Technical Report (BTR) was produced to detail all special-status species results and recommendations for the Project site. In addition, a Focused Rare Plant Survey Report and Burrowing Owl Reports were produced.

Centinela State Prison Solar Project, sub to EPD Solutions, Inc., **Centinela, Imperial County, CA** - Principal Biologist. This Project was proposed by the California Department of Corrections and Rehabilitation (CDCR) to generate renewable solar power on State-owned prison grounds for the prison. Conducted literature reviews, vegetation mapping, special-status species habitat assessments, photographic documentation, focused burrowing owl surveys and reporting in 2017 and 2018. A Biological Technical Report (BTR) was produced to detail all special-status species results and recommendations for the Project site. In addition, Burrowing Owl Reports were produced.

Ironwood State Prison & Chuckawalla Valley State Prison Solar Project, sub to EPD Solutions, Inc., **Blythe, San Bernardino County, CA** - Principal Biologist. This Project was proposed by the California Department of Corrections and Rehabilitation (CDCR) to generate renewable solar power on State-owned prison grounds for the prison. Conducted literature reviews, vegetation mapping, a biological reconnaissance survey, special-status species habitat assessment, jurisdictional waters assessment, photographic documentation, focused desert tortoise/burrowing owl burrow survey and reporting in 2017 and 2018. A Biological Technical Report (BTR) was produced to detail all special-status species results and recommendations for the Project site.

Calipatria State Prison Solar Project, sub to EPD Solutions, Inc., **Calipatria, Imperial County, CA** - Principal Biologist. This Project was proposed by the California Department of Corrections and Rehabilitation (CDCR) to generate renewable solar power for the prison. Conducted literature reviews, vegetation mapping, special-status species habitat assessments, photographic documentation, focused burrowing owl surveys and reporting in 2017 and 2018. A Biological Technical Report (BTR) was produced to detail all

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special-status species results and recommendations for the Project site. In addition, Burrowing Owl Reports were produced.

Poway Fire Department Station 3 Solar Project, sub to EPD Solutions, Inc., Poway, San Diego County, CA - Principal Biologist / Project Manager. The Project is a 1-megawatt solar photovoltaic array located on a hillside adjacent to Fire Station #3 in the City of Poway. The facility includes solar modules installed on fixed-tilt racking, inverters, and a point of connection to the electric grid adjacent to the main building of Fire Station #3. Completed a literature review, onsite reconnaissance-level biological surveys, jurisdictional assessment, special-status species habitat assessments, focused rare plant surveys and reports, USFWS protocol-level California gnatcatcher survey and report, and two biological technical letter reports (BTLR) incorporating all the results from 2016 to 2018.

SDG&E Solar Array Project, sub to ICF, Warner Springs, San Diego County, CA - Project Manager. Provided project management and personnel coordination in 2014. Coordinated Stephens' kangaroo rat surveying services to support the project.

SDG&E Valley Center Solar Battery Storage Project, sub to Chambers Group, Valley Center, San Diego County, CA – Principal Biologist. Provided County of San Diego-approved CEQA Consultant services for document review and approval in 2020.

Tule Wind Farm Project, sub to Balk Biological, AMEC and CH2MHill, San Diego County, CA - Principal Biologist. The proposed project is the development of a wind farm on BLM-managed land in the McCain Valley area of east San Diego County. Conducted the initial nesting bird surveys with AMEC biologists prior to geotechnical borings during the 2013 bird breeding season.

Ormat Geothermal Exploratory Sources Project, sub to Power Engineers, Truckhaven, Imperial County, CA - Principal Biologist / Project Manager. This Project was initiated in 2016 by Ormat Technologies to cover a large area of unexplored geothermal energy production potential on the western side of the Salton Sea. The 25-square mile area included large undisturbed and disturbed areas of California State Park land, as well as Bureau of Land Management (BLM) land, plus several smaller private parcels. Deployed a team of biologists and botanists for this Project, including rare plant, flat-tailed horned lizard and burrowing owl specialists, per California State Parks' request and upon resume approval procedures. Served as the Project Manager, while also serving as a botanist, flat-tailed horned lizard, and burrowing owl specialist.

Geo-Genco Geothermal Plant Project, sub to EB Environmental, Imperial County, CA - Principal Biologist. This Project was undertaken to document existing conditions and burrowing owl presence/absence prior to the development of a geothermal energy production facility on agricultural fields in unincorporated Imperial County. Conducted focused burrowing owl surveys and completed a report of findings following the surveys.

Sun Edison Solar Project, sub to EPD Solutions, Inc., Rancho Mirage, Riverside County, CA - Principal Biologist. This proposed small-scale solar generation project covers approximately 4 acres of primarily native desert scrub in Rancho Mirage, CA. The Project site is nestled between a golf course, residential development and roadways. Conducted a focused plant survey, focused burrowing owl surveys, and sensitive species analyses. Following the field surveys, a biological letter report was prepared following the Coachella Valley MSHCP guidelines, with proposed mitigation measures to reduce biological impacts to less than significant levels.

Chevron Lucerne Valley Solar Project, Chevron, San Bernardino County, CA - Senior Biologist / Wetland Scientist. This Project proposes the construction of a solar array on undeveloped land. Led and participated in protocol desert tortoise, rare plant, avian point count and burrowing owl surveys. Assisted with the transect-based jurisdictional delineation and contributed to the writing of the Biological Assessment (BA). Conducted a Phase II burrow survey for the burrowing owl and presence/absence and ZOI surveys for the desert tortoise following the initial surveys.

Solar Farm Initial Assessment Study, Confidential Client, Dona Ana County, NM - Principal Biologist. A solar energy company was pre-planning the siting of solar facilities in southern New Mexico in 2009 and 2010. The Project site was approximately 240 acres in size on former pasture land that had since gone fallow and was in a state of desert scrub recovery. Led and conducted all phases of the project, including project management, logistics and coordination, baseline biological surveys, sensitive species analysis, cultural resources surveys, jurisdictional waters assessments, nesting bird surveys, BLM coordination and producing the report of findings.

PdV Wind Energy Project, County of Kern Planning Department, Sheppard, Mullin, Richter, & Hampton LLP, Kern County, CA - Senior Biologist. Served in a lead role on a peer review with a focus on bat and bird strike mortality at wind turbines for a Draft Environmental Impact Report (EIR) on the PdV Wind Energy Project in 2007 and 2008 in the Tehachapi Mountain foothills. Documents reviewed included the Draft EIR, the Bio-Technical Report, and the survey reports related to these issues of the EIR.

Transportation

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Caltrans I-5 Managed Lanes Project, sub to Jacobs, Orange County, CA - Principal Biologist / Project Manager. The proposed Project would increase carpool and electric vehicle lanes from State Route 55 north to the Los Angeles County line on Interstate 5. Four alternatives are proposed; some include new bridges, ramps and roadway improvements. Conducted a literature review and biological/aquatic resources windshield survey to prepare a Preliminary Environmental Analysis Report (PEAR) for any sensitive biological and aquatic resources that may be impacted by the proposed Project in 2018.

San Diego County Camino Del Rey Drainage and Road Improvements Project, sub to RECON, Bonsall, San Diego County, CA - Principal Biologist. This Project includes the proposed realignment and elevational increase of Camino del Rey and drainage improvements associated with the adjacent Moosa Creek flood zone. In addition, a series of culverts are scheduled for repairs or replacement along the roadway to better facilitate water flows without damaging the roadway. Conducted USFWS protocol least Bell's vireo surveys and USGS protocol southwestern willow flycatcher surveys in the Project area up to 500 feet beyond the boundaries during the 2018 nesting season. Produced a USFWS 45-Day Report.

San Bernardino County Department of Public Works Dola Ditch and Lanzit Ditch Bridge Replacement Project, sub to Aspen Environmental Group, **San Bernardino County, CA** - Principal Biologist. The proposed Project involves the replacement of two timber trestle bridges along historic Route 66 with new, engineered, American Association of State Highway and Transportation Officials (AASHTO) approved, and prefabricated timber trestle "kit" bridges. Conducted site assessments that included reconnaissance-level and ground-truthing desert tortoise, burrowing owl, kit fox and rare plant surveys in 2014. Prepared a Caltrans Natural Environment Study (NES) and Biological Assessment (BA) for the Dola Ditch bridge.

Caltrans State Route 73 Retention Basins Cleanout Project, sub to Chambers Group, Inc., Orange County, CA - Principal Biologist. To reduce potential flooding hazards or damages to the integrity of State Route 73, this Project involved the cleanout of all the retention basins and large culverts between Irvine and San Juan Capistrano along SR-73. Conducted protocol California gnatcatcher and nesting bird surveys in the vicinity of various storm water basins along SR-73 in Orange County during the early 2014 nesting season.

Saddleback College Loop Road Project, sub to EPD Solutions, Inc., **Mission Viejo, Orange County, CA** - Principal Biologist / Project Manager. The Saddleback College Loop Road Project is a redevelopment project to increase parking space and improve traffic flow on the eastern side of the Saddleback College Campus in Mission Viejo, California. Other elements include the closure and redevelopment of existing sport fields and facilities. A previously prepared report had labelled a concrete ditch excavated from uplands as potentially jurisdictional across a section of the proposed Loop Road and parking lot. Provided a second opinion on the jurisdictional nature of the subject feature by conducting a jurisdictional waters assessment and providing a jurisdictional assessment report.

Los Angeles World Airports LAX Electric Bus Yard Facility Project, sub to Landrum & Brown, Los Angeles, Los Angeles County, CA - Principal Biologist / Project Manager. Los Angeles International Airport (LAX) is proposing to develop a new, larger electric bus yard, maintenance and recharging facility on 5 acres of previously developed and disturbed land located toward the southwest corner of the LAX boundary. The Project site is located across from the El Segundo Blue Butterfly Preserve, which is the largest expanse of habitat that remains for this critically endangered butterfly species. Completed a special-status species habitat analysis and baseline biological survey, after which a letter report was prepared to illustrate no significant environmental impacts.

Carnegie SVRA Biological Assessment Project, sub to Michael Baker International, Livermore, San Joaquin County, CA - Principal Biologist / Project Manager. The Project involves road reconstruction of a previously utilized, unimproved road crossing ("SRI crossing") through Corral Hollow Creek in the Carnegie State Vehicular Recreational Area (SVRA), near Livermore and Tracy, California. This Project would resurrect an access route in order to reestablish connectivity to these facilities and provide quicker emergency response times to the eastern portion of the park. Conducted a jurisdictional waters assessment, special-status species habitat analysis and baseline biological survey, and completed vegetation community mapping, focused rare plant survey and Biological Assessment report production tasks in 2019.

Railroad Track Upgrade Project, Union Pacific Railroad - Yuma Subdivision, sub to Parsons Water & Infrastructure, Thermal CA to Yuma AZ, Imperial County, CA - Senior Biologist / Wetland Scientist. This project involved biological surveys, vegetation mapping and wetland delineations along a 100-mile-long corridor for a proposed double-track rail line for Union Pacific Railroad. Conducted biological reconnaissance surveys, focused sensitive species surveys for desert tortoise, desert pupfish, Coachella Valley fringe-toed lizard, least Bell's vireo & southwestern willow flycatcher, jurisdictional delineations, and vegetation mapping within the 200 to 1000-foot right-of-way. Led the team of biologists in preparing the comprehensive Bio-Technical Report (BTR) encompassing all baseline and focused surveys for this Project.

State Routes 57 & 60/Grand Avenue Interchange Improvement Project, **EIP Associates, a Division of PBS&J, sub to Sage Environmental**

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Group, Diamond Bar and City of Industry, Los Angeles County, CA - Project Manager / Principal/Senior Biologist / Botanist / Wetland Scientist. The area of concern included hundreds of undeveloped acres and Diamond Bar Golf Course adjacent to the section of highway where State Routes 57 and 60 run in confluence for several miles. Served as Project Manager, as well as Senior Biologist, Botanist, and Wetland Scientist, and was the main point of contact for all biological work related to this project from 2007 to 2011. Led and organized several biologists in conducting baseline wildlife surveys, updating outdated reports by other firms, protocol least Bell's vireo, southwestern willow flycatcher and California gnatcatcher surveys, detailed vegetation mapping over hundreds of acres, exotic plant mapping, wetland and jurisdictional delineations, construction monitoring during fuel maintenance activities, and all reports related to these surveys for this Project within and adjacent to the Project footprint. In 2019, Blackhawk and Mr. Alberts again served on this project to complete jurisdictional delineations on the golf course and the southerly adjacent portions of the highway.

Pacific Street Bridge Project, sub to Harris & Associates, Oceanside, San Diego County, CA - Senior Biologist / Botanist. The proposed Project involves the construction a new bridge that replaced an earthen crossing near the mouth of the San Luis Rey River adjacent to Oceanside Harbor. Assisted with the creation of the Mitigation Monitoring Implementation Plan and the Environmental Awareness Program. Conducted baseline surveys for plant and animal species within the project footprint, as well as pre-construction surveys for sensitive fish and bird species, including southern steelhead, least Bell's vireo, southwestern willow flycatcher, light-footed clapper rail and coastal California gnatcatcher. Provided worker awareness trainings and monitored construction for compliance with project permits from 2007 to 2009.

Sierra Highway Widening Project, Los Angeles County Department of Public Works (LADPW), Programs Development Division. unincorporated Los Angeles County, CA - Wetland Scientist. The Project sought to increase the lane capacity of the Sierra Highway in the Antelope Valley area of Los Angeles County. Performed a jurisdictional delineation along approximately 1.5 miles of the highway that contained an adjacent and deeply incised drainage feature in order to update incomplete data from a previously completed delineation.

Reche Vista Drive Realignment, sub to KOA Corporation and Geovironment, Moreno Valley, Riverside County, CA - Principal Biologist / Senior Biologist / Botanist / Wetland Scientist. The proposed Project would realign Reche Vista Drive in Moreno Valley from the intersection of Perris Boulevard & Heacock Street to 200 feet north of the city limits. Completed a jurisdictional delineation, sensitive species habitat assessment, vegetation map, and conducted a focused burrow survey for burrowing owl according to the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) in 2008 and 2009. In 2015, conducted a jurisdictional delineation update assessment and report to document any change in conditions since 2009.

Kitching Street Improvements Project, sub to Proactive Engineering Consultants, Inc., City of Moreno Valley, Riverside County, CA - Senior Biologist / Botanist / Wetland Scientist. Completed a jurisdictional delineation, conducted a habitat assessment, and conducted a focused burrow survey for burrowing owl according to the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) in 2008 and 2009. Co-authored the biological reports documenting the findings of the jurisdictional delineation, habitat assessment, and the owl survey.

Lasselle Street Widening Project from John F. Kennedy Drive to Alessandro Boulevard, sub to Psomas, Moreno Valley, Riverside County, CA - Senior Biologist / Botanist / Wetland Scientist. Completed a jurisdictional delineation, conducted a habitat assessment, and conducted a focused burrow survey for burrowing owl according to the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) in 2007 and 2008. Co-authored the biological reports documenting the findings of the jurisdictional delineation, habitat assessment, and the owl survey.

Wildlife Corridor Report for California State Route 52, San Diego State University Foundation, Santee to San Diego, San Diego County, CA - Technical Writer. Assumed writing duties on an unfinished report documenting wildlife corridor usage of four under-crossings along California State Route 52 between Santee and San Diego.

Verizon Wireless Ribbonwood/I-8 Boulevard Wireless Communications Facility Project, Boulevard, San Diego County, CA - Verizon Wireless, sub to Trileaf Environmental & Property Consultants and M&M Telecom Inc. Quino checkerspot butterfly surveys, MSCP sensitive species surveys, focused rare plant surveys, photographic documentation, agency & County coordination, County of San Diego MSCP Biological Resource Letter Report production, USFWS protocol reporting.

AT&T Fiber Optic Cable Installation Project, sub to Forkert Engineering & Surveying, Inc., San Bernardino County, CA to Clark County, NV - Principal Biologist. Completed desert tortoise clearance surveys, cacti salvage, provided construction monitoring, and environmental compliance.

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Restoration

Imperial Irrigation District - Habitat Assesment for Phase 2 of the Managed Marsh Complex, Niland, Imperial County, CA - Principal Biologist. The Managed Marsh Complex is a 360-acre wetland complex created by the Imperial Irrigation District as part of required habitat mitigation for reduced flows due to various water conservation efforts and water transfers. Completed a habitat assessment via a combination of high-resolution aerial imaging and ground truth transect surveys on a point-based grid system. Assisted in composing the report for submittal to reviewing agencies to reach final sign-off on completion of mitigation requirements.

Communications

Verizon Wireless I-8 Boulevard/Ribbonwood Road Cell Tower Project, sub to Trileaf Environmental & Property Consultants and M&M Telecom, Inc., Boulevard, San Diego County, CA - Principal Biologist. The Project involves the installation of a 35-foot tall unmanned wireless telecommunication facility that would appear as an antiquated faux water tank mounted with 12 panel antennas, a prefabricated equipment enclosure, and a CMU block wall equipment enclosure on County of San Diego land. Performed a Quino checkerspot butterfly (QCB) habitat assessment, protocol QCB surveys, focused rare plant surveys, general nesting bird surveys and focused surveys for County of San Diego sensitive bird species in 2014 and 2015.

Fiber Optic Cable Installation, Victorville, AT&T, sub to Forkert Engineering & Surveying, Inc., San Bernardino County, CA to Las Vegas, Clark County, NV - Senior Biologist / Botanist / Wetland Scientist. Conducted surveys to map vegetation communities, and to document the existing biological resources while assessing the habitat for its potential to support sensitive plant and wildlife species. Assisted with the identification and delineation of areas of the Project site that fell under U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB) and California Department of Fish and Game (CDFG) jurisdiction as well as conducted U.S. Fish and Wildlife Service (USFWS) protocol level presence/absence surveys before and during construction for the federally and state-threatened desert tortoise. Conducted substantial construction monitoring over this period, desert tortoise clearance surveys, and monitoring of desert tortoises in and near construction areas to ensure no impacts.

Waste Management

South Region Landfills Biological Surveys, County of Orange Integrated Waste Management Department, San Juan Capistrano, Orange County, CA - Senior Biologist / Botanist / Wetland Scientist. Responsible for coastal California gnatcatcher and least Bell's vireo surveys, biological mitigation site monitoring, a jurisdictional delineation, implementation of annual brown-headed cowbird trapping program, Natural Community Conservation Planning (NCCP), State, and Federal regulatory planning assistance from 2007 to 2010. Provided additional California Environmental Quality Act (CEQA) documentation and updated the General Development Plan (GDP), Master Plan of Arterial Highways (MPAH) and supplemental Environmental Assessment (EA). Performed as-needed biological consulting services and assisted with contractor coordination, and served as technical lead on endangered species issues for these sites as well as on an advisory role as-needed.

Public Works

East Peak Mount Tamalpais Management Plan, California State Parks, sub to Placeworks, Mount Tamalpais State Park, Marin County, CA - Principal Biologist. This project involved baseline biological surveys, vegetation mapping and sensitive species analyses in support of a future conceptual facilities improvement project on the East Peak of Mount Tamalpais, the highest point in Marin County. Conducted a biological reconnaissance survey, vegetation mapping, jurisdictional waters assessment and sensitive species habitat analyses; all results were summarized in a letter report.

Keys Creek Channel Access and Flood Control Maintenance Project, sub to RECON, **Fallbrook, San Diego County, CA** - Principal Biologist. The Keys Creek Channel Access and Maintenance Project included three separate elements: 1) construction of two access ramps into the channel to facilitate maintenance activities, 2) conduct flood control maintenance (sediment removal) of the existing Keys Creek flood control facility in accordance with the Adaptive Management Plan (AMP), and 3) habitat and species management of the 8.5-acre mitigation area that overlaps with the flood control channel. Conducted environmental awareness trainings for construction personnel, construction monitoring, arroyo toad/California gnatcatcher/aquatic resources monitoring, daily reporting, and attended onsite meetings with County of San Diego project managers in 2016 and 2017. Assisted on jurisdictional permit compliance activities, including the CDFW Streambed Alteration Agreement and the Section 404 Clean Water Act permit

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from USACE.

Los Angeles Department of Public Works Dominguez Gap Basin Spreading Grounds Sediment Removal Project, sub to EPD Solutions, Inc., Carson, Los Angeles County, CA - Principal Biologist. This Project is part of an ongoing, annual effort to facilitate water storage overflow during rain events and groundwater percolation in a constructed basin adjacent to the Los Angeles River. LADPW annually maintains the vegetative regrowth within the basin, but this Project included the excavation and offsite transport of up to 14 feet of existing soils from within the basin bottom to reach the sandier soil horizon below that was detected during a geotechnical coring study. The basin covers approximately 13 acres and is surrounded by a riparian fringe of black willows and mulefat, as well as restored coastal sage scrub. Conducted all pre-construction clearance survey, nesting bird survey, turtle survey, daily reporting and County coordination tasks to support the Project in 2018.

Los Angeles Department of Public Works Iron Canyon Channel Improvement Project, sub to EPD Solutions, Inc., Santa Clarita, Los Angeles County, CA - Principal Biologist / Project Manager. This Project involved major channel improvement activities to remove accumulated sediment and debris, deepen the retention basin, trim proximal vegetative regrowth, and facilitate high water flows and in-ground infiltration of the modified stream channel. prepared a Nesting Bird Management Plan following stipulations within the CDFW Streambed Alteration Agreement In 2019.

Los Angeles Department of Public Works Tujunga Spreading Grounds Channel Improvement Project, sub to EPD Solutions, Inc., Sylmar, Los Angeles County, CA - Principal Biologist / Project Manager. This Project involved major channel improvement activities to facilitate high water flows and in-ground infiltration of the adjacent Tujunga spreading grounds. Prepared a Nesting Bird Management Plan following the stipulations within the CDFW Streambed Alteration Agreement and conducted nesting bird surveys before and during construction in 2019.

California State Lands Commission Land Transfer Project, California State Lands Commission, sub to Evans-DeShazo, Niland, Imperial County, CA - Principal Biologist. This Project involved a land transfer for three parcels of land (30 acres, 160 acres and 450 acres) in and adjacent to Slab City and Salvation Mountain. Conducted sensitive species analyses, burrowing owl and flat-tailed horned lizard habitat assessments, jurisdictional waters assessments, vegetation mapping, biological reconnaissance surveys, plant species identification, photographic documentation and letter report production tasks.

City of San Diego Open Space Restoration Project, Private Landowner, Del Mar, San Diego County, CA - Principal Biologist. Responsible for habitat restoration plan design and report production, biological monitoring, long-term vegetation sampling, maintenance monitoring and reporting, annual quantitative analysis reporting, and agency coordination.

City of San Diego Tierrasanta Trails Project, sub to Rocks Biological Consulting, San Diego, San Diego County, CA - Avian Biologist. This Project involved the improvement of existing rails, closure of non-approved trails, and new trail routes that will better link the trail network throughout the Tierrasanta canyonlands area of San Diego. Assisted with baseline habitat assessments and general baseline avian surveys throughout the project area.

Santa Ana River Trail Project - Phase III, San Bernardino County Regional Parks Department, Redlands, San Bernardino County, CA - Senior Biologist. The 3.6-mile stretch of Phase III extends from Waterman Avenue to California Street as a part of the Santa Ana River Trail Project in Redlands. Led biological surveys to map jurisdictional limits, biological resources and endangered species presence/absence. Coordinated directly with San Bernardino County staff, as well as CALTRANS biologist Juan Torres, and attended several key meetings to facilitate project progress. Devised mitigation strategies to reduce below significant thresholds any direct or indirect impacts to listed species within and adjacent to the project footprint.

Los Angeles County Fire Department and California Department of Forestry and Fire Protection (CalFire) Tonner Canyon Vegetation Management Plan Update Project, sub to Sage Environmental Group, Diamond Bar, Los Angeles County, CA - Principal Biologist. This Project involved fuel management activities on 1,245 acres of undeveloped land in Tonner Canyon to reduce the fire hazard potential for adjacent residential areas in the City of Diamond Bar, Los Angeles County, California. Prepared a Biological Addendum Letter Report in 2014 to update the Biological Assessment of the Tonner Canyon Vegetation Management Plan (VMP) prepared by Sage Environmental Group in April 2010.

Oxford Basin Low Flow Diversion Project, Los Angeles Department of Public Works, Marina Del Rey, Los Angeles County, CA - Project Manager / Avian Biologist. The Project included engineering enhancements to facilitate increased water flows within a degraded urban brackish water basin during low water flow periods (i.e., summer and fall months). Challenges to project construction schedules and closures were evident, as the project area included public park land, some public opposition, and egret and heron rookeries with active nests. Documented dozens of active snowy egret and black-crowned night heron nests, as well as one great egret nest, in large ornamental trees within the park space, conducted noise analyses on ambient conditions at various points

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Email: kris@blackhawkenv.com

around the Project area and correlated the results with known noise levels of the vehicles and equipment proposed for use in the Project from 2008 through 2010, and prepared data and materials in a comprehensive letter report. Attended a public Coastal Commission hearing with LADPW staff to answer questions from the public and illustrate how the project may proceed without affecting the nesting birds.

San Gabriel River Sediment Management Plan, Los Angeles County Department of Public Works (LADPW), Azusa, Los Angeles County, CA - Senior Biologist / Botanist. Conducted numerous biological surveys over the San Gabriel River watershed area including fish sampling surveys, and expansive data collection for vegetation characteristics, fish, macroinvertebrates, birds, amphibians, reptiles, large mammals, stream characterization, topography, and water quality from 2007 to 2011. Annual reports were prepared to convey the results of these functional analyses to the resource/permitting agencies (California Department of Fish and Game [CDFG], U.S. Fish and Wildlife Service [USFWS], and U.S. Army Corps of Engineers [USACE]).

Big Dalton Dam Sediment Removal Project, Los Angeles County Department of Public Works (LADPW), Water Resources Division, Glendora, Los Angeles County, CA - Senior Biologist / Botanist. Conducted pre- and post-dewatering surveys to assess sediment removal Project impacts that included vegetation mapping, plant assessments using the California Native Plant Society (CNPS) Rapid Assessment Protocol, focused plant surveys, amphibian, reptile, fish, avian, and mammal tracking surveys, stream assessments and macroinvertebrate collections from above the reservoir to two miles downstream of the Big Dalton Dam from 2006 to 2009. Developed a Newt Monitoring and Relocation Plan that was approved by the California Department of Fish and Game [CDFG] and provided a Biological Technical Report for the Big Dalton Dam Reservoir Cleanout Project.

San Dimas Reservoir Cleanout Project, Los Angeles County Department of Public Works (LADPW), Programs Development Division, San Dimas, Los Angeles County, CA - Senior Biologist / Botanist. Performed environmental services for LADPW to support the sediment cleanout operation for the San Dimas Reservoir in 2008 and 2009. Surveys included vegetation mapping, plant assessments using the CNPS Rapid Assessment Protocol, focused plant surveys, amphibian, reptile, fish, avian, and mammal tracking surveys, stream assessments and macroinvertebrate collections from above the reservoir to several miles downstream. Performed an additional Santa Ana sucker surveys along the rest of the river system, as well as conducted bird surveys, and set up a study station.

Live Oak Reservoir Cleanout Project, Los Angeles County Department of Public Works (LADPW), La Verne, Los Angeles County, CA - Senior Biologist. Assisted with field surveys, including vegetation mapping, focused plant surveys, amphibian, reptile, fish, avian, and mammal surveys, and stream assessments from above the reservoir to 0.5 miles downstream of the Live Oak Dam in 2008. Provided daily monitoring/relocation activities for two-striped garter, a California Species of Concern, during construction.

San Clemente Shoreline Protection Project, U.S Army Corps of Engineers (USACE), sub to Noble Consultants, San Clemente, Orange County, CA - Senior Botanist. Chambers Group prepared an integrated EIS/EIR for the Los Angeles District of the US Army Corps of Engineers (USACE) and the City of San Clemente (local non-federal sponsor) for the San Clemente Shoreline Protection Project. This environmental document provided the analysis of impacts of the proposed action and alternatives to address the ongoing problem of beach erosion that threatens the stability of City facilities, private property and a major southern California commuter rail corridor. Performed a focused plant survey for sensitive sand dune-associated plant species, and also conducted wildlife analyses for amphibians at drainage mouths in 2009; reports from these surveys were included in the project documents.

San Diego Creek In-Channel Basins Maintenance Project, Orange County, CA - County of Orange, Public Works. Vegetation mapping, baseline biological surveys.

Construction of a Pier at Perret Park, Riverside County Redevelopment Agency, Wildoar, Riverside County, CA - Senior Biologist / Wetland Scientist. This Project involved the construction of a pier, "Perret Park Boardwalk" located in Lakeland Village, California, consisting of a 270-foot long wooden dock with two lake viewing areas, wooden benches and a gazebo overlooking Lake Elsinore at Perret Park. Performed a jurisdictional delineation of the area proposed for construction using a combination of historical lake level data, aerial photographs, and Arid West protocols. Conducted burrowing owl surveys per the Western Riverside County MSHCP protocol and assisted on report writing for agency submittal.

Existing Concrete V-Ditch System Survey of Buck Gully, City of Newport Beach, Newport Beach, Orange County, CA - Senior Biologist. Reviewed existing aerial photography and field mapping to determine the likely locations of the existing concrete v-ditch system within Buck Gully. Conducted a field verification and GPS mapping survey of the existing concrete v-ditch system in the Buck Gully area of Newport Beach.

Metropolitan State Hospital Environmental Documents & Related Studies Increased Secured Bed Capacity and Security Fence Project, sub to EPD Solutions, Inc., California Department of General Services, Norwalk, Los Angeles County, CA - Principal Biologist / Project Manager. This State of California-funded Project was initiated to provide additional facilities for mental needs patients and

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to provide enhanced security fencing at the Metropolitan State Hospital complex in Norwalk, CA. Conducted a literature review, GIS analysis, vegetation mapping, baseline biological inventory, sensitive species analysis, photo-documentation, mitigation measure development, jurisdictional waters assessment, and produced a biological letter report in 2016. The mitigation measures proposed within the report were ultimately adopted into the Mitigation Monitoring & Reporting Program (MMRP) and would be implemented before and during construction activities.

San Diego County Sheriff Emergency Vehicles Operations Course Project, sub to RECON, San Diego County, CA - Principal Biologist / Project Manager. The Emergency Vehicles Operations Course Project is proposed for the construction of an off-road vehicle course near Jamul to be used for the training of San Diego Sheriff personnel; the Project would expand the existing disturbed/developed footprint to accommodate larger vehicles and add office buildings associated with the track. The County of San Diego stipulated that a suite of sensitive species surveys must be completed before implementing the project. For avian species, the surveys were to extend 500 feet beyond the proposed project envelope, which would include the riparian habitat of Jamul Creek, approximately one mile upstream of Lower Otay Reservoir. Conducted USFWS protocol least Bell's vireo and southwestern willow flycatcher surveys along Jamul Creek and its adjacent habitat types in 2016. Worked with County of San Diego personnel and RECON biologists to develop mitigation strategies to avoid and minimize impacts to least Bell's vireo, including pre-construction nest surveys and nest monitoring during construction.

San Diego Unified School District Salk Elementary Vernal Pool Mitigation and Monitoring Project, sub to RECON, San Diego, San Diego County, CA - Principal Biologist / Project Manager. The construction of Salk Elementary School resulted in the loss of several vernal pools requiring compensatory mitigation, per CEQA standards. This Project involves the long-term biological and hydrological monitoring of created, enhanced, restored and existing vernal pools in two vernal pool complexes on mesa tops within one mile of Salk Elementary School in the Mira Mesa area of the City of San Diego. Worked as a part of a team to conduct San Diego fairy shrimp sampling, invertebrate sampling, plant surveys, bird surveys, and hydrological data collection beginning in 2015.

SANDAG Inland Rail Trail Project, Sierra Pacific West, Inc., San Marcos, San Diego County, CA - Environmental Compliance Officer. The Inland Rail Trail Project is a SANDAG-sponsored multi-phase 21-mile paved bike trail construction project that will ultimately extend from Oceanside to east of Escondido. Oversaw Mitigation Monitoring & Reporting Program (MMRP) compliance on phases 1A and 1B, in the City of San Marcos, CA. Conducted weekly or bi-weekly MMRP reporting as necessary, spot-check monitoring services, photographic documentation and monthly MMRP compilation.

Torrey Pines State Reserve Utility Modernization Project, sub to ECORP Consulting, San Diego, San Diego County, CA - Principal Biologist. The proposed Torrey Pines Utility Modernization Project (Project) will upgrade existing infrastructure within Torrey Pines State Natural Reserve (TPSNR; Reserve) by installing new underground sewer, domestic water, fire, and telephone utilities on both California Department of Parks and Recreation (DPR; State) and City of San Diego property to serve the 2,000-acre Reserve. Assisted with the completion of a City of San Diego Full Biological Survey Report in support of the Project.

Preserve Management & Mitigation Banking

County of San Diego Preserves Biological Surveys Project, sub to ESA, San Diego County, CA - Principal Biologist. Surveys were conducted on County of San Diego Preserves throughout the County, including Keys Creek and Hellhole Canyon in Valley Center, and Dictionary Hill in Spring Valley to understand which species are present, particularly special-status species, or that may be present, and how best to manage the preserves for those species. Assisted and/or lead several types of focused biological surveys in 2019; survey types included small mammal trapping, herpetological trapping and avian surveys. Led and conducted the diurnal herpetological trapping surveys and nocturnal amphibian surveys at three County preserves (Dictionalry Hill, Keys Creek, Hellhole Canyon).

Moosa Creek Mitigation Bank/Restoration Project, sub to Burns & McDonnell, sub to Moosa Creek LLC, c/o Conservation Land Group, sub to WRA, Bonsall, San Diego County, CA - Principal Biologist / Project Manager. The Project seeks to convert the existing golf course into a riparian and wetland mitigation bank for several threatened and endangered species, including southwestern willow flycatcher, least Bell's vireo, yellow-billed cuckoo and arroyo toad. In 2013, conducted US Geological Service (USGS) protocol southwestern willow flycatcher surveys for the proposed Moosa Creek Mitigation Bank in Bonsall, CA on the San Luis Rey River and the Moosa Creek tributary adjacent to San Luis Rey Downs Golf Course; two breeding territories were documented. In 2015, served as the County of San Diego-approved CEQA Consultant to review and approve the comprehensive Biological Survey report prepared by WRA to support the project and gain County approvals. In 2020, Blackhawk and Mr. Alberts completed protocol least Bell's vireo and southwestern willow flycatcher surveys on Phase 1 of the overall project; six least Bell's vireo locations were found, but no southwestern willow flycatchers were documented. Also in 2020, updated vegetation mapping, focused rare plant surveys and jurisdictional delineation surveys were performed, enhancing the detail collected previously. No rare plant species were

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observed, but additional jurisdictional areas were documented along the historic channel of Moosa Creek that existed prior to the golf course's development.

Ryan Electronics Biological Surveys Project, ATI Metals, Inc., San Diego, San Diego County, CA - Principal Biologist / Project Manager. The Project site is part of the old Teledyne Ryan Electronics property just northeast of the Balboa Avenue and CA-163 intersection. The Project site represents an example of San Diego Mesa Hardpan Vernal Pool habitat within coastal sage scrub and grassland communities that has largely disappeared from the region due to development. Conducted a suite of biological surveys and services to update the biological resources inventory results on a sensitive lands parcel within a surrounding area of complete development in 2019. Completed a current literature review, special-status species habitat analysis, vegetation community mapping, vernal pool and jurisdictional resources mapping, focused rare plant surveys, Best Management Practice (BMP) installation, USFWS consultations, and Biological Technical Report (BTR) production tasks in support of a groundwater well drilling and installation project within the subject parcel.

Lakeside Ranch Mitigation Bank Quino Checkerspot Butterfly Surveys, Endangered Habitats Conservancy, Lakeside, San Diego County, CA - Principal Biologist / Project Manager. The Lakeside Ranch Mitigation Bank covers over 450 acres of preserved land owned by San Diego Gas & Electric to offset mitigation for impacts on QCB habitat from the Sunrise Powerlink project. Assisted with protocol Quino checkerspot butterfly (QCB) presence/absence surveys in two assigned subsections of the Project.

Bandy Canyon Mitigation Bank Project, Conservation Land Group, Inc., Escondido, San Diego County, CA - Principal Biologist / Project Manager. The Bandy Canyon Mitigation Bank Project is a multi-year effort involving several landowners with lands proposed for addition to existing conservation easements. The overall area includes 225 acres, 73 acres of which are already encumbered by easement protections held by the San Dieguito River Park JPA. In June and July of 2020, conducted vegetation mapping, characterized coastal sage scrub as low/medium/high suitability for California gnatcatcher, conducted a one-time California gnatcatcher survey, collected representative photographs, and produced detailed vegetation maps and a letter report of findings.

Etiwanda Residential Development Mitigation Site, C.A. Page, Rancho Cucamonga, Riverside County, CA - Senior Biologist. A housing development project at the north end of Etiwanda Avenue in Rancho Cucamonga caused the loss of approximately 100 acres of white sage-dominant Riversidian sage scrub, habitat for the federally threatened California gnatcatcher. As mitigation, the client agreed to purchase 1,070 acres of land to be held undisturbed in perpetuity. Designed a brown-headed cowbird trapping plan for acquired sites to aid gnatcatcher reproductive success within the mitigation strategy in 2007.

Biological Preserve Management, Environmental Trust, San Diego County, CA - Biologist / Botanist / Preserve Manager/ Restoration Specialist. Managed approximately 12 parcels of land held in perpetuity as mitigation lands/preserves in various parts of San Diego County from near the coast to the mountains from 1997 to 1998. Land sizes ranged from a few acres to over 300 acres, and management conditions were uniquely designed and required for each area. Conducted bird counts, vegetation mapping, trail design and construction, public outreach, exotic species removal, native plant restoration, endangered species surveys, baseline wildlife surveys, and annual report writing and submittal to the California Department of Fish & Game (CDFG).

Other Biological Surveys

Seasonal Bird Population Surveys, Monitoring of Bolsa Chica After Construction, California State Lands Commission, sub to Merkel & Associates, Inc., Orange County, CA - Senior Biologist. This Project is a large-scale coastal wetlands restoration project that is strategically converting human-altered/constructed basins within active oil fields to previously occurring natural, biological, chemical and hydrological functional capacities. Assisted with seasonal shorebird and terrestrial avian population studies through the avian wintering and breeding seasons from 2009 to 2011. Served as a point of contact and team lead for approximately 18 of these surveys.

Pio Pico RV Park Master Use Permit Project, Lions Engineering & Consrtruction, Jamul, San Diego County, CA - Principal Biologist / Project Manager. Completed special-status species habitat analyses and open space designation assistance, while serving as a liaison between the County of San Diego biological and planning staff and the US Fish & Wildlife Service and California Department of Fish & Wildlife (CDFW) staff. Serves in an on-call capacity to support the park's goal of obtaining a current Master Use Permit to cover existing operations and land uses.

Bell Valley Ranch Quino Checkerspot Butterfly Surveys, ESR, Inc., San Diego County, CA - Principal Biologist / Project Manager. Assisted with Quino checkerspot butterfly (QCB) surveys, special-status species habitat analyses, an arroyo toad habitat assessment, and report production tasks on a large parcel of privately-owned land immediately north of the US/Mexico border between Campo and Potrero in eastern San Diego County in 2019.

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Email: kris@blackhawkenv.com

USFWS Protocol Biological Surveys and Habitat Assessments, Southern CA - Independent Biologist. Conducted numerous surveys and habitat assessments for several threatened and endangered species in many areas of San Diego County and beyond. Highlights included: USFWS protocol-level California gnatcatcher surveys and least Bell's vireo surveys for EDAW in Riverside County and northern San Diego County in 2001 and 2002; USFWS protocol-level least Bell's vireo surveys of the upper Santa Margarita River near the San Diego/Riverside County line under Griffith Wildlife Biology in 2001; USFWS protocol-level California gnatcatcher surveys of the Dehesa, CA area under REC in 2002; USFWS-protocol diurnal and nocturnal arroyo toad surveys of the San Pasqual Valley under Varanus Biological in 2003; least Bell's vireo surveys in the Indian Canyons area of Palm Springs under Varanus Biological in 2003; southwestern willow flycatcher surveys of the upper San Luis Rey River under Varanus Biological in 2003; USFWS protocol-level California gnatcatcher surveys in several areas of San Diego and Vista, CA under Tierra Consulting in 2001; USFWS protocol-level California gnatcatcher surveys in several areas near Escondido and Vista, CA under Varanus Biological in 2003; small mammal trapping in Borrego Springs, CA under Varanus Biological in 2003; baseline wildlife surveys and vegetation mapping of proposed preserve sites in San Diego County under Varanus Biological in 2003.

Brown-Headed Cowbird Trapping Program, sub to Griffith Wildlife Biology, Santee, San Diego County, CA - Biologist. The golf course was required to financially support a brown-headed cowbird trapping effort as compensatory mitigation for damages to onsite riparian habitats associated with unlawful grading activities. Assisted with implementation of the trapping program from 1998 to 2001.

Brown-Headed Cowbird Trapping Program, Huntington Central Park Sports Complex, City of Huntington Beach Huntington Beach, Orange County, CA - Senior Biologist. The Brown-headed Cowbird Trapping Program was located on the approximately 45-acre Huntington Central Park Sports Complex in the City of Huntington Beach in Orange County. Assisted with implementation of the trapping program from 2007 to 2008.

Research

Border Field State Park Bird Monitoring Project, California State Parks, San Diego, San Diego County, CA - Principal Biologist. The Project survey area encompasses roughly 221 acres and includes approximately 120 acres of riparian woodland and scrub habitat in the Goat Canyon sediment basin, Tijuana River Valley Regional Park and areas west of Bunker Hill. Completed protocol least Bell's vireo (LBVI) and California gnatcatcher surveys during the 2017 and 2018 breeding seasons in the vicinity of the Goat Canyon sedimentation basin complex of Border Field State Park. Served as a contributing author on the 2017 and 2018 LBVI 45-day reports.

APPENDIX 5.2D

CNDDB Field Forms

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
P.O. Box 944209
Sacramento, CA 94244-2090
CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 04/16/2021

For Office Use Only
Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: *Athene cunicularia*

Common Name: Burrowing owl

Species Found? (●) Yes ( ) No _____ If not found, why?

Total No. Individuals: 1 Subsequent Visit? (●) Yes ( ) No

Is this an existing NDDB occurrence? _____ Yes, Occ. # [X] No [ ] Unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Desiree Johnson
Address: 1720 Midvale Dr
San Diego, CA 92105
E-mail Address: desiree@blackhawkenv.com
Phone: 909-532-9909

Plant Information

Phenology:

_____ % vegetative _____ % flowering _____ % fruiting

Animal Information

1	-	-	-	-
# adults	# juveniles	# larvae	# egg masses	# unknown

[ ] wintering [ ] breeding [ ] nesting [ ] rookery [ ] burrow site [ ] lek [X] other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Kern County Landowner / Mgr: Unknown

Quad Name: _____ Elevation: _____

T___ R___ Sec___, ___¼ of ___ ¼, Meridian: H ( ) M ( ) S ( )

T___ R___ Sec___, ___¼ of ___ ¼, Meridian: H ( ) M ( ) S ( )

DATUM: **NAD27** ( ) **NAD83** ( ) **WGS84** ( )

Coordinate System: UTM Zone 10 ( ) UTM Zone 11 ( ) ***OR*** Geographic (Latitude & Longitude)

Coordinates: 34.892083 N, -118.329567 E (WGS 83)

Source of Coordinates (GPS, topo. map & type): GPS

GPS Make & Model: ArcGIS Collector App (integrated receiver)

Horizontal Accuracy: 16ft meters/feet

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*

Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Open creosote scrub with erosion-cut ephemeral drainage features that interrupt the otherwise flat topography and present sutiable burrowing habitat within 0.5-1.0mile. Flushed during focused BUOW surveys. Unable to identify any occupied suitable burrows in the surrounding area on this or subsequent visits.

Please fill out separate form for other rare taxa seen at this site.

Site Information

Overall site/occurrence quality/viability (site + population): ( ) Excellent Good Fair Poor

Immediate AND surrounding land use: Rural residential, open space

Visible disturbances: Trash, feral dogs

Threats: Development

Comments:

Determination: *(check one or more, and fill in blanks)*

- [ ] Keyed (cite reference): _____
- [ ] Compared with specimen housed at: _____
- [ ] Compared with photo / drawing in: _____
- [X] By another person (name): Tawni Gotbaum
- [ ] Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	[ ]	[ ]	[ ]
Habitat	[ ]	[ ]	[ ]
Diagnostic feature	[ ]	[ ]	[ ]

May we obtain duplicates at our expense? (●) yes ( ) no

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
P.O. Box 944209
Sacramento, CA 94244-2090
CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 03/31/2021

For Office Use Only
Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: *Toxostoma lecontei*

Common Name: Le Conte's Thrasher

Species Found? (●) Yes ( ) No _____ If not found, why?

Total No. Individuals: 7 Subsequent Visit? (●) Yes ( ) No

Is this an existing NDDB occurrence? _____ Yes, Occ. # [X] No [ ] Unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Katie Quint
Address: 1720 Midvale Dr
San Diego, CA 92105
E-mail Address: katie@blackhawkenv.com
Phone: 703-994-3128

Plant Information

Phenology:

_____ % vegetative _____ % flowering _____ % fruiting

Animal Information

6	1	-	-	-
# adults	# juveniles	# larvae	# egg masses	# unknown

[ ] wintering [ ] breeding [ ] nesting [ ] rookery [ ] burrow site [ ] lek [X] other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Kern County Landowner / Mgr: Unknown

Quad Name: _____ Elevation: _____

T___ R___ Sec___, ___¼ of ___ ¼, Meridian: H ( ) M ( ) S ( ) Source of Coordinates (GPS, topo. map & type): GPS

T___ R___ Sec___, ___¼ of ___ ¼, Meridian: H ( ) M ( ) S ( ) GPS Make & Model: ArcGIS Collector App (integrated receiver)

DATUM: **NAD27** ( ) **NAD83** ( ) **WGS84** ( ) Horizontal Accuracy: 16ft meters/feet

Coordinate System: UTM Zone 10 ( ) UTM Zone 11 ( ) ***OR*** Geographic (Latitude & Longitude)

Coordinates: (1) 34.877732 N, -118.335947 E (2) 34.868896 N, -118.418471 E (3) 34.879166 N, -118.345239 E (4) 34.878120 N, -118.328310 E (WGS 83)

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Open creosote scrub dominated by salt bush and creosote bush. Mostly flat topographically. Some were seen repetatively in the same area on subsequent visits.
(1) 3/31/21 One individual
(2) 4/29/21 Pair observed
(3) 5/5/21 One individual (4) 5/5/21 Adult pair and one fledgling observed

Please fill out separate form for other rare taxa seen at this site.

Site Information

Overall site/occurrence quality/viability (site + population): ( ) Excellent Good Fair Poor

Immediate AND surrounding land use: Rural residential, open space

Visible disturbances: None visible

Threats: Development, illegal dumping

Comments:

Determination: *(check one or more, and fill in blanks)*

[ ] Keyed (cite reference): _____
[ ] Compared with specimen housed at: _____
[ ] Compared with photo / drawing in: _____
[X] By another person (name): Tawni Gotbaum
[ ] Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	[ ]	[ ]	[ ]
Habitat	[ ]	[ ]	[ ]
Diagnostic feature	[ ]	[ ]	[ ]

May we obtain duplicates at our expense? (●) yes ( ) no

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
P.O. Box 944209
Sacramento, CA 94244-2090
CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 04/09/2021

For Office Use Only
Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: *Asio otus*

Common Name: Long-eared Owl

Species Found? (●) Yes ( ) No _____ If not found, why?

Total No. Individuals: 1 Subsequent Visit? (●) Yes ( ) No

Is this an existing NDDB occurrence? _____ Yes, Occ. # [X] No [ ] Unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Katie Quint
Address: 1720 Midvale Dr
San Diego, CA 92105
E-mail Address: katie@blackhawkenv.com
Phone: 703-994-3128

Plant Information

Phenology:

_____ % vegetative _____ % flowering _____ % fruiting

Animal Information

1 # adults - # juveniles - # larvae - # egg masses - # unknown

[ ] wintering [ ] breeding [ ] nesting [ ] rookery [ ] burrow site [ ] lek [X] other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Kern County Landowner / Mgr: Unknown

Quad Name: _____ Elevation: 2500ft

T___ R___ Sec___, ___¼ of ___ ¼, Meridian: H ( ) M ( ) S ( )

T___ R___ Sec___, ___¼ of ___ ¼, Meridian: H ( ) M ( ) S ( )

DATUM: **NAD27** ( ) **NAD83** ( ) **WGS84** ( )

Coordinate System: UTM Zone 10 ( ) UTM Zone 11 ( ) ***OR*** Geographic (Latitude & Longitude)

Coordinates: 34.863700 N, -118.292281 E (WGS 83)

Source of Coordinates (GPS, topo. map & type): GPS

GPS Make & Model: ArcGIS Collector App (integrated receiver)

Horizontal Accuracy: 16ft meters/feet

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*

Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Observed perching in trimmed tamarisk windrow along the topographically flat, developed southwest quadrant of the intersection of 90th St West and Rosamond Blvd. Did not flush during short observation and photographing period. Trees checked during several subsequent visits and no sign of continuous roosting by that individual or others.

Please fill out separate form for other rare taxa seen at this site.

Site Information

Overall site/occurrence quality/viability (site + population): ( ) Excellent ( ) Good ( ) Fair Poor

Immediate AND surrounding land use: Developed parking lots for light-use and/or closed businesses, highways, and rural residential

Visible disturbances: Tree trimming

Threats: Future tree trimming

Comments:

Determination: *(check one or more, and fill in blanks)*

[ ] Keyed (cite reference): _____
[ ] Compared with specimen housed at: _____
[ ] Compared with photo / drawing in: _____
[X] By another person (name): Tawni Gotbaum
[ ] Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	[ ]	[ ]	[X]
Habitat	[ ]	[ ]	[X]
Diagnostic feature	[ ]	[ ]	[X]

May we obtain duplicates at our expense? (●) yes ( ) no

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
P.O. Box 944209
Sacramento, CA 94244-2090
CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 03/31/2021

For Office Use Only
Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: *Lanius ludovicianus*

Common Name: Loggerhead Shrike

Species Found? (●) Yes ( ) No _____ If not found, why?

Total No. Individuals: 39 Subsequent Visit? (●) Yes ( ) No

Is this an existing NDDB occurrence? _____ Yes, Occ. # [X] No [ ] Unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Katie Quint
Address: 1720 Midvale Dr
San Diego, CA 92105
E-mail Address: katie@blackhawkenv.com
Phone: 703-994-3128

Plant Information

Phenology:

_____ % vegetative _____ % flowering _____ % fruiting

Animal Information

39	0	-	-	-
# adults	# juveniles	# larvae	# egg masses	# unknown

[ ] wintering [ ] breeding [ ] nesting [ ] rookery [ ] burrow site [ ] lek [X] other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Kern Landowner / Mgr: _____

Quad Name: _____ Elevation: _____

T___ R___ Sec___, ___¼ of ___¼, Meridian: H ( ) M ( ) S ( ) Source of Coordinates (GPS, topo. map & type): GPS

T___ R___ Sec___, ___¼ of ___¼, Meridian: H ( ) M ( ) S ( ) GPS Make & Model: ArcGIS Collector App (integrated receiver)

DATUM: **NAD27** ( ) **NAD83** ( ) **WGS84** ( ) Horizontal Accuracy: 16ft meters/feet

Coordinate System: UTM Zone 10 ( ) UTM Zone 11 ( ) ***OR*** Geographic (Latitude & Longitude)

Coordinates: (1) 34.867532 N, -118.415319 E (2) 34.851694 N, -118.436935 E (3) 34.899945 N, -118.278825 E (4) 34.886257 N, -118.402481 E (5) 34.856778N, -118.313687 E (WGS 83)

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Open creosote scrub dominated by salt bush and creosote bush. Mostly flat topographically. Foraging habitat of good quality. 38 total non-target observations made from 3/31/21-6/29/21 during focused surveys for rare plants, BUOW, DETO, and SWHA.

Please fill out separate form for other rare taxa seen at this site.

Site Information

Overall site/occurrence quality/viability (site + population): ( ) Excellent Good Fair Poor

Immediate AND surrounding land use: Rural residential, transmission towers, dirt access roads, open space, sheep grazing

Visible disturbances: None

Threats: Development of foraging areas and nesting substrate clearing

Comments: 38 records detailing locations of 39 individuals. Re-sightings noted and not included. Incidental observations. (1) Pair observed mobbing a perched common raven (2) Potential nest site, SW-most obs (3) General, NE-most obs (4) General, NW-most obs (5) General, SE-most obs

Determination: *(check one or more, and fill in blanks)*

- [ ] Keyed (cite reference): _____
- [ ] Compared with specimen housed at: _____
- [ ] Compared with photo / drawing in: _____
- [X] By another person (name): Tawni Gotbaum, Hayley Milner, Kris Alberts
- [ ] Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	[ ]	[ ]	[ ]
Habitat	[ ]	[ ]	[ ]
Diagnostic feature	[ ]	[ ]	[ ]

May we obtain duplicates at our expense? ( ) yes ( ) no

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
P.O. Box 944209
Sacramento, CA 94244-2090
CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 03/31/2021

For Office Use Only
Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: *Falco columbarius*

Common Name: Merlin

Species Found? (●) Yes ( ) No _____ If not found, why?

Total No. Individuals: 1 Subsequent Visit? (●) Yes ( ) No

Is this an existing NDDB occurrence? _____ Yes, Occ. # [X] No [ ] Unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Kris Alberts
Address: 1720 Midvale Dr
San Diego, CA 92105
E-mail Address: kris@blackhawkenv.com
Phone: 619-972-8714

Plant Information

Phenology:

_____ % vegetative _____ % flowering _____ % fruiting

Animal Information

1 # adults | 0 # juveniles | - # larvae | - # egg masses | - # unknown

[ ] wintering [ ] breeding [ ] nesting [ ] rookery [ ] burrow site [ ] lek [X] other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Kern Landowner / Mgr: _____

Quad Name: _____ Elevation: _____

T___ R___ Sec___, ___¼ of ___ ¼, Meridian: H ( ) M ( ) S ( )

T___ R___ Sec___, ___¼ of ___ ¼, Meridian: H ( ) M ( ) S ( )

DATUM: **NAD27** ( ) **NAD83** ( ) **WGS84** ( )

Coordinate System: UTM Zone 10 ( ) UTM Zone 11 ( ) ***OR*** Geographic (Latitude & Longitude)

Coordinates: 34.867455 N, -118.308680 E (WGS 83)

Source of Coordinates (GPS, topo. map & type): GPS

GPS Make & Model: ArcGIS Collector App (integrated receiver)

Horizontal Accuracy: 16ft meters/feet

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*

Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Open creosote bush scrub dominated by saltbush and creosote. Mostly flat topographically with a very slight southward slope. Not observed on multiple subsequent survey visits in the area.

Please fill out separate form for other rare taxa seen at this site.

Site Information

Overall site/occurrence quality/viability (site + population): ( ) Excellent Good Fair Poor

Immediate AND surrounding land use: Rural residential, transmission lines, dirt access roads, undeveloped parcels

Visible disturbances: None

Threats: Development of foraging areas

Comments: Flying/transient. Not observed on subsequent visits to same location and general area. Open foraging available in immediate area but no hunting behaviors observed.

Determination: *(check one or more, and fill in blanks)*

- [ ] Keyed (cite reference): _____
- [ ] Compared with specimen housed at: _____
- [ ] Compared with photo / drawing in: _____
- [X] By another person (name): Tawni Gotbaum
- [ ] Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	[ ]	[ ]	[ ]
Habitat	[ ]	[ ]	[ ]
Diagnostic feature	[ ]	[ ]	[ ]

May we obtain duplicates at our expense? ( ) yes ( ) no

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Date of Field Work (mm/dd/yyyy): 03/31/2021

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Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: *Falco mexicanus*

Common Name: Prairie falcon

Species Found? (●) Yes ( ) No — If not found, why? _____

Total No. Individuals: 1 Subsequent Visit? (●) Yes ( ) No

Is this an existing NDDB occurrence? _____ Yes, Occ. # [X] No [ ] Unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Katie Quint
Address: 1720 Midvale Dr
San Diego, CA 92105
E-mail Address: katie@blackhawkenv.com
Phone: 703-994-3128

Plant Information

Phenology: _____ % vegetative _____ % flowering _____ % fruiting

Animal Information

2	0	-	-	-
# adults	# juveniles	# larvae	# egg masses	# unknown

[ ] wintering [ ] breeding [ ] nesting [ ] rookery [ ] burrow site [ ] lek [X] other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Kern Landowner / Mgr: _____

Quad Name: _____ Elevation: _____

T___ R___ Sec___, ___¼ of ___¼, Meridian: H ( ) M ( ) S ( ) Source of Coordinates (GPS, topo. map & type): GPS

T___ R___ Sec___, ___¼ of ___¼, Meridian: H ( ) M ( ) S ( ) GPS Make & Model: ArcGIS Collector App (integrated receiver)

DATUM: **NAD27** ( ) **NAD83** ( ) **WGS84** ( ) Horizontal Accuracy: 16ft meters/feet

Coordinate System: UTM Zone 10 ( ) UTM Zone 11 ( ) ***OR*** Geographic (Latitude & Longitude)

Coordinates: (1) 34.880974 N, -118.292429 E (2) 34.874727 N, -118.289222 E (3) 34.891321 N, -118.308540 E (4) 34.871703 N, -118.379430 E (WGS 83)

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Open creosote scrub dominated by salt bush and creosote bush. Mostly flat topographically. Foraging habitat of good quality. All were flying/soaring- likely migrants.

Please fill out separate form for other rare taxa seen at this site.

Site Information

Overall site/occurrence quality/viability (site + population): ( ) Excellent Good Fair Poor

Immediate AND surrounding land use: Rural residential, transmission tower development, dirt access roads

Visible disturbances: None

Threats: Development of foraging areas

Comments: At least 2, but likely 4 individuals observed flying— likely migrants. (1) 3/31/21 1 adult. Observations (2) and (3) were both made on 04/13/21 approx 1.5mi away from one another and 0.5mi from next nearest PRFA obs; could not confirm same or different individual. (4) 4/14/21 1 adult. Nesting substrate very limited.

Determination: *(check one or more, and fill in blanks)*

[ ] Keyed (cite reference): _____
[ ] Compared with specimen housed at: _____
[ ] Compared with photo / drawing in: _____
[X] By another person (name): Tawni Gotbaum,
[ ] Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	[ ]	[ ]	[ ]
Habitat	[ ]	[ ]	[ ]
Diagnostic feature	[ ]	[ ]	[ ]

May we obtain duplicates at our expense? ( ) yes ( ) no

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P.O. Box 944209
Sacramento, CA 94244-2090
CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 05/18/2021

For Office Use Only
Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: *Buteo swainsoni*

Common Name: Swainson's Hawk

Species Found? (●) Yes ( ) No — If not found, why? _____

Total No. Individuals: 2 Subsequent Visit? (●) Yes ( ) No

Is this an existing NDDB occurrence? - Yes, Occ. # [X] No [ ] Unk.

Collection? If yes: - Number - Museum / Herbarium

Reporter: Katie Quint
Address: 1720 Midvale Dr
San Diego, CA 92105
E-mail Address: katie@blackhawkenv.com
Phone: 703-994-3128

Plant Information

Phenology:

- % vegetative
- % flowering
- % fruiting

Animal Information

# adults	# juveniles	# larvae	# egg masses	# unknown
2	0	-	-	-

[ ] wintering [ ] breeding [X] nesting [ ] rookery [ ] burrow site [ ] lek [ ] other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Kern County Landowner / Mgr: _____

Quad Name: _____ Elevation: 2760 ft

T___ R___ Sec___, ___¼ of ___¼, Meridian: H ( ) M ( ) S ( )

T___ R___ Sec___, ___¼ of ___¼, Meridian: H ( ) M ( ) S ( )

Source of Coordinates (GPS, topo. map & type): GPS

GPS Make & Model: ArcGIS Collector App (integrated receiver)

DATUM: **NAD27** ( ) **NAD83** ( ) **WGS84**

Horizontal Accuracy: 16ft meters/feet

Coordinate System: UTM Zone 10 ( ) UTM Zone 11 ( ) ***OR*** Geographic (Latitude & Longitude)

Coordinates: 34.889485 N, -118.359802 E (WGS 83)

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Open creosote scrub: co-dominants: creosote bush and joshua tree, associates: saltbush
Sandy soils and mostly flat topography
At least one adult observed on territory during protocol visits on 5/18/21 (one perched), 5/19/21 (one perched, second possibly incubating), 5/25/21 (one perched), and 6/17/21 (one on nest possibly brooding). No SWHA observed on 6/29/21 and 7/13/21, confirming nesting failure.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ( ) Excellent Good Fair Poor

Immediate AND surrounding land use: Native habitat, rural residential to the SW, and active solar field to the north with access closest to nest being from the northwest

Visible disturbances: Noise from large vehicles accessing solar fields heard to the northwest of the nest from observations points

Threats: Development

Comments: Low-profile joshua tree used as nesting substrate

Determination: *(check one or more, and fill in blanks)*

- [ ] Keyed (cite reference): _____
- [ ] Compared with specimen housed at: _____
- [ ] Compared with photo / drawing in: _____
- [X] By another person (name): Desiree Johnson and subsequently Tawni Gotbaum and Dr. Pete Bloom
- [ ] Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	[ ]	[ ]	[X]
Habitat	[ ]	[ ]	[X]
Diagnostic feature	[ ]	[ ]	[X]

May we obtain duplicates at our expense? (●) yes ( ) no

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
P.O. Box 944209
Sacramento, CA 94244-2090
CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 05/18/2021

For Office Use Only
Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: *Buteo swainsoni*

Common Name: Swainson's Hawk

Species Found? (●) Yes ( ) No — If not found, why? _____

Total No. Individuals: 2 Subsequent Visit? (●) Yes ( ) No

Is this an existing NDDB occurrence? - Yes, Occ. # [X] No [ ] Unk.

Collection? If yes: - Number - Museum / Herbarium

Reporter: Katie Quint
Address: 1720 Midvale Dr
San Diego, CA 92105
E-mail Address: katie@blackhawkenv.com
Phone: 703-994-3128

Plant Information

Phenology:

- % vegetative
- % flowering
- % fruiting

Animal Information

# adults	# juveniles	# larvae	# egg masses	# unknown
2	0	-	-	-

[ ] wintering [ ] breeding [X] nesting [ ] rookery [ ] burrow site [ ] lek [ ] other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Kern County Landowner / Mgr: _____

Quad Name: _____ Elevation: 2760 ft

T___ R___ Sec___, ___¼ of ___¼, Meridian: H ( ) M ( ) S ( )

T___ R___ Sec___, ___¼ of ___¼, Meridian: H ( ) M ( ) S ( )

Source of Coordinates (GPS, topo. map & type): GPS

GPS Make & Model: ArcGIS Collector App (integrated receiver)

DATUM: **NAD27** ( ) **NAD83** ( ) **WGS84**

Horizontal Accuracy: 16ft meters/feet

Coordinate System: UTM Zone 10 ( ) UTM Zone 11 ( ) ***OR*** Geographic (Latitude & Longitude)

Coordinates: 34.889485 N, -118.359802 E (WGS 83)

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Open creosote scrub: co-dominants: creosote bush and joshua tree, associates: saltbush
Sandy soils and mostly flat topography
At least one adult observed on territory during protocol visits on 5/18/21 (one perched), 5/19/21 (one perched, second possibly incubating), 5/25/21 (one perched), and 6/17/21 (one on nest possibly brooding). No SWHA observed on 6/29/21 and 7/13/21, confirming nesting failure.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ( ) Excellent Good Fair Poor

Immediate AND surrounding land use: Native habitat, rural residential to the SW, and active solar field to the north with access closest to nest being from the northwest

Visible disturbances: Noise from large vehicles accessing solar fields heard to the northwest of the nest from observations points

Threats: Development

Comments: Low-profile joshua tree used as nesting substrate

Determination: *(check one or more, and fill in blanks)*

- [ ] Keyed (cite reference): _____
- [ ] Compared with specimen housed at: _____
- [ ] Compared with photo / drawing in: _____
- [X] By another person (name): Desiree Johnson and subsequently Tawni Gotbaum and Dr. Pete Bloom
- [ ] Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	[ ]	[ ]	[X]
Habitat	[ ]	[ ]	[X]
Diagnostic feature	[ ]	[ ]	[X]

May we obtain duplicates at our expense? (●) yes ( ) no

Mail to:
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California Dept. of Fish & Wildlife
P.O. Box 944209
Sacramento, CA 94244-2090
CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 04/28/2021

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Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: *Chaetura vauxi*

Common Name: Vaux's swift

Species Found? (●) Yes ( ) No _____ If not found, why?

Total No. Individuals: 2 Subsequent Visit? (●) Yes ( ) No

Is this an existing NDDB occurrence? _____ Yes, Occ. # [X] No [ ] Unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tawni Gotbaum
Address: 1720 Midvale Dr
San Diego, CA 92105
E-mail Address: tawni@blackhawkenv.com
Phone: 619-300-8918

Plant Information

Phenology:

_____ % vegetative _____ % flowering _____ % fruiting

Animal Information

2	0	-	-	-
# adults	# juveniles	# larvae	# egg masses	# unknown

[ ] wintering [ ] breeding [ ] nesting [ ] rookery [ ] burrow site [ ] lek [X] other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Kern County Landowner / Mgr: Unknown

Quad Name: _____ Elevation: _____

T___ R___ Sec___, ___¼ of ___¼, Meridian: H ( ) M ( ) S ( ) Source of Coordinates (GPS, topo. map & type): GPS

T___ R___ Sec___, ___¼ of ___¼, Meridian: H ( ) M ( ) S ( ) GPS Make & Model: ArcGIS Collector App (integrated receiver)

DATUM: **NAD27** ( ) **NAD83** ( ) **WGS84** ( ) Horizontal Accuracy: 16ft meters/feet

Coordinate System: UTM Zone 10 ( ) UTM Zone 11 ( ) ***OR*** Geographic (Latitude & Longitude)

Coordinates: (1) 34.892135 N, -118.281176 E (2) 34.865601 N, -118.404042 E (WGS 83)

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Open creosote scrub dominated by salt bush and creosote bush. Mostly flat topographically.
(1) 4/28/21 One individual - flying
(2) 5/4/21 One individual - flying

Please fill out separate form for other rare taxa seen at this site.

Site Information

Overall site/occurrence quality/viability (site + population): ( ) Excellent Good Fair Poor

Immediate AND surrounding land use: Rural residential, open space, inactive agricultural fields

Visible disturbances: None visible

Threats: Development of foraging areas

Comments:

Determination: *(check one or more, and fill in blanks)*

- [ ] Keyed (cite reference): _____
- [ ] Compared with specimen housed at: _____
- [ ] Compared with photo / drawing in: _____
- [ ] By another person (name): _____
- [ ] Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	[ ]	[ ]	[ ]
Habitat	[ ]	[ ]	[ ]
Diagnostic feature	[ ]	[ ]	[ ]

May we obtain duplicates at our expense? (●) yes ( ) no

Mail to:
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P.O. Box 944209
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Date of Field Work (mm/dd/yyyy): 04/28/2021

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Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: *Setophaga petechia*

Common Name: yellow warbler

Species Found? (●) Yes ( ) No _____ If not found, why?

Total No. Individuals: 2 Subsequent Visit? (●) Yes ( ) No

Is this an existing NDDB occurrence? _____ Yes, Occ. # [X] No [ ] Unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Katie Quint
Address: 1720 Midvale Dr
San Diego, CA 92105
E-mail Address: Katie@blackhawkenv.com
Phone: 703-994-3128

Plant Information

Phenology:

_____ % vegetative _____ % flowering _____ % fruiting

Animal Information

2	0	-	-	-
# adults	# juveniles	# larvae	# egg masses	# unknown

[ ] wintering [ ] breeding [ ] nesting [ ] rookery [ ] burrow site [ ] lek [X] other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Kern County Landowner / Mgr: Unknown

Quad Name: _____ Elevation: _____

T___ R___ Sec___, ___¼ of ___ ¼, Meridian: H ( ) M ( ) S ( ) Source of Coordinates (GPS, topo. map & type): GPS

T___ R___ Sec___, ___¼ of ___ ¼, Meridian: H ( ) M ( ) S ( ) GPS Make & Model: ArcGIS Collector App (integrated receiver)

DATUM: **NAD27** ( ) **NAD83** ( ) **WGS84** ( ) Horizontal Accuracy: 16ft meters/feet

Coordinate System: UTM Zone 10 ( ) UTM Zone 11 ( ) ***OR*** Geographic (Latitude & Longitude)

Coordinates: (1) 34.877545 N, -118.368822 E (2) 34.870040 N, -118.397242 E (WGS 83)

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Open creosote scrub dominated by salt bush and creosote bush. Mostly flat topographically.
(1) 4/28/21 One individual - perching and flying; foraging
(2) 5/4/21 One individual - perching and flying; foraging

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ( ) Excellent Good Fair Poor

Immediate AND surrounding land use: Rural residential, open space, solar fields

Visible disturbances: None visible

Threats: Development of foraging areas

Comments:

Determination: *(check one or more, and fill in blanks)*

- [ ] Keyed (cite reference): _____
- [ ] Compared with specimen housed at: _____
- [ ] Compared with photo / drawing in: _____
- [X] By another person (name): Tawni Gotbaum
- [ ] Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	[ ]	[ ]	[ ]
Habitat	[ ]	[ ]	[ ]
Diagnostic feature	[ ]	[ ]	[ ]

May we obtain duplicates at our expense? (●) yes ( ) no

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Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Date of Field Work (mm/dd/yyyy): 03/31/2021

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: *Yucca brevifolia*

Common Name: Joshua tree

Species Found? (●) Yes ( ) No — If not found, why? _____

Total No. Individuals: 1290 Subsequent Visit? (●) Yes ( ) No

Is this an existing NDDB occurrence? _____ Yes, Occ. # [ ] No [X] Unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Katie Quint
Address: 1720 Midvale Dr
San Diego, CA 92105
E-mail Address: katie@blackhawkenv.com
Phone: 703-994-3128

Plant Information

Phenology:
100 % vegetative | 0 % flowering | 0 % fruiting

Animal Information

- # adults | - # juveniles | - # larvae | - # egg masses | - # unknown

[ ] wintering [ ] breeding [ ] nesting [ ] rookery [ ] burrow site [ ] lek [ ] other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Kern Landowner / Mgr: Various
Quad Name: _____ Elevation: Various
T___ R___ Sec___, ___¼ of ___¼, Meridian: H ( ) M ( ) S ( ) Source of Coordinates (GPS, topo. map & type): GPS
T___ R___ Sec___, ___¼ of ___¼, Meridian: H ( ) M ( ) S ( ) GPS Make & Model: ArcGIS Collector App (integrated receiver)
DATUM: **NAD27** ( ) **NAD83** ( ) **WGS84** ( ) Horizontal Accuracy: 16ft meters/feet
Coordinate System: UTM Zone 10 ( ) UTM Zone 11 ( ) ***OR*** Geographic (Latitude & Longitude)
Coordinates: Centerpoint 34.882363 N, -118.346177 E (WGS 83)

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Open creosote scrub dominated by salt bush and creosote bush; co-dominant joshua tree in patches. Mostly flat topographically with intermittent hills and erosional drainage features. 433 joshua trees documented as suitable for SWHA nesting.

Please fill out separate form for other rare taxa seen at this site.

Site Information

Overall site/occurrence quality/viability (site + population): ( ) Excellent Good Fair Poor
Immediate AND surrounding land use: Rural residential, transmission towers, dirt access roads, open space, sheep grazing
Visible disturbances: None
Threats: Development, fire, drought
Comments: Inventory taken during rare plant surveys

Determination: *(check one or more, and fill in blanks)*

- [ ] Keyed (cite reference): _____
- [ ] Compared with specimen housed at: _____
- [ ] Compared with photo / drawing in: _____
- [X] By another person (name): Tawni Gotbaum, Hayley Milner, Kris Alberts, Desiree Johnson
- [ ] Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	[ ]	[ ]	[ ]
Habitat	[ ]	[ ]	[ ]
Diagnostic feature	[ ]	[ ]	[ ]

May we obtain duplicates at our expense? ( ) yes ( ) no