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| Project Title: | Willow Rock Energy Storage Center |
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| Document Title: | Willow Rock Energy Storage Center SAFC Volume II-Appendix 52A-53B |
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| Docketed Date: | 3/4/2024 |

APPENDIX 5.2A Summary of Special Status-Species within the Study Area

Flora Compendia

| Ephedraceae | | Ephedra Family |
|-------------------|-----------------|--------------------------|
| Ephedra | nevadensis | Nevada ephedra |
| Apiaceae | | Carrot Family |
| Lomatium | mohavense | Mojave wild parsely |
| Asteraceae | | Sunflower Family |
| Acamptopappus | sphaerocephalus | goldenhead |
| Ambrosia | dumosa | burro weed |
| Ambrosia | salsola | burrobrush |
| Ericameria | teretifolia | green rabbitbrush |
| Eriophyllum | pringlei | Pringle eriophyllum |
| Lasthenia | gracilis | needle goldfields |
| Layia | glandulosa | white layia |
| Leptosyne | bigelovii | bigelow coreopsis |
| Lessingia | glandulifera | valley vinegar weed |
| Malacothrix | glabrata | desert dandelion |
| Stephanomeria | exigua | small wirelettuce |
| Stephanomeria | parryi | Parry's wirelettuce |
| Tetradymia | axillaris | catclaw horsebrush |
| Tetradymia | stenolepis | narrow scaled felt thorn |
| Xylorhiza | tortifolia | Mojave woodyaster |
| Boraginaceae | | Borage Family |
| Amsinckia | tessellata | Devil's lettuce |
| Pectocarya | sp. | unknown combseed sp. |
| Phacelia | distans | fern-leaf phacelia |
| Phacelia | tanacetifolia | tansy leafed phacelia |
| Brassicaceae | | Mustard Family |
| Descurainia | pinnata | yellow tansy mustard |
| Lepidium | fremontii | desert pepper grass |
| Sisymbrium | irio | London rocket |
| Cactaceae | | Cactus Family |
| Cylindropuntia | echinocarpa | silver cholla |
| Caryophyllaceae | | Pink Family |
| Loeflingia | squarrosa | spreading loeflingia |
| Chenopodiaceae | | Goosefoot Family |
| Grayia | spinosa | hopsage |
| Krascheninnikovia | lanata | winter fat |
| Cucurbitaceae | | Gourd Family |
| Marah | macrocarpa | chilicothe |
| Euphorbiaceae | | Spurge Family |
| | | |

Flora Compendia

| Euphorbia | albomarginata | rattlesnake sandmat |
|----------------|---------------|----------------------------|
| Fabaceae | | Legume Family |
| Melilotus | albus | white sweetclover |
| Geraniaceae | | Geranium Family |
| Erodium | cicutarium | red stemmed filaree |
| Lamiaceae | | Mint Family |
| Monardella | exilis | Mojave monardella |
| Loasaceae | | Loasa Family |
| Mentzelia | albicaulis | white stemmed blazing star |
| Nyctaginaceae | | Four O'Clock Family |
| Mirabilis | laevis | desert wishbone bush |
| Onagraceae | | Evening Primrose Family |
| Camissonia | sp. | unknown sun cup sp. |
| Eremothera | boothii | Booth's sun cup |
| Papaveraceae | | Poppy Family |
| Eschscholzia | californica | California poppy |
| Eschscholzia | minutiflora | pygmy poppy |
| Polemoniaceae | | Phlox Family |
| Allophyllum | glutinosum | sticky flase gilia |
| Eriastrum | eremicum | desert woollystar |
| Eriastrum | sapphirinum | sapphire eriastrum |
| Gilia | latiflora | broad flowered gilia |
| Loeseliastrum | matthewsii | desert calico |
| Polygonaceae | | Buckwheat Family |
| Centrostegia | thurberi | thurber spiny herb |
| Chorizanthe | watsonii | Watson's spineflower |
| Eriogonum | brachyanthum | yellow buckwheat |
| Eriogonum | fasciculatum | California buckwheat |
| Eriogonum | maculatum | spotted buckwheat |
| Eriogonum | mohavense | western Mojave buckwheat |
| Eriogonum | trichopes | little desert trumpet |
| Eriogonum | viridescens | bright green buckwheat |
| Rumex | crispus | curly dock |
| Solanaceae | | Nightshade Family |
| Lycium | cooperi | Cooper's boxthorn |
| Zygophyllaceae | | Caltrop Family |
| Larrea | tridentata | creosote bush |
| | | |
| Agavaceae | | Agave Family |

Flora Compendia

| Alliaceae | | Onion Family |
|---------------|-------------|---------------------|
| Allium | fimbriatum | fringed onion |
| Poaceae | | Grass Family |
| Bromus | diandrus | ripgut brome |
| Bromus | madritensis | foxtail brome |
| Bromus | tectorum | downy chess |
| Schismus | barbatus | old han schismus |
| Stipa | speciosa | desert needle grass |
| Themidaceae | | Brodiaea Family |
| Dichelostemma | capitatum | blue dicks |

Fauna Compendium

| Lycaenidae | | Blues and Hairstreaks |
|--------------------|-----------------------|------------------------------|
| Brephidium | exilis | pygmy blue |
| Tabanidae | | Horse Flies |
| Tabanus | punctifer | western horse fly |
| Anthophoridae | | Digger Bees |
| Anthophora | urbana | digger bees |
| Crotophytidae | | Collared and Leopard Lizards |
| Gambelia | wislizenii wislizenii | large-spotted leopard lizard |
| Phrynosomatidae | | Lizards |
| Sceloporus | magister uniformis | yellow-backed spiny lizard |
| Uta | stansburiana | side-blotched lizard |
| Teiidae | | Whiptails |
| Aspidoscelis | tigris | western whiptail |
| Colubridae | | Egg-laying snakes |
| Arizona | elegans candida | Mojave glossy snake |
| Masticophis | flagellum piceus | red coachwhip |
| Viperidae | | Vipers |
| Crotalus | scutulatus | Mojave green rattlesnake |
| Cathartidae | | Vultures |
| Cathartes | aura | turkey vulture |
| Accipitridae | | Hawks |
| Buteo | swainsoni | Swainson's hawk* |
| Buteo | jamaicensis | red-tailed hawk |
| Falconidae | | Falcons |
| Falco | sparverius | American kestrel |
| Falco | mexicanus | prairie falcon |
| Columbidae | | Pigeons/Doves |
| Columba | livia | rock pigeon |
| Zenaida | macroura | mourning dove |
| Strigidae | | True Owls |
| Athene | cunicularia | burrowing owl** |
| Tyrannidae | | Flycatchers |
| Myiarchus | cinerascens | ash-throated flycatcher |
| Tyrannus | verticalis | western kingbird |
| Laniidae | | Shrikes |
| Lanius | ludovicianus | loggerhead shrike |
| | | Jays/Crows |
| Corvidae | | |
| Corvidae Corvus | corax | common raven |
| | corax | • |

* No nests observed on-site ** Incidental Observation, not on-site

Fauna Compendium

| Eremophila | alpestris | horned lark |
|------------------|------------------|--------------------------------|
| Troglodytidae | | Wrens |
| Campylorhynchus | brunneicapillus | cactus wren |
| Mimidae | | Mockingbirds/Thrashers |
| Mimus | polyglottos | northern mockingbird |
| Toxostoma | lecontei | Le Conte's thrasher |
| Sturnidae | | Starlings |
| Sturnus | vulgaris | European starling |
| Parulidae | | New world warblers |
| Dendroica | nigrescens | black-throated gray warbler |
| Wilsonia | pusilla | Wilson's warbler |
| Emberizidae | | Warblers, sparrow, etc. |
| Spizella | breweri | brewer's sparrow |
| Amphispiza | belli | sage sparrow |
| Fringillidae | | Finches |
| Haemorhous | mexicanus | house finch |
| Passeridae | | True sparrows |
| Passer | domesticus | house sparrow |
| Leporidae | | Hares and Rabbits |
| Lepus | californicus | black-tailed jackrabbit |
| Sylvilagus | audubonii | desert cottontail |
| Sciuridae | | Squirrels |
| Ammospermophilu | leucurus | white-tailed antelope squirrel |
| Otospermophilus | beecheyi | California ground squirrel |
| Xerospermophilus | tereticaudus | round-tailed ground squirrel |
| Muridae | | Mice, Rats, and Voles |
| Neotoma | lepida | desert woodrat |
| Heteromyidae | | Pocket Mice and Kangaroo Rats |
| Dipodomys | merriami | Merriam's kangaroo rat |
| Canidae | | Wolves and Foxes |
| Canis | familiaris | domestic dog |
| Canis | latrans | coyote |
| Vulpes | macrotis arsipus | desert kit fox |
| Felidae | | Cats |
| Lynx | rufus | bobcat |
| Bovidae | | Bison, Goats, and Sheep |
| Ovis | aries | domestic sheep |

APPENDIX 5.2B
Observed Species List

Sensitive Flora Observed

| Caryophyllaceae | | Pink Family |
|-----------------|-----------------------------|----------------------|
| Loeflingia | squarrosa var. artemisiarum | sagebrush loeflingia |
| Liliaceae | | Lilly Family |
| Calochortus | striatus | alkali mariposa lily |
| Lamiaceae | | Mint Family |
| Monardella | exilis | Mojave monardella |
| Agavaceae | | Agave Family |
| Yucca | Brevifollia | western Joshua tree |

Sensitive Fauna Observed

| Apidae | | Cuckoo, Carpenter, Bumble Bee Family |
|-----------|------------------|--------------------------------------|
| Bombus | crotchii | Crotch's bumble bee |
| Accipiter | | Hawk Family |
| Buteo | swainsoni | Swainson's hawk * |
| Strigidae | | True Owl Family |
| Athene | cunicularia | burrowing owl ** |
| Laniidae | | Shrike Family |
| Lanius | ludovicianus | loggerhead shrike |
| Mimidae | | Mockingbirds/Thrasher Family |
| Toxostoma | lecontei | LeConte's thrasher |
| Canidae | | Wolf and Fox Family |
| Vulpes | macrotis arsipus | desert kit fox |

* No active nests on-site, only foraging ** Incidental observation outside the project site/survey area (within 0.5 miles)

APPENDIX 5.2C Resumes of the Applicant's Biologists



SCOTT CRAWFORD

Biology Group Manager

Years with the firm

9 (2015)

Years total

30 **(1994)**

Professional registrations

Federal Permit # TE088597B-0:

California gnatcatcher. Previously Permitted for Quino Checkerspot Butterfly, Listed Fairy Shrimp, and El Segundo Blue Butterfly

Trainings

Flat-Tailed Horned Lizard, 6-2001

Wetland Training Institute, 12-1998

Desert Tortoise Council Workshop, 10-1999

40-hour EM 385 1-1

Construction Hazard Awareness Safety Training

11-2020

Wetland Training Institute 1996

Fairy Shrimp Identification Course-Denton Belk 1999

Federal Energy Regulatory Commission Compliance Training 2007

Developing a BA Training 2009

CAREER SUMMARY

Scott A. Crawford, MA, has conducted biological resource surveys throughout California since 1994. He is experienced in conducting general biological resources assessments, feasibility studies, wetland delineations, protocol surveys for sensitive plant and wildlife species, regulatory permitting, and mitigation negotiations.

Mr. Crawford is well seasoned in GIS (Geographic Information Systems), vegetation mapping, and forensic identification. He is well experienced in preparing biological reports as well as biological sections for General Plans, Specific Plans, and EIR/EISs. He participates in third-party reviews for both cities and counties. Mr. Crawford is a practiced technical expert for public hearings, City Council Meetings, Planning Commission meetings, and County Board of Supervisor meetings and has served as an expert witness.

Mr. Crawford is currently the Biology Group Manager for Wood in the Riverside Office. The team consists of six full time and as many as 20 on-call employees. His responsibilities include preparing proposals, scheduling field work, managing day-to-day activities, document peer review, and project/client management.

EDUCATION

| B.A. Environmental Biology, California State University, Northridge | 1995 |
|---|------|
| M.A. Biology, California State University, Fullerton | 1997 |

PROFESSIONAL EXPERIENCE

- Caltrans, District 8 On-Call Biological Resources Contract (08A2662) Riverside and San Bernardino Counties, \$4.23M, 2016-2021: Mr. Crawford was the contract manager for the on-call contract 08A2662 (also a portion of contract 08A2191) for biological resource assistance for standard construction, maintenance, and emergency projects throughout District 8 (Riverside and San Bernardino Counties). Mr. Crawford has managed approximately 150 individual Task Orders, which included, but not limited to standard Natural Environmental Study (NES), MSHCP consistency analysis, threatened and endangered species surveys, wetland delineations, wildlife movement corridor study, construction monitoring, regulatory permitting, and mitigation land assessments.
 - Southern California Gas Company, On-Call Environmental Resource Services. Throughout Southern California Service Area \$5M (2015 – 2020). Assisted in the management of the on-call contract for Environmental Resources Assistance for standard construction, maintenance, and emergency projects throughout southern California. The main activities Mr. Crawford was responsible for included conducting biological resources assessments, protocol surveys, managing construction monitors, jurisdictional assessments, and general contract consultation. WSP completed over 140 individual projects throughout the southern California service area.

Los Angeles County Sanitation Districts, On-Call Biological Resource Services. Throughout LACSD Service Area in California. \$720K (2016 – 2021). Assisted in the management of the on-call contract for Biological Resources Assistance for standard projects throughout the Districts' area of operation. The main activities Mr. Crawford was responsible for included coordinating field work and client assistance. WSP completed over 15 individual projects throughout the service area. Scott is currently managing the San



Gabriel River release reduction project and is responsible for annual monitoring report preparation and agency consultation. Resource agencies and other groups participating in the Habitat Monitoring Committee USACE, USFWS, CDFW, SCCWRP, LA Water Keeper, Heal the Bay, LADPW, CBMWD, WRD, LAW, MSGB Watermaster, Sierra Club, and Council for Watershed Health. This project was extended under a separate contract.

- Ames Construction, I-15/Mojave River Bridge Crossing, City of Victorville, CA, \$60K, 2019-2020: Mr. Crawford managed a team of biologists to conduct construction monitoring for sensitive riparian birds, Mojave River Vole, and sensitive fish species. Following initial vegetation removal and soil disturbance, spot checks were completed twice a week during construction. Additional monitoring was completed for work within the active channel. Turbidity fencing and exclusion fencing were utilized to protect sensitive fish species. This monitoring effort was part of a Caltrans Project but was contracted directly through the construction firm rather than the Caltrans on-call contract.
- NAVFAC, Invasive Species Management, Edwards Airforce Base, California, \$1M, 2020-2023: Mr. Crawford is responsible for managing the invasive species removal and restoration program at Edward Airforce Base in four separate Priority Management Areas (PMAs) including the Cantonment Area, Roadside and Disturbed Areas, Piute Ponds, and Seasonally Flooded Zones and Evaporative Ponds. Mr. Crawford was responsible for monthly progress reports as well as managing the restoration crew as part of a Joint Venture contract. The restoration work includes weed treatment and removal and restoration of selected sites to revert to natural communities, such as grasslands and/or riparian habitat.
- Falcon Engineering, Hamner Avenue/Santa Ana River Bridge Replacement Project, City of Norco/Eastvalle, California, \$85K, 2020-present: Managed a team of biological monitors for pre-construction and construction activities. The project extended from Detroit Street in the city of Norco o Citrus Street in the city of Eastvale. The project included the complete replacement of the Hamner Avenue Bridge. Sensitive biological resources associated with the project included Least Bell's Vireo, Santa Ana Sucker, and Sensitive bats. The project included installation of bird netting over the entire existing bridge. Mr. Crawford monitored subconsultants that conduct clearance surveys for both fish and bats, including the installation of exclusionary devices in suitable bat habitat underneath the bridge.
- Nevada Hydro Company, Lake Elsinore Advance Pump Storage (LEAPS), Lake Elsinore and Surrounding Areas in California, \$180K, 2002 to present. Conducted biological resources assessment and focused species surveys for 81-miles of proposed transmission lines for the LEAPS project near Lake Elsinore, California and surrounding areas. Surveys included general reconnaissance-level surveys as well as focused surveys for Quino checkerspot butterfly, California gnatcatcher, least bell's vireo, arroyo toad, red-legged frog, spotted owl, and sensitive plants. Also participated in informal consultation with USACE, RWQCB, USFWS, USFS, and CDFW. Assisted in siting studies for the proposal transmission line in an effort to avoid biological and cultural resources associated with the project. Negotiated alignment changes with the US Forest Service. An impact assessment was prepared and used as part of the application for a recognized project under the Federal Energy Regulatory Commission. Mr. Crawford also prepared work plans for biological resources, recreational resources, and fire resources.



JOHN F. GREEN

Senior Biologist

Years with the firm

23 (2001)

Years total

37 (1987)

Professional registrations

Federal Recovery Permit TE-054011-8:

Quino checkerspot butterfly (QCB), vernal pool branchiopods (listed fairy shrimp & tadpole shrimp of CA), Yuma Ridgway's (clapper) rail (YRRA), western yellowbilled cuckoo (WYBC), San Bernardino kangaroo rat (SBKR), southwestern willow flycatcher (SWFL), & coastal California gnatcatcher (CCGN). Federal Bird Marking and Salvage Permit 23035 - D

For bird banding activities, including mist nets.

CDFW Scientific Collecting Permit SC-190360007:

Vernal pool branchiopods, QCB, flat-tailed horned lizard, elf owl, California black rail, YRRA, WYBC, Gila woodpecker, gilded flicker, willow flycatcher (all subspecies including SWFL), CCGN, bird banding, earthquake (Aguanga) Merriam's kangaroo rat, SBKR, Palm Springs round-tailed ground squirrel, San Diego (SD) desert woodrat (AKA Bryant's), southern grasshopper mouse, and the following pocket mice: Palm Springs, Jacumba, Dulzura, Los Angeles, pallid SD & northwestern SD.

CAREER SUMMARY

John has a broad background in field biology and has worked on numerous projects in southern California. He has also done biological surveys in Japan, northern California and other states including Arizona, Maine, Nevada, New Mexico, South Carolina, and Texas. Professional experience includes: general biological surveys; focused surveys for sensitive, threatened, and endangered wildlife and plant species; monitoring for same, vegetation mapping; and the management of projects involving these elements, including preparation of documents and reports.

EDUCATION

| B.S., Entomology, University of California, Riverside | 1991 |
|---|------|
| A.A. Biology, Fullerton College, California | 1989 |
| PROFESSIONAL EXPERIENCE | |

- Falcon Engineering, Hamner Avenue Bridge, Norco, California. 2020 present (ongoing): John is the field manager implementing environmental oversight for this bridge replacement project. The existing two-lane Hamner Avenue Bridge over the Santa Ana River is being replaced with a new four-lane, higher bridge to improve capacity and prevent flooding. Responsibilities included scheduling and conducting surveys and monitoring for the endangered least Bell's vireo and other nesting birds; worker environmental training; environmental compliance monitoring; scheduling surveys and rescue for the endangered Santa Ana sucker when project activity is within the river; and coordination with our subcontractors, construction contractors, and the Riverside County Transportation and Land Management Agency.
- NorthPoint Development LLC, Sunset Crossroads Project, Banning, Riverside County, California. 2020 - present (ongoing): John is heading the WSP field and reporting team conducting general and focused surveys for this 550-acre commercial development project. John conducted the initial due-diligence survey on-site and focused surveys for burrowing owl, fairy shrimp, and Los Angeles pocket mouse. He has prepared and edited multiple reports for completed and ongoing surveys and for regulatory agencies and has participated in client and agency meetings.
- Riverside County Parks and Open Space District, Santa Ana River Point Count Monitoring Project, Riverside, California. 1996 – 2022: Since 2002 John has been part of the WSP team conducting bird point counts. Following invasive plant removal and riparian restoration along the Santa Ana River in Riverside, California, this long-term bird population monitoring project was established. It uses unlimited distance point counts to monitor bird populations along the river. The data has documented increased riparian bird usage of the restored habitat over time, particularly by the endangered least Bell's vireo, and has also documented new threats such as West Nile Virus, homeless occupation of the river and resultant wildfires.
- San Diego County Water Authority, Yuma Ridgway's (Clapper) Rail and California Black Rail Monitoring at Dos Palmas Marsh, Coachella Valley, Riverside County, California. 2009 – 2021: John was part of the WSP team conducting focused monitoring surveys for Yuma Ridgway's (clapper) rail and California black rail. This monitoring was one of the mitigation commitments associated with the Coachella Canal Lining Project, which John also worked on from 2003 to 2008. It ensured that the Dos Palmas Core Marsh was maintained such that it continued to provide habitat for these endangered species.
- Southern California Edison, West of Devers Upgrade Project, Riverside and San Bernardino Counties, California. 2014 – 2021: This project upgraded 48 miles of transmission lines for Southern California Edison. As part of WSP's team supporting Barnard Construction Company with the Victor Group and Jacobs, John conducted habitat assessments and focused



JOHN F. GREEN

Senior Biologist

Trainings

Advanced Molt-limits and Plumage Workshop Certificate, Institute for Bird Populations (bird banding)

Identification of California Branchiopod Crustaceans Workshop (Fairy and Tadpole Shrimp)

Yellow-billed Cuckoo Workshop and Training

CEQA Basics Workshop, Association of Environmental Professionals

Southwestern Willow Flycatcher Survey Training Workshop

The Desert Tortoise Council Survey Workshop Certificate

Plant Identification and Ecology, University of California Extension

Rapid Assessment Method Vegetation Workshop, California Native Plant Society

Field Study of Birds: University of California Extension

Professional associations

California Native Plant Society Desert Tortoise Council

Western Field Ornithologists

Xerces Society (Invertebrate Conservation)

Languages

English

Office location

Riverside, CA, USA

surveys for least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, Stephens' kangaroo rat, San Bernardino kangaroo rat, Los Angeles pocket mouse, and rare plants. John also prepared documents and reports regarding these activities and in support of project applications for coverage under habitat conservation plans.

Caltrans, District 8, Biological Support, Riverside & San Bernardino Counties, California. 2013
 2020: As part of the WSP team John provided as-needed professional and technical biological support services to District Eight's Environmental Branch. John provided services such as biological resources assessments, construction monitoring, bird exclusion, focused surveys for special-status plants, desert tortoise, burrowing owl, southwestern willow flycatcher, least Bell's vireo, Los Angeles pocket mouse, and the preparation of documents including focused survey reports, biological resources assessment reports, mitigation monitoring plans (MMP), Natural Environment Studies (NES), and Determination of Biologically Equivalent or Superior Preservation (DBESP) reports.

- **On-Call Contract with Southern California Gas Company, Southern California. 2016 – 2020:** John was part of the WSP team for this biological resource assistance on-call contract for standard construction, maintenance, and emergency projects throughout southern California. Activities include conducting biological resources assessments, protocol surveys, monitoring, and preparation of numerous documents including environmental reviews.

Marine Corps Base Camp Pendleton, Base-wide Coastal California Gnatcatcher Surveys, San Diego County, California. 2019: John was part of the WSP team conducting focused surveys for the coastal California gnatcatcher. This study supported ongoing documentation and management of the species' population in suitable habitats throughout the base. This study was developed to better understand the current distribution of the coastal California gnatcatcher across the base, to evaluate the effectiveness of the current management measures being implemented through the Integrated Natural Resources Management Plan (INRMP), and to determine if adaptive management measures are required to maintain the current coastal California gnatcatcher population and distribution across the base.

PREVIOUS EXPERIENCE

Before joining WSP, John's experience included surveys for invasive insects, a long-term small mammal trapping study, and long-term bird population monitoring studies:

PUBLICATIONS & PRESENTATIONS

Presentations

— Ornithological Considerations for Habitat Connectivity. Presentation by John for the South Coast Missing Linkages Workshop, University of Redlands, Redlands, CA. 2002.

Publications

- Life History and Description of Immature Stages of *Procecidochares stonei* Blanc & Foote on *Viguiera spp.* in Southern California (*Diptera: Tephritidae*). John F. Green, David H. Headrick, and Richard D. Goeden. *Pan-Pacific Entomologist*, v. 69, no. 1, p. 18–32. 1993.
- Riverside County Coordinator. North American Birds. 2002 to 2012.
- Birds of the Season. Western Meadowlark. San Bernardino, CA. 1998 to 2005.
- Birds and other Vertebrates of the Box Springs Mountains and Vicinity. Riverside, CA. 2016.



NATHAN MOORHATCH

Senior Biologist

Years with the firm

24 (2000)

Years total

33 (1991)

Professional registrations

Certified biologist on lists for San Bernardino, Kern, Los Angeles, Orange, Ventura, and Riverside Counties, California

Completed desert tortoise training workshop (1990)

Completed Mohave ground squirrel workshop, sponsored by The Wildlife Society

Authorized by the U.S. Fish and Wildlife Service to independently perform focused surveys for the federally endangered Delhi Sands Flower-loving Fly, Quino Checkerspot Butterfly, Casey's June Beetle, and the federally threatened western yellow-billed cuckoo and coastal California Gnatcatcher

Office location

Riverside, CA

CAREER SUMMARY

Mr. Moorhatch has over 31 years consulting experience performing a wide variety of biological surveys throughout California, spanning from the Sacramento Valley to the International Border. Mr. Moorhatch has conducted biological and environmental assessments at project sites in Solano, Monterey, San Luis Obispo, Tulare, Fresno, Inyo, Kern, Kings, Ventura, Santa Barbara, Los Angeles, San Bernardino, Orange, Riverside, San Diego, and Imperial counties in California, as well as in Arizona, Nevada, New Mexico, Texas, and South Carolina. He has conducted the following types of assessments: rare plant species surveys; plant species inventory and vegetation mapping; revegetation plan preparation and implementation; general wildlife species surveys; focused sensitive wildlife species surveys and habitat quality assessments; sensitive wildlife species monitoring and relocations; small mammal trapping studies; Corps Section 404 waters/wetlands delineation and jurisdictional determination; CDFG 1601-3 stream and riparian habitat assessments and jurisdictional determinations; and preparation of biological assessment reports and sections of EIS and EIR documents for federal, state, and/or county agency CEQA and NEPA environmental review. Professional experience includes serving as a lead biologist, supervising and managing biological compliance monitoring and sensitive species survey efforts for a variety of large-scale projects.

Mr. Moorhatch has been authorized by the U.S. Fish and Wildlife Service to independently perform focused surveys for the federally endangered Delhi Sands Flower-loving Fly, Quino Checkerspot Butterfly, Casey's June Beetle, and the federally threatened California Gnatcatcher and Western yellow-billed cuckoo. Mr. Moorhatch has also been authorized to assist other permitted biologists with focused surveys for the Stephens' Kangaroo Rat, San Bernardino Kangaroo Rat, Los Angeles Pocket Mouse, Palm Springs Pocket Mouse, Mojave Ground Squirrel, California Red-legged Frog, Least Bell's Vireo (nest searches), and Southwestern Willow Flycatcher (assistant for nest searches and surveys). He has also received both federal and state agency authorization for specific projects to capture, handle, process, and relocate the Desert Tortoise; and to capture, handle, and release the California Red-legged Frog. Additionally, he conducts general inventories of flora and fauna; and authors biological assessments and mitigation plans.

EDUCATION

B.S. Zoology, California State Polytechnic University, Pomona

1991

PROFESSIONAL EXPERIENCE

- On-Call Contract with Caltrans District 8. Mr. Moorhatch was one of several senior biologists for the on-call contract 08A2662 (also contract 08A2191) for biological resource assistance for standard construction, maintenance, and emergency projects throughout District 8 (Riverside and San Bernardino Counties). Mr. Moorhatch completed standard Natural Environmental Study (NES) documents, MSHCP consistency analysis, threatened and endangered species surveys, wildlife movement corridor study, construction monitoring, and mitigation land assessments.
- On-Call Contract with Southern California Gas Company. Was a Subject Matter Expert for the on-call contract for Environmental Resources Assistance for standard construction, maintenance, and emergency projects throughout southern California. The main activities Mr. Moorhatch was responsible for include conducting biological resources assessments,



NATHAN MOORHATCH

Senior Biologist

protocol surveys, and managing construction monitors. Wood completed over 140 individual projects throughout the southern California service area and Mr. Moorhatch was invoiced in nearly all of these projects.

- On-Call Contract with Los Angeles County Sanitation Districts. Was the lead senior biologist on all of the on-call projects for Biological Resources Assistance for standard projects throughout the Districts area of operation. The main activities Mr. Moorhatch was responsible for included conducting habitat assessments for the shot hole borer, coordinating field work and conducting the sampling effort of the San Gabriel River release reduction project and is responsible for annual monitoring documentation and technical advice.
- I-15/Mojave River Bridge Crossing, Ames Construction. Mr. Moorhatch conducted construction monitoring for sensitive riparian birds, Mojave River Vole, and sensitive fish species. Following initial vegetation removal and soil disturbance, spot checks were completed twice a week during construction. Additional monitoring was completed for work within the active channel. Turbidity fencing and exclusion fencing were utilized to protect sensitive fish species. This monitoring effort was part of a Caltrans Project, but was contracted directly through the construction firm rather than the Caltrans on-call contract.
- CV LINK Project, Caltrans & Coachella Valley Association of Governments, Riverside County, CA. As part of a team of biologists, conducted general biological assessments for a wide variety of special-status biological resources as well as protocol focused surveys for Casey's June beetle at various locations throughout the approximate 74.5-miles of potential project alignments for a proposed non-motorized, multi-modal transportation path connecting various cities and jurisdictions throughout the Coachella Valley, Riverside County, California.
- Whitewater Wind Energy Conversion Systems. Acted as a Lead Biologist for the development, installation, and implementation of a wind energy park located in the San Gorgonio Pass area, on the northwestern outskirts of the Coachella Valley. Conducted general and focused (for Desert Tortoise, Burrowing Owl, and sensitive plant species) biological surveys; Desert Tortoise burrow excavation, artificial burrow construction, processing, and relocation; Burrowing Owl burrow excavation, artificial burrow construction, and passive relocation; mitigation monitoring; personnel awareness training for the life of the project; Shell Oil Corporation; Riverside County.



MARSHALL PAYMARD

Senior Biologist

Years with the firm

1 (2023)

Years total

15 (2009)

Professional registrations

Federal Recovery Permit TE-64455D-0: Quino checkerspot butterfly, & coastal California gnatcatcher (in progress). CDFW Scientific Collecting Permit Crotch's bumble bee MOU FAA Part 107 Commercial UAV Pilot Certification Trainings

Wetland Training Institute (WTI) Wetland Delineation Certificate

California Environmental Protection Agency Air Resource Board Visual Method 9 Emissions evaluations Certificate

Orange County Wildlife Tracking Certificate (Orange County Trackers)

Professional associations

Society for Conservation GIS The Wildlife Society Neotropical Primate Conservation

Languages English

Office location

San Diego, CA, USA

CAREER SUMMARY

Marshall Paymard is a highly skilled conservation biologist, GIS analyst, and SUAS (small unmanned Aerial System) pilot with more than 14 years of professional experience in the southern California region. He has a strong background in project management and has successfully conducted surveys for various special-status plant and animal species throughout the region. Additionally, Mr. Paymard is a professionally trained and experienced wetland delineator and possesses extensive knowledge and expertise in implementing key environmental regulations such as, the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), California Environmental Quality Act (CEQA), sections 404 and 401 of the Clean Water Act (CWA), and the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP).

EDUCATION

B.A., Biological Anthropology, University of California, Santa Cruz

2008

PROFESSIONAL EXPERIENCE

SPECIAL STATUS PLANT SURVEY AND VEGETATION COMMUNITY MAPPING

Conducted approximately 6,000+ hours of protocol rare plant transect surveys throughout the Counties of San Diego, Kern, Orange, and Riverside. Conducted vegetation mapping and classification of approximately 5,000 acres of land located throughout the southern California region. Attended advanced California Native Plant Society (CNPS) vegetation mapping workshop.

JURISDICTIONAL AQUATIC RESOURCE DELINEATION

Experienced in conducting wetland delineation per the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual, the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 (Arid West Supplement), and the 2008 Ordinary High Water Mark Manual. Skilled in characterizing and analyzing soils for hydric indicators; skilled in analysis of hydrophytic vegetation, and wetland geomorphic indicators. Skilled in the analysis of indicators for identification of the OHWM for jurisdictional non-wetland waters delineation.

Associated Projects: Pedley Landfill Project, Riverside, CA. Dockery Land Project, Riverside, CA. Sun Lakes Boulevard Extension Project, Riverside County, CA. Valle Vista Landfill drainage and Slope Repair Project, San Jacinto, CA. Fanita Ranch Project, Santee, California. North River Farms, Oceanside, California. Cannon Road Project, Caruso Acquisition Co II LLC, Carlsbad, California. Proctor Valley Project, San Diego County, California. Maple Street Project, San Diego County, California. Carmel Valley Road Widening Project, San Diego County, California. Otay Ranch Village 13 Resort Site, San Diego County, CA. Jacumba Solar, San Diego County, CA.

TECHNICAL WRITING

Authored and contributed to environmental resource technical documents including, Biological Technical Reports, Endangered Species Survey Reports, Jurisdictional Aquatic Delineation Reports, Habitat Constraints Analysis Reports, Western Riverside MSHCP Consistency Analysis Reports, Mitigation Monitoring and Construction Reporting Programs (MMCRP), and Determination of Biologically Equivalent or Superior Preservation (DBESP) reports.

GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Experienced in configuring and utilizing ESRI products, including ArcGIS Pro, ArcGIS Online, ArcGIS Field Maps, Collector, and Survey123. Skilled in field data collection, spatial analysis, cartographic visualization, and data management. Proficient in configuring ESRI field data collection applications and pairing advanced GNSS receivers for accurate data collection. Experienced in geodatabase creation, management, and remote-sensing technology applications.

SPECIAL-STATUS WILDLIFE SURVEY

Flat-tailed horned lizard (*Phrynosoma mcallii***)** Conducted and led flat-tailed horned lizard (FTHL) habitat assessments and surveys in various locations throughout the FTHL distribution range. Completed over 5,500+ survey hours, relocated over approximately 150 individuals, and collected bio-metric data on over 75 individuals. Provided diligent biological monitoring and species related training to project related personnel.

Associated Projects: Imperial Solar Energy Center South (ISECS), Imperial County, CA. Imperial Solar Energy Center West (ISECW), Imperial County, CA. Solar Gen 2, First Solar, Imperial County, CA. Ocotillo Wind Energy Facility, Imperial County, CA. Sunrise Powerlink Project, San Diego County, CA. Ocotillo Solar Project, San Diego County, CA

Burrowing Owl (Athene cunicularia) Conducted over 6,000+ survey hours, including 3,000+ hours of direct observation of burrowing owls. Led and conducted numerous habitat assessments and focused surveys for burrowing owl in accordance with the, 2012 CDFG Staff Report on Burrowing Owl Mitigation and the Western Riverside MSHCP. Skilled in manufacturing and installing one-way door systems associated with passive relocation efforts of burrowing owls. Skilled in artificial burrow structure construction and installation to accomplish burrowing owl mitigation goals. Experienced in setting camera traps and using burrow endoscopes to assess burrow occupancy and conditions. Knowledgeable on building and placement of visual and audio barriers to nesting burrowing owls.

Associated Projects: Valentine Solar Project, Kern County, CA. Warner Springs Water Bank Project, Los Angeles and Kern County, CA. Imperial Solar Energy Center South (ISECS), Imperial County, CA. Imperial Solar Energy Center West (ISECW), Imperial County, CA. Blythe Solar Power, NextEra Energy Resources, Blythe, CA. McCoy Solar Energy Project, NextEra Energy Resources, Blythe, CA. North City Project (Purewater), San Diego County, CA. Confidential Solar Energy Project, Jacumba, CA. Solar Gen 2, First Solar, Imperial County, CA. Ocotillo Wind Energy Facility, Imperial County, CA. Grapevine Project Tejon Ranch Corporation, Kern County, CA. Otay Ranch Village 13 Resort Site, San Diego County, CA. Proctor Valley Project, San Diego County, CA. Cannon Road Project, Caruso Acquisition Co II LLC, Carlsbad, CA. Fanita Ranch Project, Santee, CA.

Golden Eagle (*Aquila chrysaetos***)** Conducted over 100 hours of golden eagle surveys at set point locations throughout East San Diego County.

Associated Projects: Campo Wind, Campo, CA. Proctor Valley Development, San Diego County, CA.

Swainson's Hawk (Buteo swainsoni) Conducted over 100 hours of Swainson's hawk surveys and historical nests documentation in Kern and Los Angeles County.

Associated Projects: Warner Springs Water Bank Project, Los Angeles and Kern County, CA.

Coastal California gnatcatcher (*Polioptila californica californica***)** Assisted in protocol surveys for the coastal California gnatcatcher (CAGN). Completed over 60 hours of direct observation of CAGN throughout the Counties of San Diego County and Orange.

Associated Projects: Southern California Edison (SCE) Infrastructure Replacement Project. Montebello, Development, Montebello, CA. West Coyote Hills Development, Fullerton, CA. Fanita Ranch Project, Santee, California. Portola Hills Development Project, Lake Forest, California. Alessandro Business Park, Western Realco, Riverside, California. Vista Water, Vista, CA.

Least Bell's Vireo (Vireo bellii pusillus) Conducted presence/absence surveys for the Least Bell's Vireo in accordance with the survey protocol described in the USFWS Survey Guidelines (2001). Completed over 300 hours of surveys for Least Bell's Vireo throughout San Diego County, CA.

Associated Projects: Los Angeles Department of Water and Power (LADWP) Project, San Bernardino, California. TJ River Channel Maintenance, San Diego County, California. North City Project (Purewater), San Diego County, CA.

Southwestern Willow Flycatcher (Empidonax traillii extimus) Conducted presence/absence surveys for Southwestern willow flycatcher in accordance with the survey guidelines (2011). Completed approximately 100 hours of presence /absence surveys for the Southwestern Willow Flycatcher in various locations throughout the Counties of San Diego and San Bernardino, CA. Attended USFWS approved training for Southwestern Willow Flycatcher

Associated Projects: Los Angeles Department of Water and Power (LADWP) Project, San Bernardino, California. TJ River Channel Maintenance, San Diego County, California. North City Project (Purewater), San Diego County, CA.

Quino Checkerspot Butterfly (*Euphydryas editha quino***)** Conducted over 500 hours of protocol presence/absence surveys for the Quino checkerspot butterfly in accordance with the USFWS Survey Guidelines (2014). Conducted habitat assessments and host plant mapping and population counts. 10(a)(1)(A) Recovery Permit- Quino checkerspot butterfly (*Euphydryas editha quino*) TD- TE-64455D-0

Associated Projects: Fanita Ranch Project, Santee, California. Proctor Valley Project, San Diego County, California. Otay Ranch Village 13 Resort Site, San Diego County, California. Confidential Solar Energy Project, Jacumba, California. Manzanita Wind Energy Project, San Diego County, CA.

Hermes Copper (*Lycaena hermes***)** Conducted and led over 60 hours of presence/absence surveys for the Hermes copper butterfly in accordance with accepted protocol survey guidelines. Conducted habitat assessment and mapping in various locations throughout San Diego County, CA.

Associated Projects: Fanita Ranch Project, Santee, California. Proctor Valley Project, San Diego County, California. Otay Ranch Village 13 Resort Site, San Diego County, California.

Desert Tortoise (*Gopherus agassizii***)** Conducted over 4,000 combined hours of presence/absence protocol surveys, habitat assessment, and biological monitoring for desert tortoise. Skilled in identification of desert tortoise track, scat, and suitable burrow metrics. Surveyed and monitored for desert tortoise at various locations throughout the species range in California and Nevada. Completed the Desert Tortoise Council workshop in 2015.

Associated Projects: Warner Springs Water Bank Project, Los Angeles and Kern County, CA. Valentine Solar Project, Kern County, CA. Blythe Solar Power, NextEra Energy Resources,

Blythe, CA. McCoy Solar Energy Project, NextEra Energy Resources, Blythe, CA. Stateline Solar Project, Primm, Nevada. Alta East Wind Project, Kern County, CA.

Desert kitfox (Vulpes macrotis arsipus)

Conducted over 4,000+ survey hours for desert kitfox throughout its range in the Mojave and Colorado Deserts. Led and conducted passive relocation, including construction of associated one-way door systems. Experienced in habitat suitability analysis and detection of desert kitfox through track, scat, and den metrics. Skilled in application of camera traps to observe and monitor desert kitfox.

Associated Projects: Valentine Solar Project, Kern County, California. Imperial Solar Energy Center South (ISECS), Imperial County, CA. Imperial Solar Energy Center West (ISECW), Imperial County, CA. Solar Gen 2, First Solar, Imperial County, CA. Ocotillo Wind Energy Facility, Imperial County, CA. Sunrise Powerlink Project, San Diego County, CA. Ocotillo Solar Project, San Diego County, CA. Blythe Solar Power, NextEra Energy Resources, Blythe, CA. McCoy Solar Energy Project, NextEra Energy Resources, Blythe, CA. Warner Springs Water Bank Project, Los Angeles and Kern County, CA.

Arroyo Toad (*Anaxyrus californicus***)** Conducted approximately 40 hours of habitat assessment and focused surveys for the Arroyo toad. Analyzed habitat suitability pertaining to substrate type, channel metrics, and parameters related to water quality (PH, velocity, and turbidity). Conducted focused surveys (non-protocol) and documented Arroyo toad and co-occurring amphibian species. Attended specialized training on the Arroyo toad through the Southern California Chapter of TWS.

Associated Projects: Southern California Edison (SCE) Infrastructure Replacement Project. Rancho Mission Viejo Development, Orange County California. TWS Workshop Survey, Jacumba, San Diego County, California.

MICHAEL WILCOX SENIOR BIOLOGIST

Years with the firm

24 (2000)

Years total

31 (1993)

Professional registrations

Certified biologist on lists for San Bernardino, Kern, Los Angeles, Orange, Ventura, and Riverside Counties, California

USFWS 10(a)(1)(A) Threatened & Endangered Species Recovery Permits for Casey's June beetle, Delhi sands flowerloving fly, Quino checkerspot butterfly, coastal California gnatcatcher & Western yellow-billed cuckoo

Trainings

Southwestern Desert Bats Workshop, 2016

Southwest Partners in Amphibian and Reptile Conservation (PARC) Annual Conference, 2016

Yellow-billed Cuckoo Survey Protocol Workshop, 2015

37th International Herpetological Symposium, 2014

Southwest PARC Annual Conference -Energy Development and Herpetofauna Conservation, 2012

The Wildlife Society Western Section Annual Conference -Alternative Energy and

CAREER SUMMARY

Mr. Wilcox has conducted a wide variety of biological resource studies throughout the southwestern United States (California, Arizona, Nevada and New Mexico). Experience includes serving as the lead biologist, supervising and managing biological compliance monitoring, as well as conducting protocollevel focused surveys and monitoring of a variety of endangered, threatened, and/or otherwise sensitive species for a variety of large and small-scale projects. Mr. Wilcox has been authorized by the U.S. Fish and Wildlife Service (USFWS) to independently perform focused surveys for the federally endangered Casey's June beetle, Delhi Sands flower-loving fly, quino checkerspot butterfly as well as the federally threatened coastal California gnatcatcher and western yellow-billed cuckoo. He has also been authorized by the USFWS, California Department of Fish and Wildlife (CDFW) and/or Bureau of Land Management (BLM) to handle desert tortoise, arroyo toad, Coachella Valley fringe-toed lizard and flat-tailed horned lizard for various projects in the past and to assist other permitted biologists with focused surveys for the Stephens' kangaroo rat, San Bernardino kangaroo rat, Los Angeles pocket mouse, Palm Springs pocket mouse, Mohave ground squirrel, California red-legged frog, least Bell's vireo (nest searches), and southwestern willow flycatcher (assistant for nest searches and surveys).

Other special status species Mr. Wilcox has experience with include Coachella Valley Jerusalem cricket, Coachella giant sand treader cricket, Hermes copper, California tiger salamander, Coast Range newt, southwestern pond turtle, gila monster, coast (San Diego) horned lizard, Belding's orange-throated whiptail, two-striped garter snake, south coast garter snake, southern rubber boa, burrowing owl, California spotted owl, snowy plover, least tern, least Bell's vireo, Le Conte's thrasher, bighorn sheep, various bat species, and various rare plants including Harwood's milkvetch, Borrego milkvetch, Coachella Valley milkvetch, Lancaster milkvetch, Nevin's barberry, Plummer's mariposa lily, alkali mariposa lily, crucifixion thorn, Mojave spineflower, Mojave tarplant, slender-horned spineflower, Santa Ana River woolly star, Utah vine milkweed, golden goodmania, Burke's goldfields, ocellated Humboldt lily, devil's claw, Coulter's Matilija poppy, black-flowered figwort, Joshua tree as well as other protected botanical resources (i.e., oak trees, yucca species, cacti species, etc.).

EDUCATION

BA, Art-Anthropology, University of Redlands, Redlands

1991

PROFESSIONAL EXPERIENCE

Resource Management & Conservation

- City of La Quinta, Peninsular Bighorn Sheep Fence Project, La Quinta, Riverside Co., CA,
 2022-present. Lead biologist, administering the project-specific Worker Environmental
 Awareness Program (WEAP), conducting pre-construction clearance surveys and overseeing,
 supervising and managing biological compliance monitoring for the proposed construction
 of a permanent Peninsular bighorn sheep exclusion fence within designated critical habitat
 and in a Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)
 conservation area.
 - Riverside County Flood Control & Conservation District, U.S. Fish and Wildlife Range-wide Research Study of Casey's June Beetle, Palm Springs, Riverside Co, CA, 2016-2022.
 Supervised and served as a lead biologist conducting black light trapping, handling and mark

vsp

Wildlife: Current Efforts to Balance Conflicting Sustainability Goals, 2011

Rare Pond Species Survey Techniques Workshop, 2010

Mojave Ground Squirrel Workshop, 2006

Biology of the Rattlesnakes Symposium, 2005

3rd North American Ornithological Conference, 2002

South Coast Missing Linkages Projects: Restoring Connectivity to California's South Coast Ecoregion, 2002

28th Annual Southern California Botanists Symposium: Rare Plants of Southern California. 2002

27th Annual Western Field Ornithologists Conference, 2002

38-Hour Army Corps of Engineers Wetland Delineation and Management Training Seminar & Workshop, 2001

27th Annual Southern California Botanists Symposium: Shifting Sands - Conservation and Biology of California's Dune Habitats, 2001

Arroyo Toad Symposium (Bufo californicus): Natural History and Management Practices, 2000 and recapture studies of Casey's June beetle for an on-going USFWS study in Palm Canyon Wash and Tahquitz Creek.

- Lockheed Martin Company, Remedial Action Project, Beaumont Site 1, Potrero Canyon, Riverside Co., CA, 2021. As part of a team, conducted vegetation assessments, mapping and mitigation monitoring in support of the project Habitat Monitoring and Mitigation Plan (HMMP).
- Lockheed Martin Company, Remedial Action Project, Beaumont Site 2, Laborde Canyon, Riverside Co., CA, 2017-2021. As part of a team, conducted vegetation surveys and monitoring, nesting bird surveys, nest monitoring, preconstruction clearance surveys and mapping of Stephens' kangaroo rat, western spadefoot toad, burrowing owl, assessments and mitigation monitoring in support of the project HMMP for the project. Results included the detection of active red-tailed hawk nests, coastal California gnatcatcher, coastal cactus wren, rufous-crowned sparrow, Stephens' kangaroo rat, western spadefoot toad, Belding's orange-throated whiptail and roosting bats in various portions of the project.
- City of San Bernardino Department of Public Works, Environmental Management Division, Delhi Sands Flower-loving Fly Surveys, San Bernardino, San Bernardino Co., CA, 2017. Served as lead biologist conducting a habitat assessment, vegetation mapping and focused surveys for the Delhi Sands flower-loving fly at the 4.25-acre Randall Basin Preserve in San Bernardino. The efforts resulted in 13 observations of the species, including the detection of the species excuviae (pupal skin) conclusively documenting that habitat conditions on-site are currently suitable for egg laying, incubation, larval development and metamorphosis.
- California Department of Transportation (Caltrans), District 8, SR-58 Hinkley Realignment Project and SR-58 Kramer Junction Project: Focused Surveys for Desert Tortoise for 7 Proposed Mitigation Sites, Mojave Desert, San Bernardino County, CA, 2017. Part of a team of biologists conducting focused surveys for desert tortoise on seven parcels totaling approximately over 1500 acres proposed as mitigation sites for unavoidable incidental take of desert tortoise and/or desert tortoise habitat on the SR-58 Hinkley Realignment Project and SR-58 Kramer Junction Project. Surveys resulted in the detection of a total of 3 live desert tortoises, many burrows, scat, carcasses and one set of tortoise tracks.
- Caltrans, SR-395 Widening and Improvement Project Focused Surveys for Desert Tortoise for Proposed Translocation Recipient Sites, Mojave Desert, San Bernardino County, CA, 2017. Part of a team of biologists conducting focused surveys for desert tortoise on five parcels totaling approximately 1600 acres proposed as translocation recipient sites as mitigation for unavoidable incidental take of desert tortoises on the proposed SR-395 Widening and Improvement Project. Surveys resulted in the detection of a total of 7 live desert tortoises, many burrows, scat, tracks, carcasses and eggshell fragments.
- City of La Quinta, Temporary Peninsular Bighorn Sheep Barrier Installation Project, La Quinta, Riverside County, CA, 2017-2018. Lead biologist, supervising, managing, overseeing and administering the project WEAP, pre-construction clearance surveys, biological compliance monitoring and Migratory Bird Treaty Act (MBTA) nesting bird avoidance for the installation of the temporary bighorn sheep barrier along the mountain-urban interface between the undeveloped open space of the Santa Rosa Mountains and the developed areas of the City of La Quinta.



Planning for Biodiversity: Bringing Research and Management Together, 2000

Workshop on Year 2000 Draft Quino Checkerspot Butterfly Survey Protocol, 1999

Current Research on Herpetofauna of the Sonoran Desert, 1999

Desert Tortoise Council Techniques Workshop, 1993-1999

Status and Biology of the Quino Checkerspot Butterfly, 1998

Herpetology of the Californias: First Annual Symposia in honor of Lawrence Klauber, 1998

Declining Amphibians and Reptiles in California II, 1998

Quino Checkerspot Butterfly Seminar, 1998

Desert Tortoise Council Symposium, 1994-1998

Declining Amphibians and Reptiles in California, 1997

The Quino Checkerspot/Butterfly Identification Workshop, 1997

Empidonax traillii extimus in California: The Willow Flycatcher Workshop, 1995

Desert Lands Rehabilitation Workshop, 1995

Biology and Management of Sensitive Amphibians and Reptiles of Central

- City of La Quinta, Peninsular Bighorn Sheep Barrier Project, La Quinta, Riverside County, CA, 2016. As part of a team of biologists, conducted field surveys and authored the project biological resources assessment, with special emphasis on the Peninsular bighorn sheep, for a proposed barrier to bighorn along the mountain-urban interface between the undeveloped open space of the Santa Rosa Mountains and the developed areas of the City of La Quinta. The field surveys resulted in the detection of Peninsular bighorn sheep, black-tailed gnatcatcher and vermillion flycatcher.
- Caltrans, SR-58 Widening and Realignment Project Focused Surveys for Desert Tortoise for Proposed Translocation Recipient Sites, Hinkley, San Bernardino County, CA, 2014. Part of a team of biologists conducting focused surveys for desert tortoise on three parcels (2 separate sites) totaling 1094 acres proposed as translocation recipient sites as mitigation for unavoidable incidental take of desert tortoises on the proposed SR-58 Widening and Realignment Project. Surveys resulted in the detection of a total of 39 live desert tortoises of all age classes, 532 tortoise burrows of all age classes (including pallets and rock shelters), 936 tortoise scats of all age classes, 90 occurrences of tortoise tracks, 46 tortoise carcasses of all age classes, 2 drinking depressions and 5 occurrences of tortoise eggshell fragments.
- City of Pasadena Parks & Recreation District, Arroyo Seco Master Plan General Herpetological Inventory and Focused Sensitive Species Surveys, Pasadena, Los Angeles Co, CA, 2001-2004. Supervised, managed, and conducted habitat suitability assessments for sensitive herpetofauna, a general herpetological inventory, and protocol focused surveys for the arroyo toad, mountain yellow-legged frog, California red-legged frog, southwestern pond turtle and San Diego coast horned lizard within the Arroyo Seco, a tributary of the Los Angeles River. Methodologies employed included diurnal and nocturnal eye-shine visual encounter surveys, diurnal larval and egg mass searches, periodic silent listening for calling individuals and night driving. Although the survey efforts for the target species ended with negative results, a total of 14 species including 4 sensitive species (i.e., Coast Range newt, coastal western whiptail, two-striped garter snake and San Bernardino Mountain kingsnake) were detected by this study.
- City of Pasadena Parks & Recreation District, Descanso Gardens Nature Trail, Pasadena, Los Angeles, Co, CA, 2001-2004. Lead biologist, conducting special status species surveys and monitoring for the proposed siting and development of a new pedestrian, equestrian and bike trail through an area of undeveloped natural open space adjacent to Descanso Gardens. Efforts resulted in the mapping and avoidance of impacts to populations of Plummer's mariposa lily and protected oak trees. A study of potential equestrian-spread invasive and noxious plant species was also conducted.
- The Wildlands Conservancy, San Bernardino National Forest/California State Park Parcel Exchange Project, San Bernardino National Forest, San Bernardino County, CA. Conducted comprehensive wildlife surveys and habitat evaluations of several parcels considered for exchange from/to the U.S. Forest Service and California State Parks system.
- SFPP, L.P., Operating Partnership for Kinder Morgan Energy Partners and CalNev Pipeline Company, L.L.C., Habitat Conservation Plan for Delhi Sands Flower-loving Fly, Colton to Ontario, San Bernardino Co., CA, 2013. Developed and co-authored a draft HCP for the Delhi Sands flower-loving fly at the Colton Terminal and associated pipeline facilities totaling approximately 50 miles of linear pipeline easements in Colton, Rialto, and Ontario. Managed



MICHAEL WILCOX SENIOR BIOLOGIST

and Southern California, 1994

Second Annual Horned Lizard Conference, 1994

Second Annual Tropical Deciduous Forest Symposium, 1994

Professional associations

Partners in Amphibian and Reptile Conservation

The Wildlife Society

Southwestern Herpetologists Society

Society for the Study of Amphibians and Reptiles

Desert Tortoise Council

Friends of the University of California, Riverside Entomological Research Museum

National Audubon Society

California Botanical Society

California Native Plant Society

Languages

English

Office location

Riverside

and conducted focused surveys for the Delhi Sands flower-loving fly, general biological assessments, mitigation monitoring, and habitat restoration activities for SFPP, L.P.'s facilities located at the Colton Terminal and within the Colton Dunes.

Southern California Edison Company (SCE), Habitat Conservation Plan, Inland Empire, San Bernardino and Riverside Counties, CA, 1999. Supervised and managed a team of up to 12 biologists for a two-year period conducting habitat assessments and focused surveys for the Delhi Sands flower-loving fly in support of the development of a multi-species HCP for Southern California Edison's transmission line easements and associated properties throughout the Colton Dunes in the Inland Empire.

- U.S. Forest Service, Angeles National Forest Ranger District, Angeles National Forest Arroyo Toad Surveys, Los Angeles County, CA. Conducted habitat assessments and focused surveys for the arroyo toad throughout 9 drainage systems containing potentially suitable and in historically occupied habitat within the Angeles National Forest. The focused survey efforts resulted in the detection of the species in one of the drainages surveyed and the discovery of a previously unknown population of the California red-legged frog.
- U.S. Forest Service, San Bernardino Ranger District, San Bernardino National Forest Mountain Yellow-legged Frog Surveys, San Bernardino County, CA. Conducted habitat assessments and focused surveys for the mountain yellow-legged frog throughout 14 drainage systems in historically occupied habitat within the San Bernardino National Forest resulting in the rediscovery of the species in the San Bernardino Mountains where they had been previously reported to be extirpated.
- U.S. Forest Service, San Bernardino Ranger District, San Bernardino National Forest Arroyo Toad Surveys, San Bernardino County, CA. Conducted habitat suitability assessments and protocol focused surveys for the endangered arroyo toad in selected drainages, totaling approximately 6 miles, in the San Bernardino National Forest, San Bernardino County, California. Methodologies employed included diurnal and nocturnal eye-shine visual encounter surveys, diurnal larval and egg mass searches, and periodic silent listening for calling individuals. The survey efforts resulted in the detection of arroyo toads within several of the focused survey areas and the rediscovery of the species in the Mojave River.
- Riverside Land Conservancy (RLC), Hayfield Wash: APN 709-500-021-4, Colorado Desert, Riverside County, CA, 1995. Oversaw, coordinated and conducted focused surveys for desert tortoise on a 25-acre parcel proposed by the RLC to be used for conservation. Also trained RLC staff and volunteers how to survey for, identify and interpret desert tortoise sign.

Department of Defense

 CAPE Environmental Management, Inc., Naval Air Weapons Station (NAWS) China Lake, Base-wide Groundwater Monitoring Well Repairs/Replacement and Landfill Cover Repair, NAWS China Lake, Kern County, CA, 2021-2022. As part of a team of biologists conducted site assessments, clearance surveys and biological monitoring at existing and proposed new groundwater well development sites base-wide at NAWS China Lake.

- Naval Facilities Engineering Systems (NAVFAC)Southwest, Munitions Response Program, Sites 1, 3 & 4, NAWS China Lake, Kern County, CA, 2020-2022. As part of a team of biologists conducted site assessments, pre-construction clearance surveys and biological monitoring for geotechnical drilling, soil and water sampling at several former shooting ranges and munitions testing sites base-wide at NAWS China Lake.
- Terra Nova Planning & Research, Inc., Water Treatment Plant Project at MCAGCC
 Twentynine Palms, San Bernardino, Co, CA. 2021. Administered project WEAP, conducted pre-construction clearance surveys and biological monitoring for the proposed development of a water treatment plant on-base.
- Naval Weapons Station Seal Beach Detachment Norco Bullfrog and Red-eared Slider Removal Project, Norco, Riverside County, CA, 2012. Authored and implemented the Work Plan which included focused surveys, live capture and removal of non-native bullfrogs and red-eared sliders from Lake Norconian and four smaller ponds located on the Naval Weapons Station grounds. Authorized by California Department of Fish & Game (CDFG) to live trap, handle, transport and rescue exotic turtles (i.e., red-eared slider); live trap, handle, temporarily hold in captivity (as necessary) and release southwestern pond turtles incidentally captured; and capture, kill and properly dispose of bullfrogs. Survey and capture methodologies authorized include diurnal visual encounter surveys and live bait trapping, nocturnal eye-shine surveys, dip net, seine, gig, Hawaiin sling, spear and air rifle/pistol.
- Nevada Army National Guard Readiness Center, Nevada Army National Guard, Las Vegas, Clark Co, NV, 2010. Conducted focused surveys for special status species, including desert tortoise and burrowing owl, as well as a general biological inventory for the proposed expansion of the Nevada Army National Guard Readiness Center in Las Vegas, NV.
- NAWS China Lake, Current Status of the Mohave Ground Squirrel, Kern Co, CA, 2008. As
 part of a team of biologists and students, assisted Phil Leitner with focused live trapping of
 the Mohave ground squirrel at NAWS China Lake.
- Vandenberg Air Force Base (AFB), Missile Transport Bridge Project, Vandenberg AFB, Santa Barbara Co, CA, 2002-2003. As part of a team of biologists, conducted focused surveys, capture, and relocation of California red-legged frogs, two-striped garter snakes and southwestern pond turtles, seine netting and relocation of the unarmored three-spine stickleback, exclusion fence construction and maintenance, construction monitoring and environmental compliance training.
- Kinder Morgan Energy Partners, Camp Pendleton Marine Corps Air Station Road Improvement Project, San Diego Co, CA. Provided biological monitoring for the improvement of base road infrastructure. Sensitive biological resources monitored included the Pacific pocket mouse, coastal California gnatcatcher and participated in bullfrog eradication as mitigation for the endangered arroyo toad.
- Edwards AFB, Base-wide Inventory of Reptiles and Amphibians, Kern Co, CA. Participated in a two-year base-wide inventory of the reptiles and amphibians of Edwards AFB. Survey methodologies included diurnal visual encounter surveys, cover boards, night driving, and nocturnal eye-shine searches for amphibians, Edwards AFB.

- Edwards AFB, Leuhman Ridge Rocket Test Site, San Bernardino County, CA, 1995.
 Conducted focused surveys, handling, processing, artificial burrow construction, and relocation of desert tortoises at Edwards AFB, Kern County, CA.
- March AFB Wetland Mitigation Project, Moreno Valley, Riverside Co, CA. 1995. Designed, implemented, and monitored the development of a wetland (pond 6B') as mitigation for impacts to other on-base wetlands.

Renewable Energy

- SCE, Garnet Solar Power Generation Station 1 and Electrical Power System Tie-in, Hanwha Q-CELLS USA, Palm Springs, Riverside Co, CA, 2014. As part of a team of biologists, conducted preconstruction clearance surveys (for Coachella Valley fringe-toed lizard, desert tortoise, burrowing owl, and nesting birds), mitigation monitoring and administered Worker Environmental Awareness training for onsite personnel for the development, installation, and implementation of a new solar power generation station and installation of electrical power poles and lines connecting the facility to SCE's existing electrical power transmission lines in the San Gorgonio Pass area for the life of the project.
- enXco, Desert Harvest Solar, Colorado Desert, Riverside Co, CA, 2010. Conducted special status biological resources assessments and focused surveys (i.e., desert tortoise and rare plants), vegetation mapping and authored the technical report for a proposed 100 mega-Watt renewable energy power plant incorporating First Solar's thin-film photovoltaic panels on 1,070-acres of public lands in the Colorado Desert of southeastern CA.
- enXco, McCoy Soliel Solar, Colorado Desert, Riverside Co, CA, 2010. Conducted special status biological resources assessments and focused surveys (desert tortoise and rare plants), vegetation mapping and authored the technical report for a proposed 300 mega-Watt renewable energy power plant incorporating First Solar's thin-film photovoltaic panels on 1,808-acres of public lands in the Colorado Desert of southeastern CA.
- Inland Energy, Palmdale Hybrid Power Project, Palmdale, Los Angeles Co, CA, 2009.
 Conducted biological surveys (i.e., Swainson's hawk and arroyo toad) for a 570-MW solar/natural gas hybrid power plant and its associated linear components (36-mile transmission line, 9-mile reclaimed water pipeline, 7-mile natural gas pipeline) in Palmdale, CA. Provided technical editing of the Biological Resources Technical Report (BRTR) and the Biological Resources section of the Application for Certification (AFC) for the California Energy Commission (CEC).
- ENSR, Victorville 2 Hybrid Power Plant, Victorville, San Bernardino Co, CA, 2007. Conducted and prepared comprehensive BRTR and BA for a 400+ acre hybrid power plant site and associated transmission lines and pipeline easements for this proposed power plant construction project Other tasks included overseeing an/or participating in focused desert tortoise surveys, focused burrowing owl surveys, focused surveys for rare plants, focused trapping surveys for Mojave ground Squirrel, vegetation and sensitive species mapping, identification and delineation of jurisdictional water courses, and identifying potential mitigation strategies. Regulatory agencies involved included CEC, USFWS, CDFG and U.S. Army Corps of Engineers (USACE).



DALE HAMEISTER

Senior Biologist

Years with the firm

5 (2019)

Years total

26 (1998)

Professional registrations

Certified Arborist (pending renewal)

Certified Wetland Delineation

Experienced GIS Technician

Office location

Riverside, CA

CAREER SUMMARY

Dale has over 24 years experience as a biologist, conducting botanical and wildlife surveys throughout California. He has extensive experience in conducting jurisdictional delineations and wetland assessments, as well as conducting focused protocol surveys for sensitive and listed species. Dale is also highly skilled in managing small to large-scale environmental compliance projects with active populations of threatened and endangered species.

EDUCATION

Bachelor of Science, Earth System Science and Policy, California State University, Monterey Bay 1998

PROFESSIONAL EXPERIENCE

- SoCal Gas PSEP Cactus City to Blythe: Conducted jurisdictional and wetland delineation, habitat mapping, and rare plant surveys for all work areas along SoCal Gas line from Cactus City to Blythe.
- SoCal Gas PSEP Newberry Springs to Needles: Conducted jurisdictional and wetland delineation, habitat mapping, and rare plant surveys for all work areas along SoCal Gas line from Newberry Springs to Needles.
- Caltrans I-40 Colorado River Bridge Rehabilitation Project: Conducted a rare plant survey and habitat mapping over 105 acres within California and Arizona at the Colorado River.
- Caltrans SR-18 Reline and Replace Culverts Project San Bernardino to Crestline: Conducted a rare plant survey, habitat mapping, biological surveys, and jurisdictional and wetland delineation for 21 Caltrans culvert replacement locations from San Bernardino to Crestline.
- Caltrans SR-18 Reline and Replace Culverts Project San Bernardino to Crestline: Conducted a rare plant survey, habitat mapping, biological surveys, and jurisdictional and wetland delineation for 38 Caltrans culvert replacement locations from Big Bear Lake to Lucerne Valley.
- Los Angeles Department of Sanitation, Lancaster, CA: Mr. Hameister, along with a team
 of biologist conducted rare plant surveys over several hundred acres near Lancaster, CA.
 Lancaster milk vetch (*Astragalus preussii var. laxiflorus*) was observed and recorded for the
 first time in 27 years.
- Ames Construction, I-15/Mojave River Bridge Crossing: Mr. Hameister was the principal biological monitor during construction activities to protect sensitive riparian birds, Mojave River Vole, and sensitive fish species. Following initial vegetation removal and soil disturbance, Dale completed spot checks twice a week during construction. Additional monitoring was completed for work in the water. Turbidity fencing and exclusion fencing were utilized to protect sensitive fish species and were inspected during each site visit.



— **Kinder Morgan ILI Pipeline Repair:** Conducted rare plant surveys, biological surveys, and rare plant surveys at multiple locations from Riverside to State Line, Nevada.

PREVIOUS EXPERIENCE

Before joining WSP, Dale's experience included:

- Department of Water Resources (DWR) Lake Perris Dam Remediation Project, Perris, CA: Dale conducted construction monitoring, clearance surveys, nesting bird surveys, mapped nest locations, and conducted biological monitoring for several sensitive species including least Bell's vireo, Stephens' kangaroo rat, Los Angeles pocket mouse, and bald eagle. Dale served as the project biologist for the duration of the 4-year project. This included monitoring over 20 least Bell's vireo nests, 6 red-tail hawk nests, 2 Cooper's hawk nests, and 1 bald eagle nest as well as many other nests of passerine species. Dale also conducted environmental training for a large crew of over 200 contractors and DWR staff.
- DWR Oak Valley Mitigation Project, Calimesa, CA: Conducted biological monitoring for several sensitive species including least Bell's vireo. Dale also acted as the construction inspector during the planting period of the project for DWR. Monthly monitoring of planting performance and maintenance requirements were conducted by Mr. Hameister for three years following project installation.
- City of Los Angeles Wildlife Movement Pathways: Conducted field surveys to analyze
 potential wild movement corridors between blocks of habitat within the City of Los
 Angeles.
- First Solar, Dry Lake Project Desert Tortoise Survey, Nevada: Conducted protocol surveys for desert tortoise in Nevada for large solar project over 2 months with a large team of biologists.
- Dana Point Harbor Tree Inventory, Dana Point, CA: Dale conducted arborist surveys, tree inventory, health assessment, and nesting bird surveys for trees in public areas of Dana Point Harbor.
- Walmart, Yucca Valley, CA: Dale conducted biological assessment, burrowing owl surveys, desert tortoise surveys, arborist surveys, tree inventory, and health assessment for over 100 Joshua trees. Dale monitored the relocation of Joshua trees during construction and then placement in the project landscaping areas.
- Runkle Canyon Specific Plan, Simi Valley, CA: Dale monitored the moving of selected oak, and removal of oaks and brush areas. Dale did spot checks on health of boxed trees and monitored the installation of oaks after grading was completed. Dale has also conducted vegetation cover surveys within the restoration over several years.

Emily Urquidi Entry Level Biologist

Years with the firm

3 (2021)

Years total

3 (2021)

Trainings

Certified HAZWOPER 40-Hour

Desert Tortoise Council Introductory course certified

Languages

English

Office location

Riverside, CA

CAREER SUMMARY

Emily Urquidi is an entry-level biologist currently pursuing a master's degree at California State University, San Bernardino. She has participated in several biological resource surveys throughout California during her first year as a biological consultant.

Ms. Urquidi has completed storm water sampling, mark and recapture surveys for an endangered beetle in Palm Springs, assisted in fairy shrimp surveys with a permitted senior biologist, and conducted vegetation sampling in a large riparian area. She is familiar with vegetation transects, stacked cube methods, and stem water potential monitoring. She has been trained to complete basic construction monitoring tasks. Ms. Urquidi is currently an on-call biologist for Wood in the Riverside Office.

EDUCATION

| B.S., Biology, California State University, San Bernardino | December 2020 |
|--|---------------------|
| M.S., Biology, California State University, San Bernardino (in-Progress) | Estimated: May 2023 |

PROFESSIONAL EXPERIENCE

Lockheed Martin, Beaumont 1 & 2 (2021 to Present)

Provide biological resources assistance within Potrero and Laborde Canyon. Assisted in HMMP monitoring at Potrero (site 1)/Laborde canyon (site 2), including surveys for invasive flora and nesting birds ahead of annual MEC inspections and vegetation removal activities. Assisted in surface water monitoring following rain events. Performed routine OMM maintenance and inspections for the groundwater extraction and treatment system. Performed regularly scheduled inspections at the landfill on site including monitoring for erosional damage, previously graded areas, and drainage systems.

San Bernardino County Stormwater Program, Stormwater Sampling & Monitoring Services (2021-Present)

Assists in water sampling and testing on sites throughout western San Bernardino County. She is responsible for collecting water samples, measuring pH, temperature, turbidity, oxidation reduction potential, and conductivity. She also maintains the required documents and assists in sample delivery.

Riverside County Flood Control District, Casey June Beetle Mark and Recapture Study (2021-Present)

Assisted in completing 2021 and 2022 Mark and Recapture Study to document the population dynamics at two mitigation monitoring sites for the United States Fish and Wildlife Service. Activities included setting up and manning several black-light traps. Beetles collected during the study were marked to identify the recapture locations as well as identify those beetles that travel throughout the study area. Casey's June beetle is one of the rarest beetles in California and is only known from a few locations in the southern and western portion of the Coachella Valley. She was partnered with a

permitted Wood senior biologist to complete the mark and recapture study but was responsible for monitoring her own individual traps.

Los Angeles County Sanitation Districts, San Gabriel River Adaptive Management Plan, Los Angeles County, CA (2020-Present)

Performed stem water potential surveys and stem water potential data gathering within and around the San Gabriel River channel in support of ongoing research on potential habitat impacts to least Bell's vireo. Surveys were conducted alongside a senior biologist and included stem water potential measurement collection for 96 individual trees.

Webb Development, Tres Cerritos, Riverside County CA (2022)

Performed MSHCP compliant fairy shrimp wet season surveys alongside a USFWS permitted biologist in Hemet, CA throughout the 120 day duration of surveys as part of development assessment. Responsibilities included field data collection from monitored pools, GIS mapping of pools meeting surveying criteria, and sample collection.

Corona Clay Company, Corona Clay, Riverside County CA (2022)

Performed MSHCP compliant fairy shrimp wet season surveys alongside a USFWS permitted biologist in Corona, CA throughout the 120 day duration of surveys as part of permitting efforts for prior development. Responsibilities included field data collection from monitored pools, GIS mapping of pools meeting surveying criteria, and sample collection.

Webb Development, Riverwoods, Riverside County CA (2022)

Performed MSHCP compliant fairy shrimp wet season surveys alongside a USFWS permitted biologist in Perris, CA throughout the 120 day duration of surveys as part of development assessment. Responsibilities included field data collection from monitored pools, GIS mapping of pools meeting surveying criteria, and sample collection.

Falcon Engineering, Santa Gertrudis Trail, Temecula CA (2022)

Performed environmental and biological compliance monitoring throughout nesting bird seasons, scheduling of Wood staff to perform requisite site visits, and interfacing to assist with environmental recommendations throughout project duration.

PUBLICATIONS & PRESENTATIONS

Presentations

"Quantifying Southern Pacific Rattlesnake (*Crotalus oreganus helleri*) Hunting Behavior through Community Science" Joint Meeting of Ichthyologists and Herpetologists virtual meeting: 2021

"Quantifying Southern Pacific Rattlesnake (*Crotalus oreganus helleri*) Hunting Behavior through Community Science" Southwest Regional Meeting of Organismal Biologist, Orange, CA 2021 "Effects of Urbanization on Western Fence Lizard (*Sceloporus occidentalis*)" Southern California Academy of Sciences Fullerton, CA, 2022

"Quantifying Southern Pacific Rattlesnake (*Crotalus oreganus helleri*) Hunting Behavior through Community Science" Animal Behavior Society, San Jose, CR 2022

Publications

"Quantifying Southern Pacific Rattlesnake (*Crotalus oreganus helleri*) Hunting Behavior through Community Science" Urquidi, Emily R., and Breanna J. Putman. 2021. **Diversity** 13, no. 8: 349. https://doi.org/10.3390/d13080349

wsp

KYRALAI DUPPEL Assistant Consultant, Environmental Scientist

Education

BS, Society & Environment, Minors in GIS and Sustainable Design University of California, Berkeley 2022

Certifications

PADI Advanced Diver

PADI Rescue Diver

Areas of practice

Coral Reef Restoration

Biological surveying

Mangrove Reforestation

Food Systems

Fisheries

Marine and Aquatic Ecology

Environmental Justice

GIS

Cartography

Remote Sensing

Languages

English

Spanish

German

Publications

The Intersection of Labor Abuses and Environmental Degradation in the Global Fishing Industry: Extent and Potential Solutions

Expanding CalEnviroScreen as a Tool for Environmental and Public Health Resilience

CAREER SUMMARY

Kyralai is a motivated early career professional with an interdisciplinary background covering marine and aquatic ecology, biology, environmental justice, policy, and geospatial technologies. She has worked both remotely and in person in nonprofits, startups, consulting, and as an academic researcher, resulting in strong communication, teamwork, and independency skills. As a marine research assistant at SORCE, Kyralai scuba dove daily to assist in coral reef restoration and megafauna surveys. She built artificial reefs, maintained coral nurseries, and surveyed transects to identify damage to reefs. As a student, Kyralai was part of multiple research groups. She supported a PhD student in the College of Natural Resources by analyzing satellite imagery in Google Earth Pro to determine land use change in the Caribbean before and after a hurricane. She also created a year-long undergraduate project with Berkeley Law resulting in a research paper discussing the potential use of CalEnviroScreen as a tool for public health emergencies which she co-authored. To support her thesis, Kyralai created a GIS project with the Kelly Lab in order to show the future demand, supply, and deficit of global tuna using ArcGIS Pro in order to communicate the need for better fisheries management and policy. Her thesis discussed labor and environmental issues within the global fishing industry, efforts to mitigate them, as well as possible solutions. The final paper was published by the nonprofit, Human Rights at Sea.

PROFESSIONAL EXPERIENCE

- Sustainable Agriculture Education (SAGE), Berkeley. Worked as a Project Associate during and after completing undergraduate degree. Led the 100+ Jobs project by reaching out to potential ambassadors, guiding them through the project, video editing, and website maintenance. Conducted research on regional and local agricultural and food systems to assess their economic impact, local educational resources and potential educational opportunities. Assisted in writing reports by drafting language about ecosystem services relating to food systems, economic activity and impact generated by agriculture and food systems, as well as outlining educational resources relating to food systems. Worked as a hiring manager and assisted in onboarding new team members.
- SORCE, Lombok. Marine Research Assistant. Maintained coral nurseries by cleaning algae from them while scuba diving. Built artificial reefs by casting MARS blocks and dropping them in restoration sites. Planted corals from nurseries into dropped blocks. Collected mangrove propagates and seeds and replanted them in deforested sites. Conducted megafauna surveys of turtles and sharks and entered sightings into database. Identified individual turtles using software to recognize unique shell patterns.
- Honors Thesis: The Intersection of Labor Abuses and Environmental Degradation in the Global Fishing Industry: Extent and Potential Solutions, Berkeley. Conducted research for over a year on the connection between labor and environmental violations within the global fishing industry. Research included a literature review, interviews with experts, and proposals for solutions. International, national, corporate, and nongovernmental efforts and shortcomings were reviewed and analyzed. Analysis was used to inform policy proposals on the international, national, and corporate levels. Main findings included the need to cut subsidies for offshore fishing and redirect them towards rebuilding national nearshore fisheries to create not only healthier ecosystems to support fisheries but other economic



opportunities, such as tourism and recreation. Final output was a research paper and presentation at the College of Natural Resources Honors Symposium.

- Kelly Lab, Berkeley. Undergraduate Research Apprentice. Created a research project to project the global demand, supply, and deficit of global tuna stocks. Used catch data for the family Thunnidae acquired from Sea Around Us and economic trends to create maps for present day, 2030 and 2050 in ArcGIS Pro. Results were used to support the suggestion in honors thesis to improve fisheries management and policies, particularly reducing subsidies for offshore fishing.
- College of Natural Resources, Berkeley. Undergraduate research apprentice. Used Google Earth Pro to analyze satellite imagery in the Caribbean, determining land use changes over time and after hurricanes.
- Berkeley Law Center for Law, Energy & Environment, Berkeley. Undergraduate research apprentice. Lead a research team of undergraduates in compiling a database of resources relating to COVID-19 and environmental justice. Co-authored a research paper discussing how CalEnviroScreen can be used in the future as a resource during and to prepare for public health emergencies, particularly by better preparing health and environmentally disadvantaged communities.
- Seqana, Berlin. Intern. Wrote blog posts on the importance of soil carbon sequestration and the role of remote sensing in monitoring soil carbon sequestration as well as communicating technical work to the general public. Blog posts included Carbon Farming & Satellite Imagery, The Power of Grasslands, The 3 Challenges of NCS, and Seqana Data Transfer App. Created mock ups for website redesign using Canva and Balsamiq.
- Reeflife Foundation, Remote. Science intern. Lead identification of marine organisms colonizing installed artificial reefs in the Caribbean project site. Authored a portion of scientific research paper that discussed the socioenvironmental benefits of healthy coral reefs which can be restored through artificial reef installation.
- Center for Environmental Health, Oakland. Research assistant. Conducted research on products suspected of violating CA Prop 65. Tested products for contaminants using XRF machine. Maintained database of tested products and researched new products to investigate.
- Paia Consulting, Singapore. Intern. Conducted research on the alignment of Singaporean companies with Sustainable Development Goals and GRI Standards. Investigated best practices regarding forestry and palm oil production in neighboring countries. Translated findings into spreadsheets, presentation decks and blog posts. Conducted final research presentation on the efforts of Singaporean companies towards supporting SDG 13: Life Underwater.

MELANIE BUKOVAC

Wildlife Biologist

Years with the firm

2 (2022)

Years total

2(2022)

Trainings

eRailSafe Badged Contractor

BNSF Railway Contractor Safety Orientation

Certified HAZWOPER 40-Hour

Languages

English

Office location

Riverside, California

CAREER SUMMARY

Melanie Bukovac is an entry-level wildlife biologist at WSP. She has a B.S. in Biology from the University of California, Riverside. Melanie's education includes coursework in Plant Biology, Entomology, Paleobiology & Paleoecology, and Restoration Ecology. She also did research lab work for a year within the Department of Botany and Plant Sciences, while attending UCR. Melanie is currently a full-time biologist for WSP based out of the Riverside office. Her key responsibilities include preparing documents, data collection and data entry, conducting field surveys and construction monitoring. Melanie has participated in nest monitoring, storm water sampling, Burrowing Owl and rare plant surveys, restoration site monitoring and maintenance, and Casey's June Beetle surveys.

EDUCATION

Bachelor of Science, Biology, University of California, Riverside (UCR)

2019

PROFESSIONAL EXPERIENCE

- Falcon Engineering, Hamner Avenue Bridge, Norco, California. 2020 present (ongoing): Melanie is the biological monitor implementing environmental oversight for this bridge replacement project. The existing two-lane Hamner Avenue Bridge over the Santa Ana River is being replaced with a new four-lane, higher bridge to improve capacity and prevent flooding. Responsibilities included environmental compliance monitoring and nest monitoring.
- Southern California Gas Company, Line 4000, San Bernardino County. 2023: Melanie was part of the WSP team conducting biological resource surveys on the 30-mile section of Line 4000 within the western portion of San Bernardino County. Activities include conducting biological resources assessments, mapping Joshua trees and cactus, and documenting desert tortoise habitat.
- Willow Rock Project, Hydrostor Inc. Rosamond, California. 2023. She provided construction monitoring for a geo-tech drilling program to identify the depth of bedrock. She provided a Worker Environmental Awareness Program training.

— Stormwater Sampling & Monitoring Services, San Bernardino County Stormwater Program, San Bernardino County, CA (Mar 2022-Present)

Melanie assists in conducting storm water sampling and monitoring on multiple sites throughout the western San Bernardino and Riverside counties. She is responsible for collecting water samples, measuring pH, temperature, turbidity, oxidation reduction potential, and conductivity. She also assists in filling out the chain of custody forms and delivering the water samples to the testing facility.

— Citrus Distribution Center Restoration Site, Riverside, CA (Mar 2022-Present)

Participates in restoration site monitoring and periodically conducts non-native plant species removal throughout the riparian restoration area.

Burrowing Owl Clearance Survey, Continental East Development, Moreno Valley, CA (Mar 2022)

Assisted a senior biologist in conducting a Burrowing Owl clearance survey within a residential construction project site for Continental East in Moreno Valley.

— Paleontological Monitor, Granite, Jurupa Valley, CA (Mar – Apr 2022)

Assisted with the paleontological monitoring of the road construction project at Jurupa Rd & Van Buren Blvd in Jurupa Valley. The project consisted of reconfiguring Jurupa Rd to cross underneath the existing railway that runs alongside Van Buren Blvd, to improve traffic flow. Responsibilities included monitoring excavation activities for any paleontological/cultural discoveries.

 Casey's June Beetle Mark and Recapture Study, Riverside County Flood Control District/USFWS, Palm Springs, CA (Apr 2022 – May 2022)

Melanie assisted in completing the 2022 Mark and Recapture Study to document population sizes and dynamics at a mitigation monitoring site for the United States Fish and Wildlife Service. Activities included setting up and manning several black-light traps. Beetles collected during the study were marked to identify the recapture locations as well as identify those beetles that travel throughout the study area. Casey's June beetle is one of the rarest beetles in California and is only known from a few locations in the southern and western portion of the Coachella Valley. She was partnered with permitted Wood senior biologists to complete the mark and recapture study.

 Burrowing Owl & Rare Plant Surveys, Sewer Pipeline Proposal - City of Twenty-nine Palms, Twenty-nine Palms, CA (Apr 2022)

As part of the Wood team, Melanie assisted with conducting burrowing owl surveys and rare plant surveys across the city of Twenty-nine Palms for their proposed city-wide sewer line project.

Biological Monitor, The CalNev Pipeline, Kinder Morgan, Rialto/Barstow, CA (Jun 2022)

Melanie has served as a biological monitor on various pipeline repair dig sites for Kinder Morgan along the CalNev Pipelines. These sites included monitoring for the presence of San Bernardino Kangaroo Rat in Rialto, and the presence of Desert Tortoise on site in Barstow.

Biological & Compliance Monitor, Santa Gertrudis Trail Project, Falcon Engineering, Temecula, CA (Jun 2022 – Present)

Provides biological and compliance monitoring for Falcon Engineering on the Santa Gertrudis Trail Project in Temecula. Duties include monitoring for nesting bird activity, as well as ensuring compliance with environmental permitting during the construction of the Santa Gertrudis Creek Trail within the wash.

— Fairy Shrimp Soil Sampling, Corona/Perris, CA (Jun – Jul 2022)

Melanie served as a field assistant for the dry season's Fairy Shrimp soil sample collections across two different sites. She assisted a permitted senior biologist with bagging, labeling, and recording the hundreds of soil samples that were taken in dried fairy shrimp pools.

— Beaumont Site 1 & 2, Lockheed Martin, Beaumont, CA (Jun 2022 – Present)

Provides biological resources assistance within Potrero and Laborde Canyon. Assists in HMMP monitoring at Potrero (site 1)/Laborde canyon (site 2), including surveys for invasive flora and nesting birds ahead of annual MEC inspections and vegetation removal activities. Performs routine OMM maintenance and inspections for the groundwater extraction and treatment system.

SR 79 Temecula Creek Bridge Repair, Beador Construction Company Inc., Temecula, CA (Aug 2022 – Sep 2022)

Completed the Pre-Construction Clearance Surveys and monitored the construction activities to ensure that no least Bell's vireo (LBVI) individuals were impacted or otherwise harmed during construction activities.

— San Gabriel River Adaptive Management Plan, Los Angeles County Sanitation Districts, Los Angeles County, CA (Sep 2022 - Present)

Performed stem water potential surveys and stem water potential data gathering within and around the San Gabriel River channel in support of ongoing research on potential habitat impacts to least Bell's vireo. Surveys were conducted alongside a senior biologist and included stem water potential measurement collection for 96 individual trees.



PHILIP CLEVINGER

Monitor/Biologist

| Years with the firm | CAREER SUMMARY | |
|------------------------|--|------|
| 15 (2009) | | |
| Years total | Mr. Clevinger is biologist with more than 13 years of experience conducting biological stud and environmental monitoring services throughout southern California. He has provided | lies |
| 15 (2009) | environmental monitoring services for a variety of public and private sector projects locate | |
| Expertise | within the arid western Mojave Desert region. Monitoring activities have included clearance surveys for sensitive species (such as the Desert Tortoise), nesting bird surveys, and genera | |
| Biological Monitoring | biological monitoring. He has also provided stormwater best management practice | |
| Protocol Level Surveys | (BMP)compliance monitoring. | |
| Languages | EDUCATION | |
| English | Associates Degree, Liberal Arts, Victor Valley Community College | 20 |
| Office location | | |
| Riverside, California | B.S., Biology, California State University at San Bernardino (CSSB) | 20 |
| | | |

PROFESSIONAL EXPERIENCE

- Stormwater Sampling & Monitoring Services, San Bernardino County Stormwater Program, San Bernardino County, CA (Mar 2022-Present) Mr. Clevenger assists in conducting storm water sampling and monitoring on multiple sites throughout the western San Bernardino and Riverside counties. He is responsible for collecting water samples, measuring pH, temperature, turbidity, oxidation reduction potential, and conductivity. Also assists in filling out the chain of custody forms and delivering the water samples to the testing facility.
- Desert Tortoise Monitor, Caltrans, Kramer JCT TO 45, CA Conducted desert tortoise construction monitoring to protect species of concern including but not limited to, desert tortoise, burrowing owl, Mojave ground squirrel, desert kit fox, American badger, nesting birds. Daily awareness meetings with construction crew and contractors, daily site inspections of equipment and surrounding habitat for sensitive species. Was part of a team of biologist that completed daily monitoring for the first portion of the project, then transitioned to weekly spot checks for the remainder of the project.
- Southern California Gas Company, Line 2000 C Project, Riverside County, CA. Mr. Clevenger provided biological monitoring for desert tortoise in support of the Line 2000 C hydrotest project. This included, daily tortoise awareness meetings with construction crew and contractors, daily site inspections of equipment and surrounding habitat for the presence of desert tortoises.
- Mountain View Acres Storm Drain Project San Bernardino County, San Bernardino County Flood Control, San Bernardino County, California. Oversaw the monitoring of storm drain construction in an urban interface area supporting a state streambed, Joshua tree woodlands and migratory birds. Documented construction activities and ensured all regulatory requirements were fulfilled.

2003

2012



- Amethyst Detention/Stormwater Basin Project, Victorville, California. San Bernardino County Flood Control District is constructing Amethyst Basin (formerly known as Oro Grande Basin No. 9) with combined detention and stormwater recharge capabilities. The basin will include the construction of associated inlet and outlet structures, channels and/or closed conduits, transition structures, wingwalls, headwalls, cutoff walls, basin embankments, emergency spillways, and access roadways along tops of the embankments and around the basins and access ramps to the basin floor. Over a several month period, Mr. Clevinger provided general biological monitoring, clearance surveys for sensitive species and compliance monitoring for stormwater BMPs during excavation and construction of the basin. Monitoring activities were summarized on daily field monitoring sheets.
- Transmission Line Rating Remediation (TLRR) Program, Cal Cement-Monolith-Rosamond-Windfarm Project, Mojave, California. Southern California Edison (SCE) removed and replaced 63 poles, placed guy wires and transferred conductor and facilities to new poles located along Tehachapi Willow Springs Road and 65th Street, which is located within the Town of Mojave, California. The poles were located on SCE property adjacent to the road beds. Mr. Clevinger provided biological monitoring services for this pole replacement project which included pre-construction surveys of the project area for the presence- absence of Desert Tortoise (Gopherus agassizii) and other sensitive species. He also coordinated daily with the construction project manager and SCE biologists to identify and implement pre-construction surveys. Mr. Clevinger also presented a brief Worker Environmental Awareness Program (WEAP).
- Tehachapi Renewable Transmission Project, Southern California Edison, Los Angeles, Riverside, San Bernardino Counties, California. Participated in focused desert tortoise surveys, burrowing owl burrow surveys, and focused surveys for rare plant species potentially occurring in the vicinity of this proposed green energy project.

Statement of Qualifications

Dalton Stanfield

SCP ID: S-190040009-22018-001

Conduct protocol surveys for Mohave Ground Squirrel (*Xerospermophilus mohavensis***):** Dalton has conducted Mohave Ground Squirrel surveys since 2020 under the supervision of Dr. Philip Leitner Karla Flores. In 2022 Dalton did attend The Wildlife Society's Mohave ground squirrel workshop to further expand on his knowledge of the species and understand CDFW's goals and responsibilities with the species. Dalton has also had experience trapping for Stephens and San Bernardino Kangaroo rats under the supervision of Steven Chen. Dalton is also regularly utilized by Southern California Edison and its various consultants in surveying for suitable habitat for a variety of small mammals including Mojave ground squirrel, San Bernardino Kangaroo Rat, and Stevens Kangaroo Rat. Dalton has had 19 individual Mohave Ground Squirrel handling events, 20 field days of trapping including over 4000 traps checked, over 100 antelope ground squirrel handling events. He has spent countless hours performing habitat suitability assessments based on food plants, burrows, and known range.

Conduct nesting bird surveys and nest monitoring for native and non-native species for preconstruction surveys and biological monitoring of construction projects: Dalton has performed nesting bird surveys routinely since 2017, and surveys have increased in frequency and comprehensiveness since then. He has spent a decade engaging in recreational observation and scientific study of birds and is well-versed in identifying birds of western North America by sight and sound. Additionally, he is extensively experienced in locating nests through systematic searches and via behavioral cues and follows standard protocols for minimizing disturbance and reducing risks of nest predation. Dalton frequently works independently, but initially trained under Dr. Christopher M. Rogers when participating in undergrad research in 2014 Dalton has located well over 100 nests since his initial training. Nests found include waterfowl, raptors, owls, and songbirds, of a variety of species.

Capture and relocate non-listed vertebrates (amphibians, reptiles, small mammals) on an "out-ofharm's-way" basis: Dalton has performed "out-of-harm's way" relocations of a wide variety of small vertebrates, mostly small mammals, and reptiles, on a variety of construction monitoring projects since 2017. He is experienced in ethical capture and relocation methods and works effectively with work crews to ensure that the maximum possible number of vertebrates can be safely relocated. Dalton has handled and participated in health assessments on a variety of animals species including large carnivores, birds, owls, primates, reptiles, tortoises, large ungulates, rodents, and many more during his time as a zookeeper and animal handler at Tanganyika Wildlife Park and Tallahassee living museum. He has handled over 500 small mammals during a variety of live trapping studies, including ground squirrels, chipmunks, woodrats, kangaroo rats, and mice. Dalton Stanfield has also worked with a variety of native herptofauna including, California Tiger Salamander, Desert Tortoise, Arroyo Toad, Red-Legged Frog and Coachella Valley Fringe-toed Lizard. Small mammals (and incidentally, reptiles and amphibians) have been captured in Sherman-, Tomahawk-, Pima-Tuning-style live traps, and pit-fall traps during research projects. Captures for "out-of-harm's-way" relocations have been by hand, sweep net, or snake tongs, depending on the species.

Project: Hesperia Commerce Center/I-15 Industrial Park

Position: Field Assistant

Years Worked: 2021: 2 days of field work (400 Trapping Events) 2020: 13 days of field work (2600 Trapping Events) Location: Hesperia, CA Duties:

- Established 2 trapping grids of 100 traps using a handheld GPS
- Prepared trapping bait
- Live-trapped and handled antelope ground squirrels and California ground squirrels
- Recorded age, sex and reproductive condition of all individuals trapped
- Set up Bushnell infrared cameras and bait tubes to identify presence of Mohave ground squirrel

Project: Coso Geothermal Power Generation Facility

Position: Field Assistant

Years Worked:

2021: 5 days of field work (2205 Trapping Events)

19 Mohave Ground Squirrel Handling Events

Location: China Lake Naval Base, CA (Coso Junction)

Duties:

- Established 1 trapping grids of 441 traps using a handheld GPS
- Prepared trapping bait
- Live-trapped and handled antelope ground squirrels and Mohave ground squirrels
- Recorded age, sex and reproductive condition of all individuals trapped
- Assisted in pit tagging new individuals
- Performed visual health assessments for ectoparasites.

Other Trapping Experiences

Project: Hellhole Canyon Preserve

Position: Field Assistant

Years Worked: 2021: 3 days of field work (200 trapping events) Location: Hellhole Canyon, San Diego, CA Duties:

- Established 1 trapping grids of 100 traps using a handheld GPS
- Daytime site assessment for suitable habitat

- Prepared trapping bait
- Live-trapped and handled Stevens Kangaroo rat and Dulzura Kangaroo rat
- Recorded age, sex and reproductive condition of all individuals trapped

Project: Southern California Edison Cajon Pass Transmission Line repair

Position: Field Assistant

Years Worked: 2021: 2 days of field work (100 trapping events (Overnight)) Location: Cajon Pass, CA Duties:

- Established 1 trapping grids of 50 traps using a handheld GPS
- Daytime site assessment for suitable habitat
- Live-trapped and handled one San-Bernardino Kangaroo Rat

Recorded age, sex and reproductive condition of all individuals trapped.

Subject: Resume for CDFW and USFWS approval for project surveys and monitoring

Kyle Tabor – Aardvark Biological Services LLC

Education

A.S. in Life Science, Westside Community College, Taft, CA 2011

B.S. in Biology, California State University, Bakersfield, CA 2018

Trainings/Workshops

Ringtail Cat Workshop presented by David Wyatt in the Sutter Buttes, CA. 2016

Workshop presented live-trapping, morphometries, and radio telemetry of the ringtail (*Bassariscus astutus*).

Western Pond Turtle Workshop presented by The San Francisco Bay Area Chapter of The Wildlife Society, 2015 - Workshop presented Ecology and Conservation of the Western pond turtle (*Actinemys marmorata*).

Basic Tracking and Awareness Workshop 2014

Training on mammal tracks and sign identification.

CALIFORNIA TIGER SALAMANDER WORKSHOP 2012

Training on species identification, survey methods, sampling techniques and habitat requirements of California tiger salamander (*Ambystoma californiense*). Lecture on the biology and conservation management for the species.

INTRODUCTION TO DESERT TORTOISE SURVEYING, MONITORING, AND HANDLING TECHNIQUES WORKSHOP 2011 Information on handling, monitoring and surveying methods for Mojave Desert Tortoise (*Gopherus agassizii*). that included authorized egg handling techniques and burrow construction demonstrations. Lecture on species ecology and biology.

Certifications

- > CDFW DESIGNATED BIOLOGIST for Giant Kangaroo Rat for Panoche Valley Solar Project.
- CDFW DESIGNATED BIOLOGIST for San Joaquin kit fox, Tipton kangaroo rat and San Joaquin antelope squirrel for the California High Speed Rail project (Construction Package 2 and 3).
- > CDFW LEVEL II protocol surveyor for blunt-nosed leopard lizards (*Gambelia sila*).
- USFWS ENDANGERED SPECIES ACT 10(A)(1)(A) RECOVERY PERMIT (TE-95006A) Tipton kangaroo rat (Dipodomys nitratoides nitratoides), Fresno kangaroo rat (Dipodomys nitratoides exilis) and Giant kangaroo rat (Dipodomys ingens).
- CDFW SCIENTIFIC COLLECTING PERMIT SC-13532/MEMORANDUM OF UNDERSTANDING /LETTER OF CONCURRENCE

Selected Wildlife Experience

San Joaquin Kit Fox (Vulpes macrotis mutica)

Project: HIGH SPEED RAIL CONSTRUCTION PACKAGES 2-3 (FRESNO-BAKERSFIELD) Location: San Joaquin Valley, CA Completed: In progress Permit #: ITP # 2081-20015-024-04

Lead Biologist: (Current) - Eric Hanson, ehanson@dudek.com

Work Description: Performed preconstruction surveys for SJKF. Monitored potential SJKF dens with game cameras and tracking medium. Excavated and supervised excavation of potential SJKF dens. Monitored construction in SJKF habitat.

Estimated Survey Hours: 723 Estimated Monitoring Hours: 1003 Adults Observed: 0 Juveniles Observed: 0 Potential Dens Excavated: Over 400

Project: San Joaquin Kit Fox Mange Study Location: San Joaquin Valley, CA Completed: 2016 Lead Biologist: Brian Cypher (661) 381-0048, bcypher@esrp.csustan.edu, and Jaime Rudd, (916) 201-2699, jlrudd@ucdavis.edu

Work Description: Assisted with sarcoptic mange study in urban San Joaquin kit fox. Responsibilities include: setting, baiting, and checking traps, trap maintenance, and radio telemetry. Data collection included: recording weight, ocular swab, nasal swab, fecal swab, skin scrape, collection of blood, radio collaring, ear tagging, applying topical solution for treatment of ectoparasites, overall health and dental assessment. Additional duties included transport to and from animal health care facility and release near capture site.

Estimated Survey Hours: 500 Adults Observed: 50 Juveniles Observed: 10 Potential Dens Observed: 100 Adults Handled: 25

Project Name: Victor Dry Farm Solar Site (2014)
Location: San Bernardino County
Completed: November 2014
Work description: Conducted monitoring and excavations of desert kit fox dens at the development site.
Monitoring consisted of using wildlife camera stations to record use of the dens prior to excavations. Dens were excavated using hand tools only as the site was within the range of the desert tortoise.
Estimated Survey Hours: 84
Adults Observed: 0
Dens Observed: 4 known pupping dens with numerous entrances

Project Name: Great Valley Solar Project
Location: Southern Tulare County
Completed: September 2011
Work description: Conducted baseline biological surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Tipton Rat, Burrowing Owl and special status plant species. Provided biological surveys for listed and special-status plants and wildlife, conducted small mammal trapping, mapped vegetation and habitat types, conducted scent station surveys and nighttime spotlight surveys for nocturnal carnivores and other wildlife.
Estimated Survey Hours: 500

Project Name: Buena Vista 3D Geophysical
Location: Elk Hills, Kern County, CA
Completed: 2009 - 2010.
Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources.

Estimated Survey Hours: 2600 Adults Observed: 2 Dens Observed: 100 potential, 25 known.

Project Name: PANOCHE VALLEY SOLAR Location: Mendota, CA Completed: September 2013 Work description: Conducted protocol surveys for Blunt-nosed Leopard Lizards. Other sensitive species encountered include Burrowing Owl, Giant Kangaroo Rat, and San Joaquin Kit Fox. Estimated Survey Hours: 300 Adults Observed: 7 Dens Observed: 1 Active and 7 Potential

Project Name: ANTELOPE VALLEY 3D SEISMIC SURVEY Location: Lost Hills Completed: November 2011 Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources. Estimated Survey Hours: 400 Adults Observed: 1 Dens Observed: 2 Potential

Project Name: APEX 3D SEISMIC SURVEY
Location: North Belridge
Completed: July 2011
Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources.
Estimated Survey Hours: 1200
Adults Observed: 12
Dens Observed: 7 Active and 17 Potential

Project Name: CYMRIC 3D SEISMIC SURVEY Location: McKittrick Completed: May 2011 Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources. Estimated Survey Hours: 1200 Adults Observed: 0 Dens Observed: 20 potential, 5 active.

Burrowing Owl (Athene cunicularia)

Project Name: ANTELOPE VALLEY 3D SEISMIC SURVEY Location: Lost Hills Completed: November 2011

Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources.

Estimated Survey Hours: 400 Adults Observed: 8 Burrows Observed: 5 Active

Project Name: APEX 3D SEISMIC SURVEY
Location: North Belridge
Completed: July 2011
Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources.
Estimated Survey Hours: 1200
Adults Observed: 21
Burrows Observed: 15 Active

Project Name: Buena Vista 3D Geophysical
Location: Elk Hills, Kern County, CA
Completed: 2009 - 2010.
Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources.
Estimated Survey Hours: 2600
Adults Observed: 10
Burrows Observed: 20

Giant and Tipton Kangaroo Rats

(Dipodomys ingens and D. nitratoides nitratoides)

Project Name: LOKERN PRESERVE SMALL MAMMAL MONITORING Location: Lokern Preserve Completed: September 2012, September 2013, September 2014 Work description: Nocturnal protocol trapping for small mammals, mainly for giant and short-nosed kangaroo rats (*Dipodomys nitratoides brevinasus*) to evaluate success of management strategies. Set Sherman Traps, and extracted and processed individuals. Estimated Survey Hours: 75 Adults Handled: 40 Giant Kangaroo Rats (*Dipodomys ingens*) All captures were handled under supervision of permitted biologist. Burrows Observed: Multiple Project Name: SEMITROPIC RIDGE PRESERVE SMALL MAMMAL MONITORING Location: Semitropic Ridge Preserve Completed: August 2012, August 2013, August 2014, August 2015

Work description: Nocturnal protocol trapping for small mammals, mainly Tipton kangaroo rats, to evaluate success of management strategies. Set Sherman Traps, extracted and processed individuals.
 Estimated Survey Hours: 65
 Adults Handled: 34 Tipton Kangaroo Rats (*Dipodomys nitratoides nitratoides*)
 All captures were handled under supervision of permitted biologist.
 Burrows Observed: Multiple

Project Name: PANOCHE VALLEY SOLAR
Location: Mendota, CA
Completed: September 2013
Work description: Conducted protocol surveys for Blunt-nosed Leopard Lizards. Other sensitive species encountered include Burrowing Owl, Giant Kangaroo Rat and San Joaquin Kit Fox. Surveys for giant kangaroo rats

included looking for recent evidence of use (i.e. fresh scat, tracks, tail drags, mowing, haystacks, etc.). Scat, tracks, and burrows were measured and compared to literature published. Estimated Survey Hours: 300 Adults Observed: Multiple

Project Name: ANTELOPE VALLEY 3D SEISMIC SURVEY Location: Lost Hills Completed: November 2011 Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources. Estimated Survey Hours: 400 Adults Observed: Multiple Burrows Observed: Multiple

Project Name: APEX 3D SEISMIC SURVEY Location: North Belridge Completed: July 2011 Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources. Estimated Survey Hours: 1200 Adults Observed: Multiple Burrows Observed: Multiple

Project Name: Buena Vista 3D Geophysical
Location: Elk Hills, Kern County, CA
Completed: 2009 -2010.
Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources.
Estimated Survey Hours: 2600
Adults Observed: Multiple
Dens Observed: Multiple

Blunt-nosed Leopard Lizard

(Gambelia sila)

Project Name: OXY BNLL SURVEYS 2012 Location: Elk Hills Completed: 2012 Work description: Conducted protocol surveys for Blunt-nosed Leopard Lizards and other sensitive species. Estimated Survey Days: 137 Adults Observed: 200 (see attached CNDDB form). Hatchlings: 50 Level II Contact: Ignacio Maldonado Stantec Consulting Ignacio.Maldonado@stantec.com (661) 302-3669

Project Name: BACON HILLS Location: Belridge, CA Completed: 2015 Work description: Conducted protocol surveys for Blunt-nosed Leopard Lizards and other sensitive species.

| Estimated Survey Days: 26 Adults Observed: 27 Level II Contact: Steve Tabor | BEASPT@aol.com | (970) 481-8386 |
|---|------------------------------|--|
| Project Name: Kettleman Hills | <u></u> | |
| Location: Avenal, CA | | |
| Completed: 2014 | | |
| - | tocol surveys for Blunt-nos | ed Leopard Lizards and other sensitive species. |
| Estimated Survey Days: 83 | · | |
| Adults Observed: 0 | | |
| Level II Contact: Chris Bronny | chrisbronny@gmail.com | (925) 330-7202 |
| Project Name: PANOCHE VALLEY SOL | AR | |
| Location: Mendota, CA | | |
| Completed: 2013 | | |
| Work description: Conducted pro | tocol surveys for Blunt-nose | ed Leopard Lizards. Other sensitive species |
| encountered include Burrowing O | wl, Giant Kangaroo Rat and | San Joaquin Kit Fox. |
| Estimated Survey Days: 64 | | |
| Adults Observed: 5 | | |
| Hatchlings Observed: 3 | | |
| Level II Contact: Steve Tabor | BEASPT@aol.com | (970) 481-8386 |
| Project Name: CMO PIPELINE | | |
| Location: Belridge Oilfield | | |
| Completed: September 2013 | | |
| | | sed Leopard Lizard on multiple proposed oil wells |
| | Protocol. Documented all se | ensitive flora and fauna encountered and observed |
| Estimated Survey Days: 24 | | |
| Adults Observed: 4 | | |
| Level II Contact: Steve Tabor | BEASPT@aol.com | (970) 481-8386 |
| Project Name: ANTELOPE VALLEY 3D | SEISMIC SURVEY | |
| Location: Lost Hills | | |
| Completed: November 2011 | | |
| | | reys for sensitive species, notably San Joaquin Kit Fox, |
| | | telope Squirrel, and Burrowing Owl. Monitored |
| ground-disturbing activities for bid | ological resources. | |
| Estimated Survey Days: 33 | | |
| Adults Observed: 2 | | |
| Project Name: VENOCO, INC. OIL WE | ELLS PROJECT | |
| Location: Kern County | | |
| Completed: July 2011 | | |
| Work description: Surveyed for th | ne presence of the Blunt-no | sed Leopard Lizard on multiple proposed oil well sites |
| | Protocol. Documented all se | ensitive flora and fauna encountered and observed. |
| Estimated Survey Days: 50 | | |
| Adults Observed: 1 | | |
| Project Name: Apex 3D Seismic Sur | VEY | |
| Leastian, North Delridge | | |

Location: North Belridge Completed: July 2011 Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources. Estimated Survey Days: 30 Adults Observed: 12

Project Name: Buena Vista 3D Geophysical
Location: Elk Hills, Kern County, CA
Completed: 2009 -2010.
Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources.
Estimated Survey Days: 100
Adults Observed: 50 – 60
Hatchlings: 12

San Joaquin Antelope Squirrel (SJAS)

(Ammospermophilus nelsoni)

Project Name: BACON HILLS Location: Belridge, CA Completed: 2015 Work description: Conducted protocol surveys for Blunt-nosed Leopard Lizards and other sensitive species. Estimated Survey Hours: 208 Adults Observed: 25

Project Name: CMO PIPELINE Location: Belridge Completed: September 2013 Work description: Surveyed for the presence of the Blunt-nosed Leopard Lizard on multiple proposed oil wells following the CDFW 2004 Survey Protocol. Documented all sensitive flora and fauna encountered and observed Estimated Survey Hours: 100 Adults Observed: 10

Project Name: ANTELOPE VALLEY 3D SEISMIC SURVEY
Location: Lost Hills
Completed: November 2011
Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources.
Estimated Survey Hours: 400
Adults Observed: 1

Project Name: APEX 3D SEISMIC SURVEY
Location: North Belridge
Completed: July 2011
Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources.
Estimated Survey Hours: 1200
Adults Observed: Numerous Project Name: CYMRIC 3D SEISMIC SURVEY Location: McKittrick Completed: May 2011 Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources. Estimated Survey Hours: 1200

Adults Observed: 25

Project Name: Buena Vista 3D Geophysical
Location: Elk Hills, Kern County, CA
Completed: 2009 -2010.
Work description: Conducted preconstruction clearance surveys for sensitive species, notably San Joaquin Kit Fox, Blunt-nosed Leopard Lizard, Giant Kangaroo Rat, Nelson's Antelope Squirrel, and Burrowing Owl. Monitored ground-disturbing activities for biological resources.
Estimated Survey Hours: 2600
Adults Observed: 60

Project Name: LOKERN PRESERVE SMALL MAMMAL MONITORING
Location: Lokern Preserve
Completed: September 2012, September 2013, September 2014
Work description: Nocturnal protocol trapping for small mammals, mainly Giant and Short-nosed Kangaroo Rats, to evaluate success of management strategies. Set Sherman Traps, and extracted and processed individuals.
Estimated Survey Hours: 75
Adults Handled: 3

Mohave Ground Squirrel

(Xerospermophilus mohavensis)

Project Name: Endangered Species Recovery Program MGS Study

Location: Mojave Desert, CA

Completed: 2015 – 2016

Lead Biologist: - Philip Leitner, pleitner@pacbell.net

Work description: Protocol trapping for Mohave ground squirrel (*Xerospermophilus mohavensis*), to evaluate presence/absence. In addition to deployment of wildlife cameras, Sherman and Pymatuning traps were set in accordance with the protocol survey guidelines. Mohave ground squirrels were processed and evaluated each morning. Incidental captures included antelope ground squirrel ground squirrels (*Ammospermophilus leucurus*). **Estimated Survey Hours:** 1200

Adults Handled: 5 Mohave ground squirrels (*Xerospermophilus mohavensis*) and 17 antelope ground squirrels (*Ammospermophilus leucurus*).

Project Name: COSO MGS Study

Location: Naval Air Weapons Station, China Lake

Completed: 2021

Lead Biologist: - Philip Leitner, pleitner@pacbell.net

Work description: Protocol trapping for Mohave ground squirrel (*Xerospermophilus mohavensis*), to evaluate presence/absence. Sherman and Pymatuning traps were set in accordance with the protocol survey guidelines. Mohave ground squirrels were processed and evaluated each morning. Incidental captures included antelope ground squirrels (*Ammospermophilus leucurus*).

Estimated Survey Hours: 36

Adults Handled: 5 Mohave ground squirrels (*Xerospermophilus mohavensis*) and 8 antelope ground squirrels (*Ammospermophilus leucurus*).

APPENDIX 5.2D

(This Appendix Is Filed Under a Request for Confidential Designation)

APPENDIX 5.3A Native American Correspondence

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission

1550 Harbor Blvd, Suite 100 West Sacramento, CA 95691 916-373-3710 916-373-5471 – Fax nahc@nahc.ca.gov

Project: _____ County:_____ USGS Quadrangle Name:_____ Township:_____ Range:_____ Section(s):_____ Company/Firm/Agency:_____ Street Address: City:_____ Zip:_____ Phone:_____ Fax:_____ Email:_____

Information Below is Required for a Sacred Lands File Search

Project Description:



CHAIRPERSON Reginald Pagaling Chumash

VICE-CHAIRPERSON Buffy McQuillen Yokayo Pomo, Yuki, Nomlaki

Secretary Sara Dutschke *Miwok*

Parliamentarian Wayne Nelson Luiseño

COMMISSIONER Isaac Bojorquez Ohlone-Costanoan

Commissioner Stanley Rodriguez Kumeyaay

Commissioner Laurena Bolden Serrano

COMMISSIONER Reid Milanovich Cahuilla

Commissioner Vacant

Executive Secretary Raymond C. Hitchcock Miwok, Nisenan

NAHC HEADQUARTERS 1550 Harbor Boulevard Suite 100 West Sacramento, California 95691 (916) 373-3710 nahc@nahc.ca.gov NAHC.ca.gov STATE OF CALIFORNIA

NATIVE AMERICAN HERITAGE COMMISSION

December 29, 2023

Michael Amorelli WSP USA

Via Email to: michael.amorelli@wsp.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Willow Rock Energy Storage Center Project, Kern County

To Whom It May Concern:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

• Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was <u>positive</u>. Please contact the Kern Valley Indian Community on the attached list for more information.

- 4. Any ethnographic studies conducted for any area including all or part of the APE; and
- 5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: <u>Cody.Campagne@nahc.ca.gov</u>.

Sincerely,

Cody Campagne

Cody Campagne Cultural Resources Analyst

Attachment

Native American Heritage Commission Native American Contact List Kern County 12/29/2023

| County | Tribe Names | Fed (F) Non-Fed | Contact Person | Contact Address | Phone # | Fax # | Email Address | Cultural Affiliation | Counties | Last Update |
|--------|---|--------------------|---|---|-----------------------|-----------------------|---|--|--|----------------|
| Kern | Big Pine Paiute Tribe of the Owens Valley | F | James Rambeau, Chairperson | P. O. Box 700 Big Pine, CA, 93513 | (760) 938- 2003 | (760) 938- 2942 | j.rambeau@big pinepaiute.org | Paiute- Shoshone | Inyo, Kern, Mono, San Bernardino | |
| | Big Pine Paiute Tribe of the Owens Valley | F | Sally Manning, Environmental Director | P. O. Box 700 Big Pine, CA, 93513 | (760) 938- 2003 | | s.manning@big pinepaiute.org | Paiute- Shoshone | Inyo, Kern, Mono, San Bernardino | 7/18/2017 |
| | Chumash Council of Bakersfield | N | Julio Quair, Chairperson | 729 Texas Street Bakersfiel d, CA, 93307 | (661) 322- 0121 | | chumashtribe@ sbcglobal.net | Chumash | Kern, Los Angeles, San Luis Obispo, Santa Barbara, Ventura | |
| | Coastal Band of the Chumash Nation | N | Gabe Frausto, Chairman | P.O. Box 40653 Santa Barbara, CA, 93140 | (805) 568- 8063 | | fraustogabriel2 8@gmail.com | Chumash | Kern, Los Angeles, San Luis Obispo, Santa Barbara, Ventura | 8/28/2023 |
| | Fernandeno Tataviam Band of Mission Indians | N | Sarah Brunzell, CRM Manager | 1019 Second Street San Fernando, CA, 91340 | (818) 837- 0794 | | CRM@tataviam -nsn.us | Tataviam | Kern, Los Angeles, Ventura | 5/25/2023 |
| | Kern Valley Indian Community | N | Robert Robinson, Chairperson | P.O. Box 1010 Lake Isabella, CA, 93240 | (760) 378- 2915 | | bbutterbredt@g mail.com | Kawaiisu Tubatulab al Koso | Inyo, Kern, Los Angeles ,San Bernardino, Tulare | |
| | Kitanemuk & Yowlumne Tejon Indians | N | Delia Dominguez, Chairperson | 115 Radio Street Bakersfiel d, CA, 93305 | (626) 339- 6785 | | 2deedomingue z@gmail.com | Kitanemuk Southern Valley Yokut | Kern, Los Angeles | |
| | Quechan Tribe of the Fort Yuma Reservation | F | Manfred Scott, Acting Chairman - Kw'ts'an Cultural Committee | P.O. Box 1899 Yuma, AZ, 85366 | (928) 210- 8739 | | culturalcommitt ee@quechantri be.com | Quechan | Imperial, Kern, Los Angeles, Riverside, San Bernardino, San Diego | 5/16/2023 |
| | Quechan Tribe of the Fort Yuma Reservation | F | Jill McCormick, Historic Preservation Officer | P.O. Box 1899 Yuma, AZ, 85366 | (928) 261- 0254 | | historicpreserva tion@quechantr ibe.com | Quechan | Imperial, Kern, Los Angeles, Riverside, San Bernardino, San Diego | 5/16/2023 |
| | Quechan Tribe of the Fort Yuma Reservation | F | Jordan Joaquin, President, Quechan Tribal Council | P.O. Box 1899 Yuma, AZ, 85366 | (760) 919- 3600 | | executivesecret ary@quechantri be.com | Quechan | Imperial, Kern, Los Angeles, Riverside, San Bernardino, San Diego | 5/16/2023 |
| | San Fernando Band of Mission Indians | N | Donna Yocum, Chairperson | P.O. Box 221838 Newhall, CA, 91322 | (503) 539- 0933 | (503) 574- 3308 | dyocum@sfbmi .org | Kitanemuk Vanyume Tataviam | Kern, Los Angeles, San Bernardino, Ventura | 5/8/2023 |
| | San Manuel Band of Mission Indians | F | Alexandra McCleary, Cultural Lands Manager | 26569 Communit y Center Drive Highland, CA, 92346 | (909) 633- 0054 | | alexandra.mccl eary@sanmanu el-nsn.gov | Serrano | Kern, Los Angeles, Riverside, San Bernardino | 3/27/2023 |
| | Tejon Indian Tribe | F | Candice Garza, CRM Scheduler | 4941 David Road | (661) 345- 0632 | | cgarza@tejonin diantribe- nsn.gov | Kitanemuk | Kern | 4/11/2023 |

| County | Tribe Names | Fed (F) Non-Fed | Contact Person | Contact Address | Phone # | Fax # | Email Address | Cultural Affiliation | Counties | Last Update |
|--------------|----------------------------|--------------------|-----------------------------|--|-----------------------|-----------------------|--|-------------------------|---|----------------|
| | | | | Bakersfiel d, CA, 93307 | | | | | | |
| | Tule River Indian Tribe | F | Neil Peyron, Chairperson | P.O. Box 589 Porterville , CA, 93258 | (559) 781- 4271 | (559) 781- 4610 | neil.peyron@tul erivertribe- nsn.gov | Yokut | Alameda, Amador, Calaveras, Contra Costa, Fresno, Inyo, Kern, Kings, Madera, Mariposa, Merced, Monterey, Sacramento, San Benito, San Joaquin, San Luis Obispo, Stanislaus, Tulare, Tuolumne | |
| This list is | | | | | | | | | bility as defined in Sectic c Resources Code. | n 7050.5 of |
| This list | is only applicable | for consultatic | on with Native Ame | erican tribes u Storage Ce | | | | 21080.3.1 for | the proposed Willow Roo | k Energy |

January 12, 2024



Mr. Robert Robinson, Chairperson Kern Valley Indian Community P.O. Box 1010 Lake Isabella, CA 93240

RE: Willow Rock Energy Storage Center (WRESC), Unincorporated Communities of Ansel and Rosamond, Kern County, California

Dear Honorable Chairperson Robinson,

GEM A-CAES, LLC (GEM) proposes to construct and operate a new Advanced Compressed Air Energy System (A-CAES) facility in the unincorporated community of Ansel, north of the town of Rosamond, Kern County, California, called the Willow Rock Energy Storage Center (WRESC). You may have received notification of this project from PaleoWest in 2021, but the footprint has since changed and the facility location has moved. The facility will now be situated upon an approximate 163-acre area of native desert near the Dawn Road exit of State Route 14, with approximately 133 acres of additional land allocated for potential staging and laydown areas, which may also be subject to surficial disturbance and adverse impact. Additionally, approximately 19 miles of new 230kilovolt (kV) generation-tie (gen-tie) transmission line will be constructed to deliver energy generated and stored at the facility to the Southern California Edison (SCE) Whirlwind Substation, located near the intersection of 170th Street and Rosamond Boulevard. GEM is also exploring approximately 69 miles of alternatives to the preferred gen-tie route. This project is subject to review by both the California Energy Commission (CEC) and the Department of Energy (DoE) and GEM has contracted WSP to conduct a cultural resources assessment of the project, in compliance with the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act.

Project Location

The project area is located in Township 10 North, Range 12 West, Section 33, San Bernardino Baseline and Meridian, immediately east of SR-14, on the Dawn Road exit, west of Sierra Highway. The project is located on the eastern edge of the Rosamond Hills, west of Edwards Air Force Base and approximately four miles northwest of Rosamond Lake. The preferred transmission route runs west along Dawn Road to Mojave Tropico Road south to Felsite Avenue, east to 65th Street West and south to Rosamond Boulevard, terminating at the SCE Whirlwind Substation. The explored gen-tie alternatives run parallel to Rosamond Boulevard along Hamilton, Irone, Fisher and Stetson Avenues, with north-south alternatives running along 65th Street West, Tehachapi-Willow Springs Road, 100th Street West, 110th Street West, 120th Street West, 125th Street West, 140th Street West, 150th Street

NSD

West, and an existing Los Angeles Department of Water and Power transmission easement. The preferred and alternative transmission routes span the majority of Ranges 12-14 West, in Townships 9 and 10 North, bordering or crossing geographical locations that include the Rosamond Hills, Tropico Hill, Willow Springs Butte and Bean Spring.

Project Undertaking and Area of Potential Effects

The project will consist of the development of an advanced compressed air energy system (A-CAES) on the project parcel. Project development will involve extensive geotechnical testing, followed by vegetation clearance and grading of the entire parcel. Operations structures will be constructed over the entire parcel, requiring extensive excavation for pad development and several air and water shafts will be developed with a combined 0.3 acre of horizontal disturbance, reaching depths in excess of 2,700', through quartz monzonite bedrock, resulting in an expected 1.3 million cubic yards of waste rock material. In addition, surrounding parcels are proposed for auxiliary use during construction, including material staging, personnel parking and waste material storage. Development of the 230kV transmission line would involve the installation of new 90-foot tall transmission poles along the chosen route.

WSP submitted a Sacred Land File (SLF) request to the California Native American Heritage Commission (NAHC) on December 21, 2023 and a response was received on December 29, 2023, indicating that the project APE was positive for Native American cultural resources. As a result, the NAHC recommended that we contact you directly.

WSP conducted an initial records search at the Southern San Joaquin Valley Information Center (SSJVIC) on May 18, 2023 (23-185) for the project parcels, preferred transmission route and the majority of alternatives and a supplemental records search for several additional transmission line alternatives on September 7, 2023 (23-380) for the project parcels, transmission lines and a surrounding one-mile buffer. No previously recorded resources were identified on the project parcel and the property had not been previously surveyed. However, several low-density lithic scatters were identified to the north and southeast of the project. One previously recorded rhyolite flake, one amethyst glass bottle, Tropico Gold Mine (15-007591) and several historic debris scatters and homestead ruins were identified on or immediately adjacent to the preferred gen-tie route. Several sites, including the Bean Spring Archaeological Complex (CA-KER-2821H), Willow Springs (CA-KER-129), a lithic scatter, and numerous rhyolite flakes and isolated historic glass and cans were identified along or adjacent to the alternatives. Review of the Kern County Built Environment Resources Directory (BERD) indicates no historic properties listed or eligible for inclusion on the National Register of Historic Places or California Register of Historic Resources in the vicinity of the project, though two properties, Tropico Gold Mine and Willow Springs International Raceway (15-011586) have been designated at California Points of Historical Interest.

Initial surveys of the project have identified a number of previously unrecorded resources, including a historical-period structure pad with associated debris, two scatters of rhyolite flakes, twenty-four additional rhyolite flake isolates, two chalcedony flake, one obsidian flake and one prospect mining pit on the project parcel, with two rhyolite flake scatters, two large historic debris scatters, six rhyolite flake isolates, one chert flake and more than two dozen historic period can isolates, along the preferred transmission route and alternatives. Transmission line and parcel surveys are ongoing.



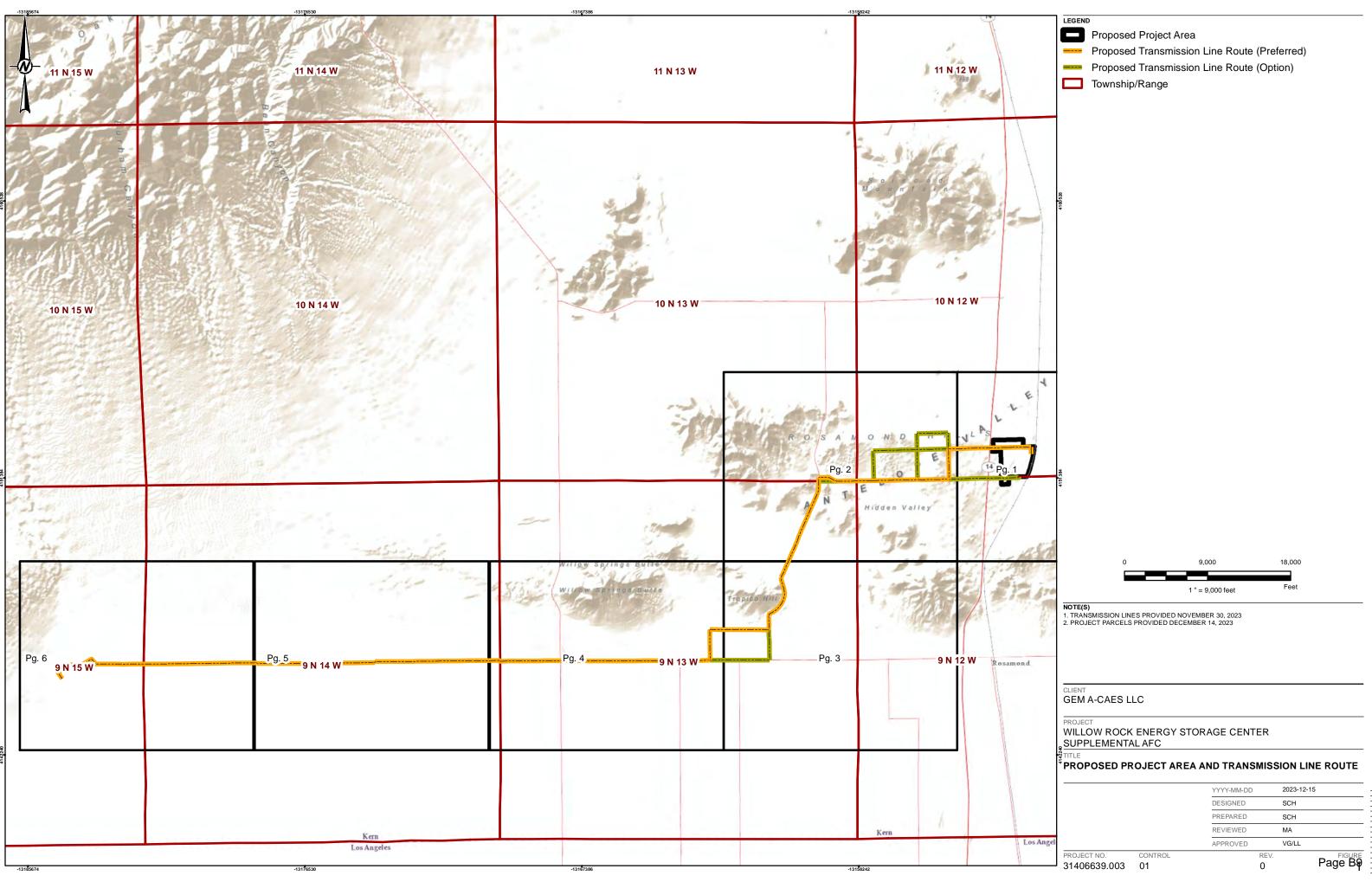
The purpose of this letter is to provide information about the project, learn if you have specific knowledge to share regarding cultural resources in the vicinity of the project or if you have any other concerns, so that they may be considered during the study. If you have any questions or concerns regarding this project, please feel free to contact Allegria Garcia at (951) 905-5046 or via email at <u>allegria.garcia@wsp.com</u>. Thank you in advance for your time in addressing this important matter.

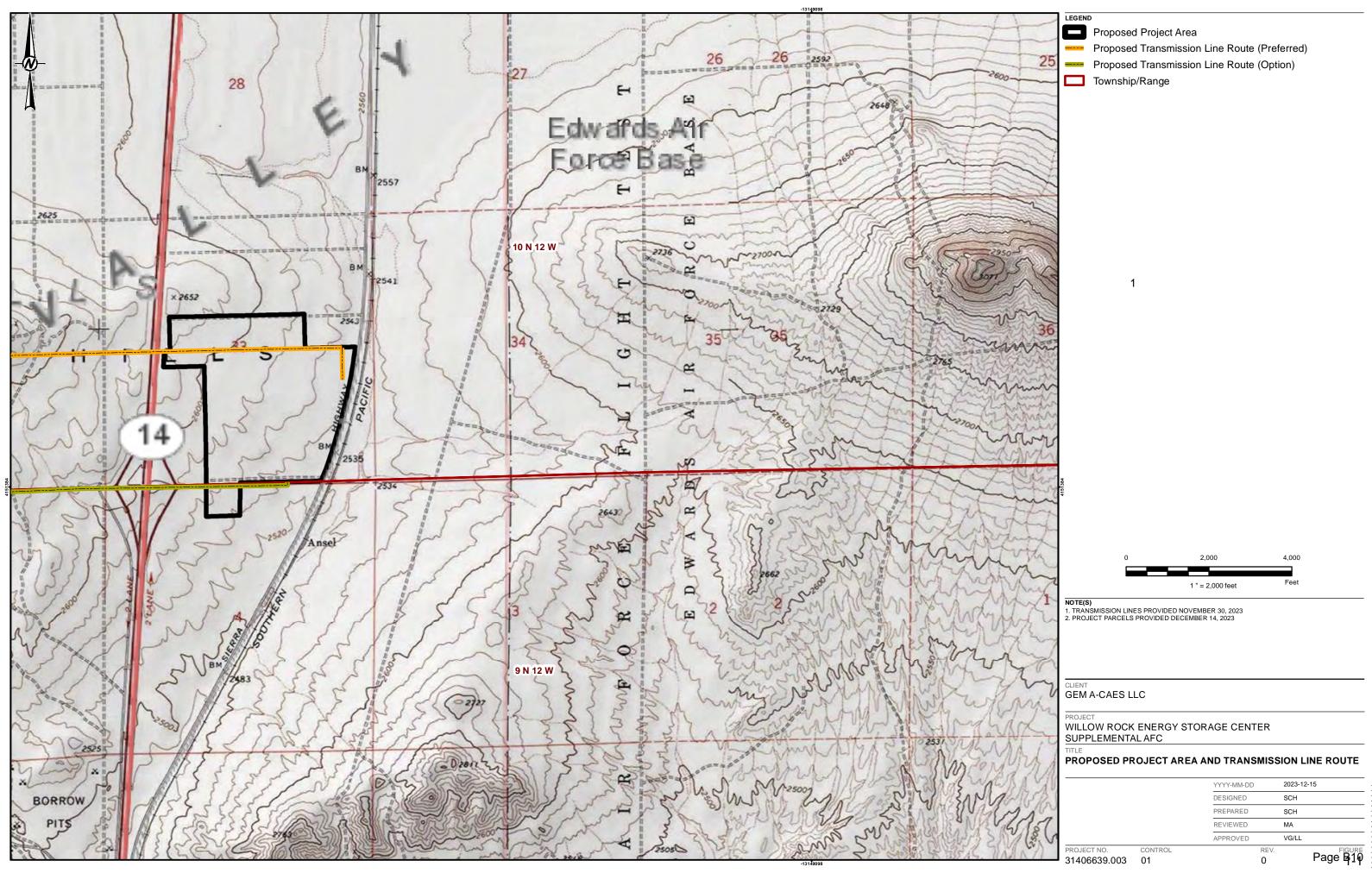
Sincerely,

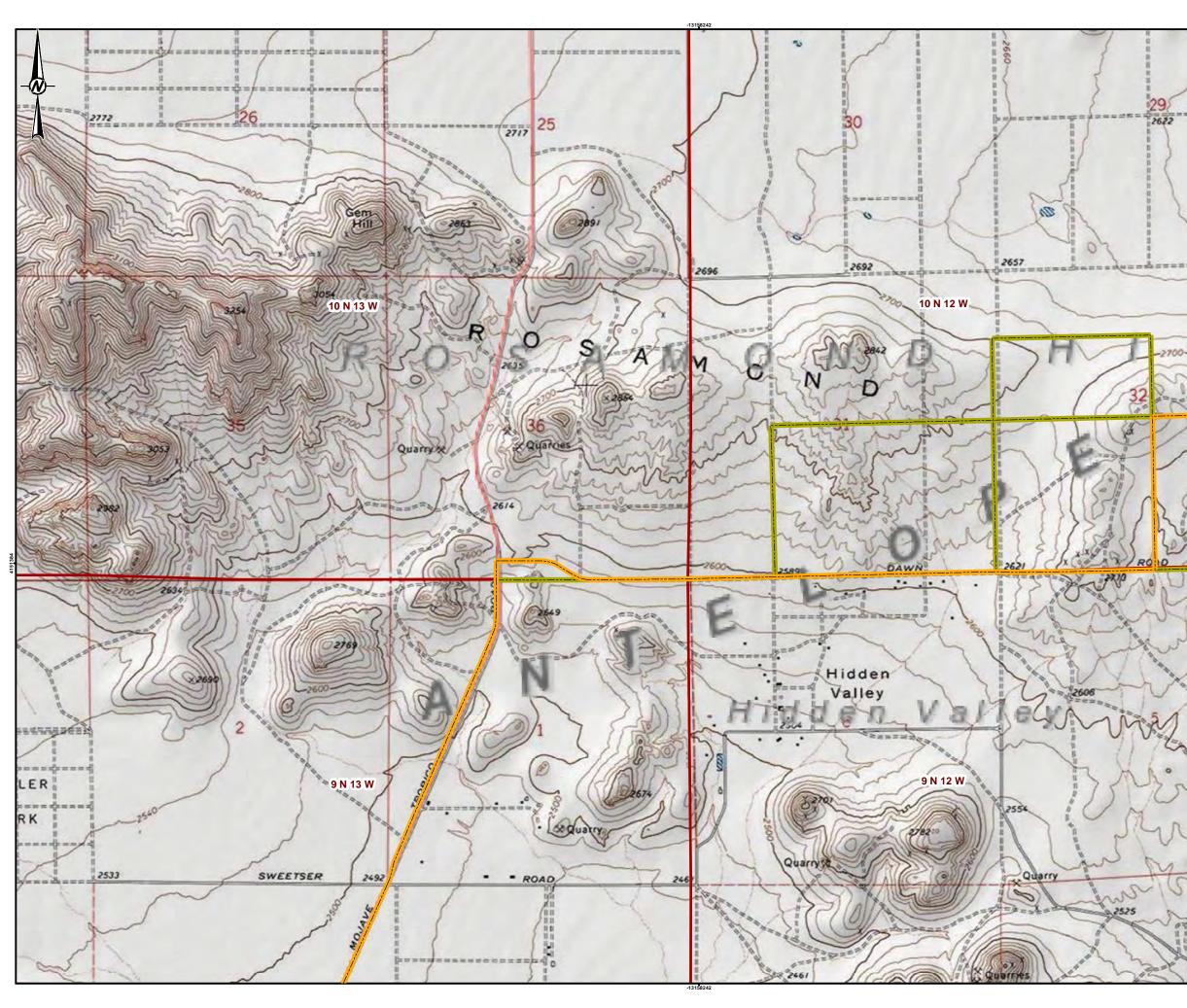
Allegria Garcia, MA, R.P.A. Staff Archaeologist WSP USA 11870 Pierce St. #160 Riverside, CA 92505 P: (951) 905-5046 M: (661) 247-7516 E: allegria.garcia@wsp.com

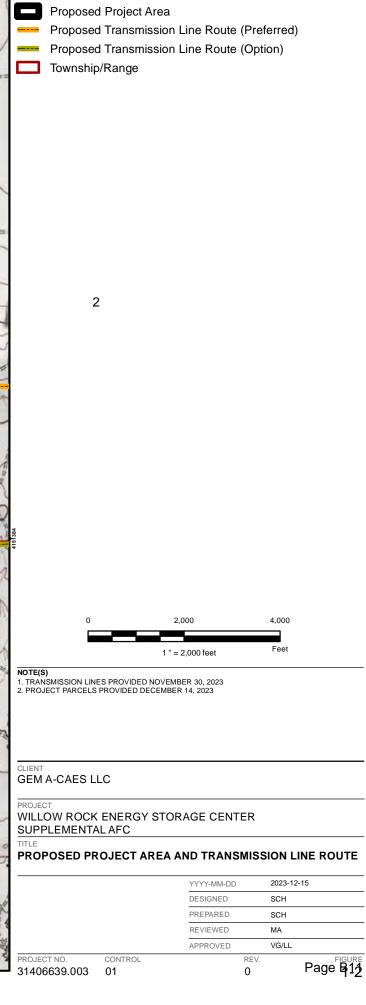
Other Tribal Groups Being Consulted:

Big Pine Paiute Tribe of the Owens Valley Chumash Council of Bakersfield Coastal Band of the Chumash Nation Fernandeño Tataviam Band of Mission Indians Kitanemuk & Yowlumne Tejon Indians Quechan Tribe of the Fort Yuma Reservation San Fernando Band of Mission Indians San Manuel Band of Mission Indians Tejon Indian Tribe Tule River Indian Tribe

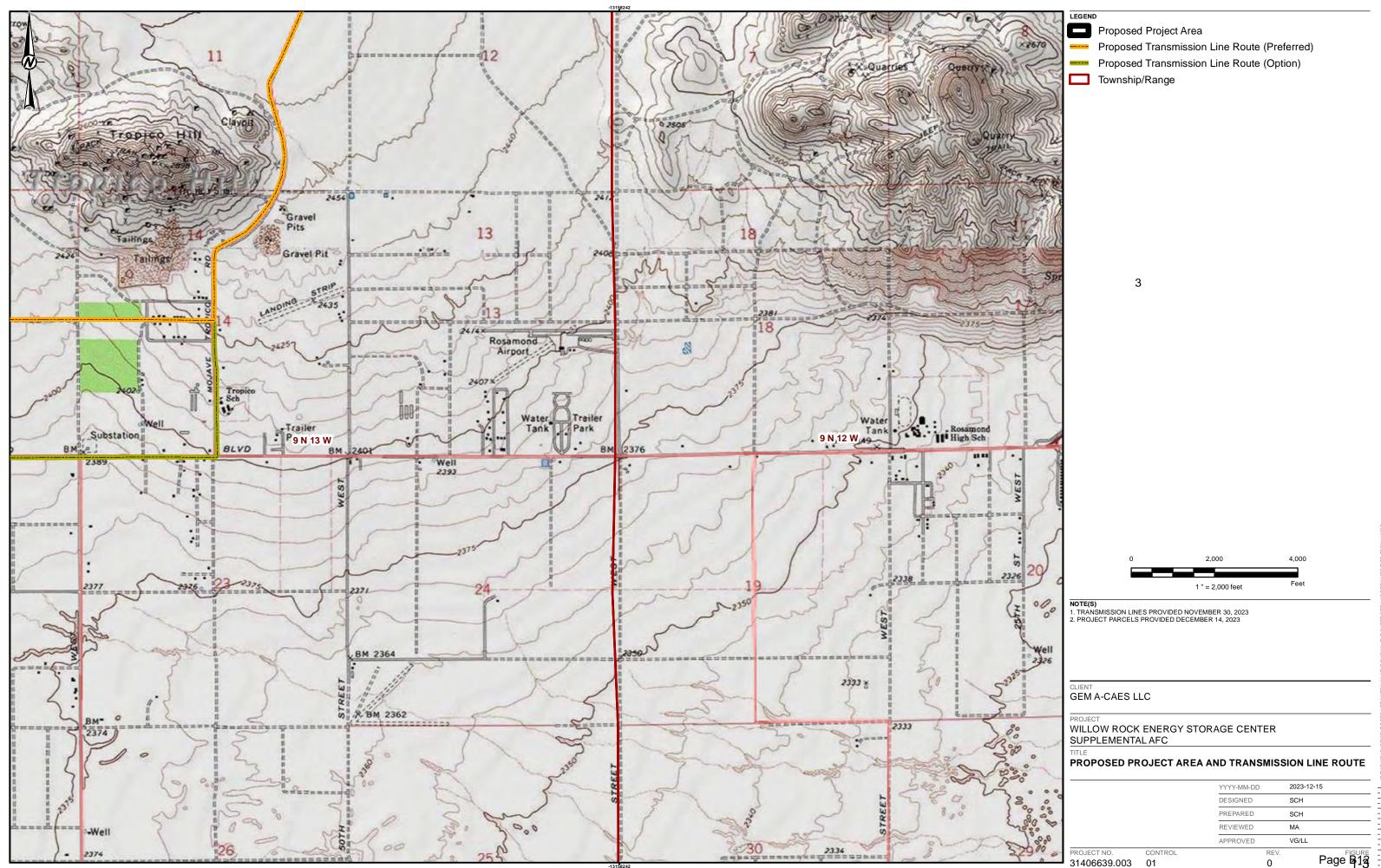


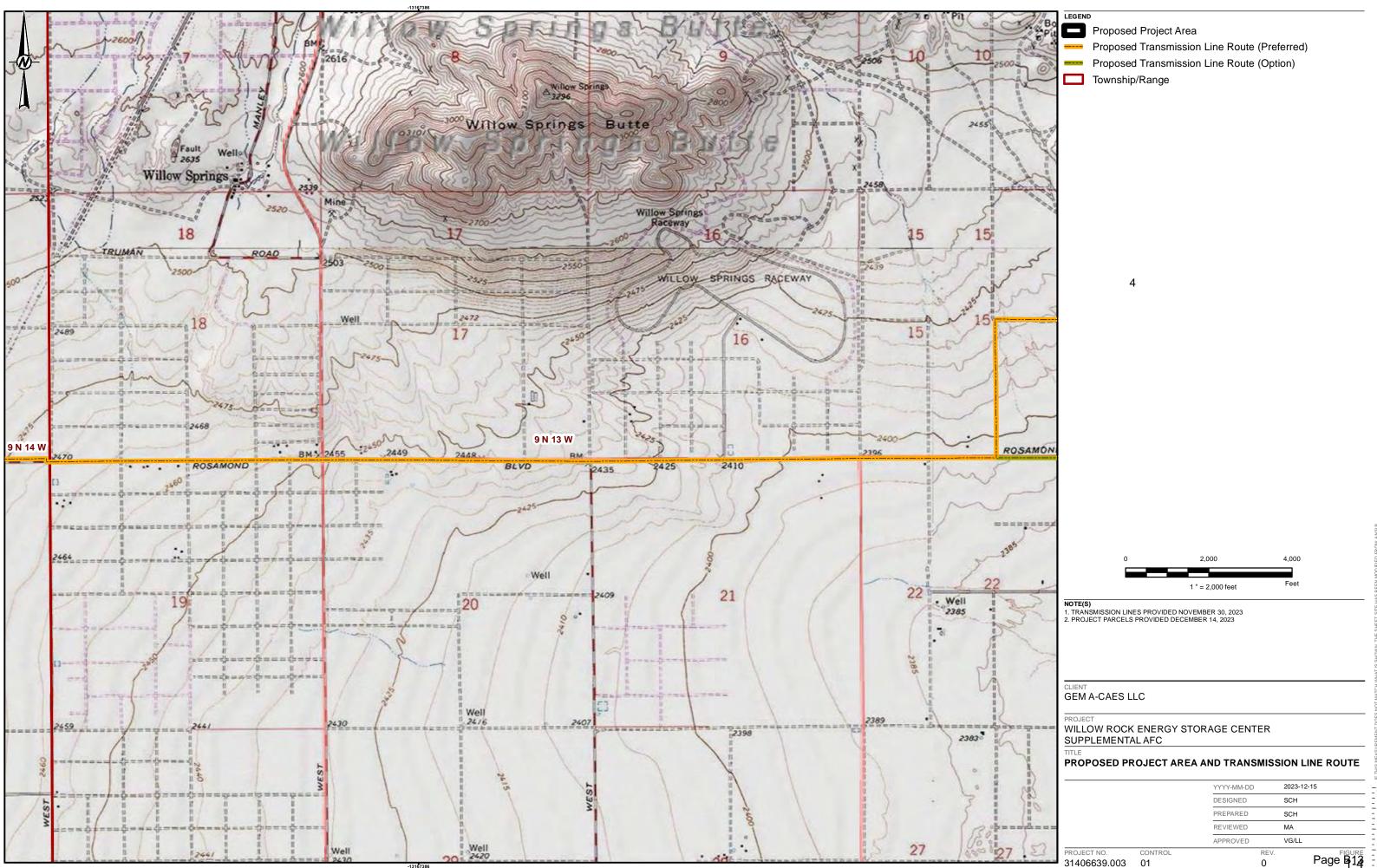


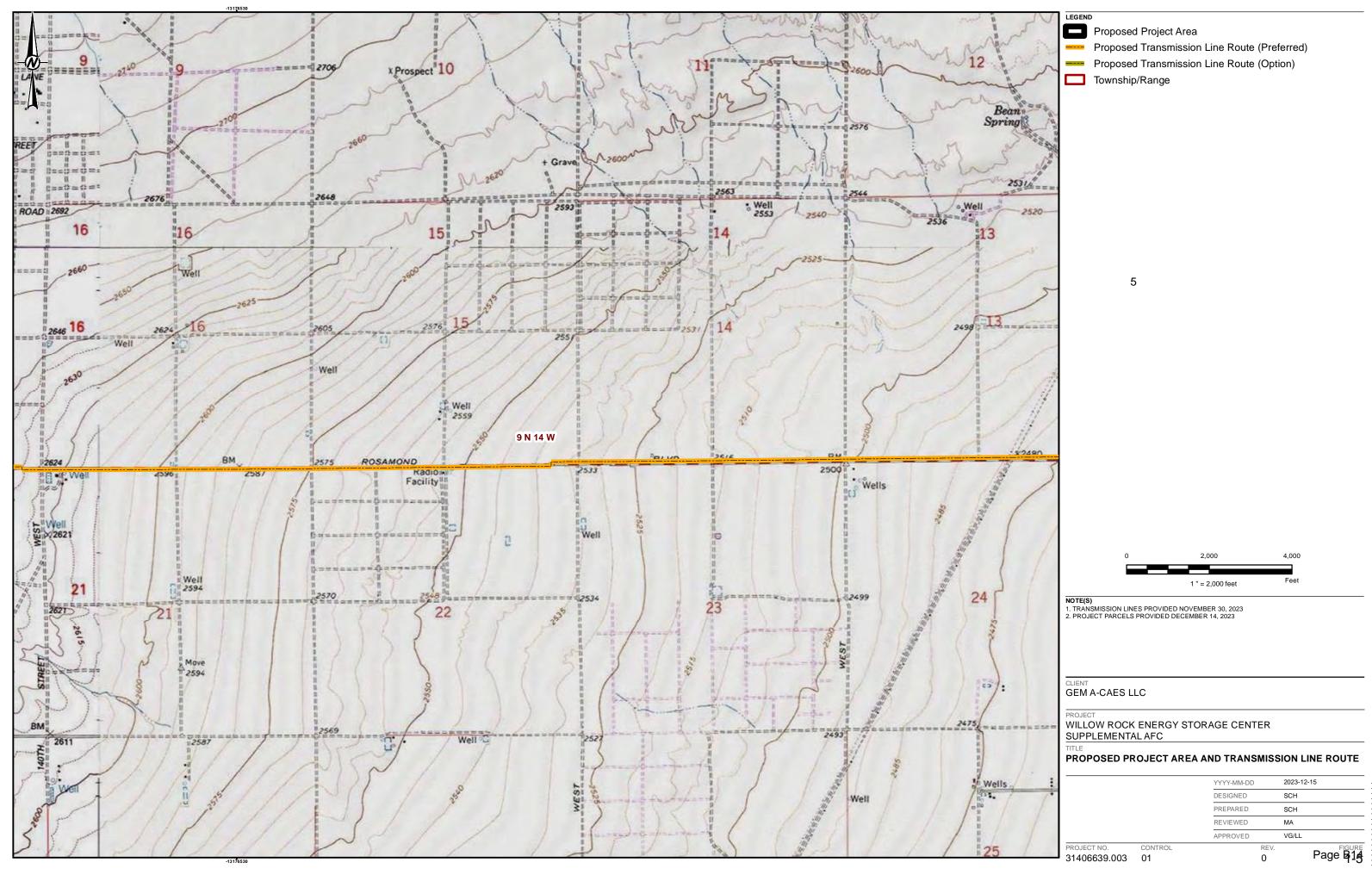


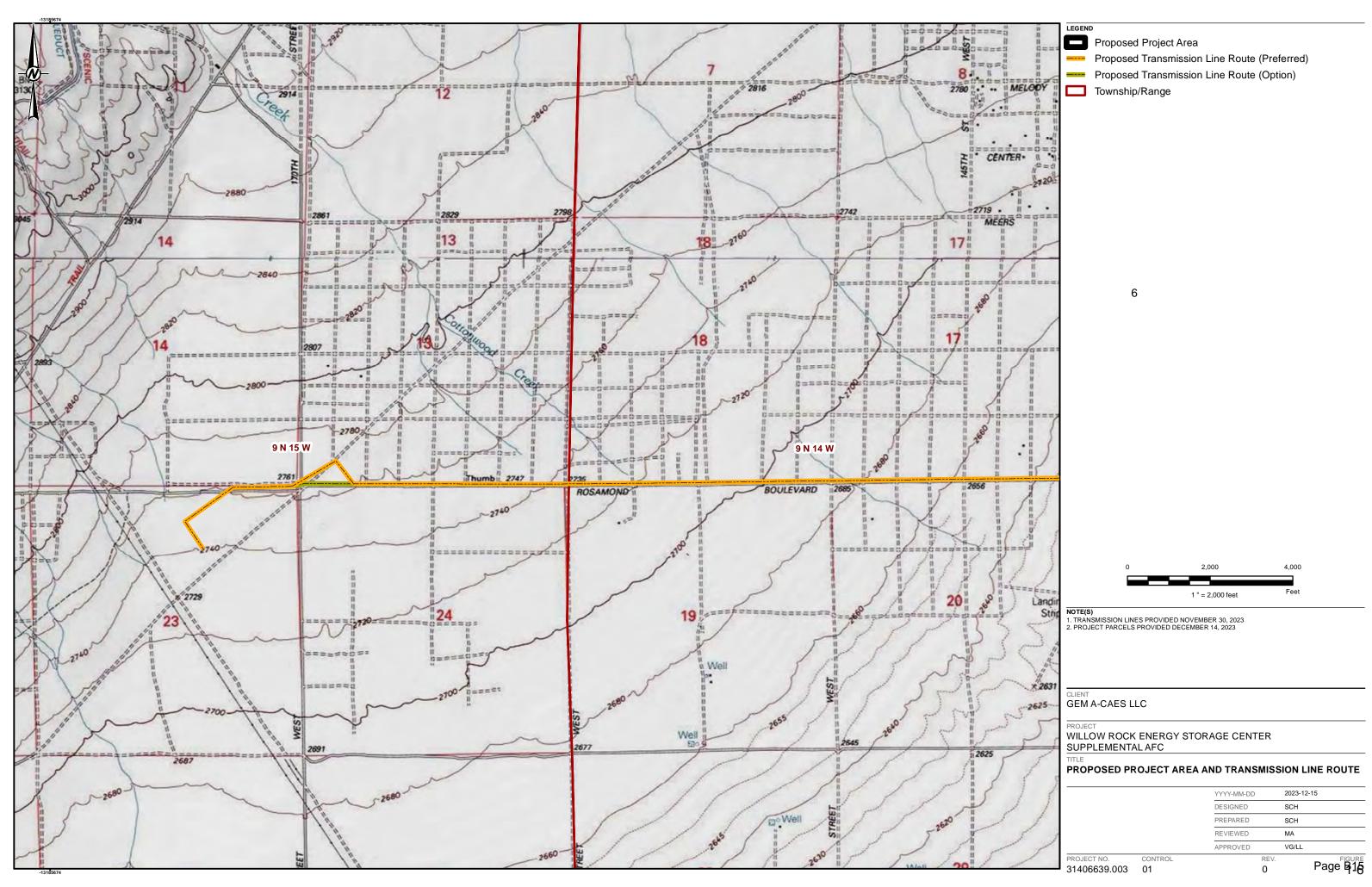


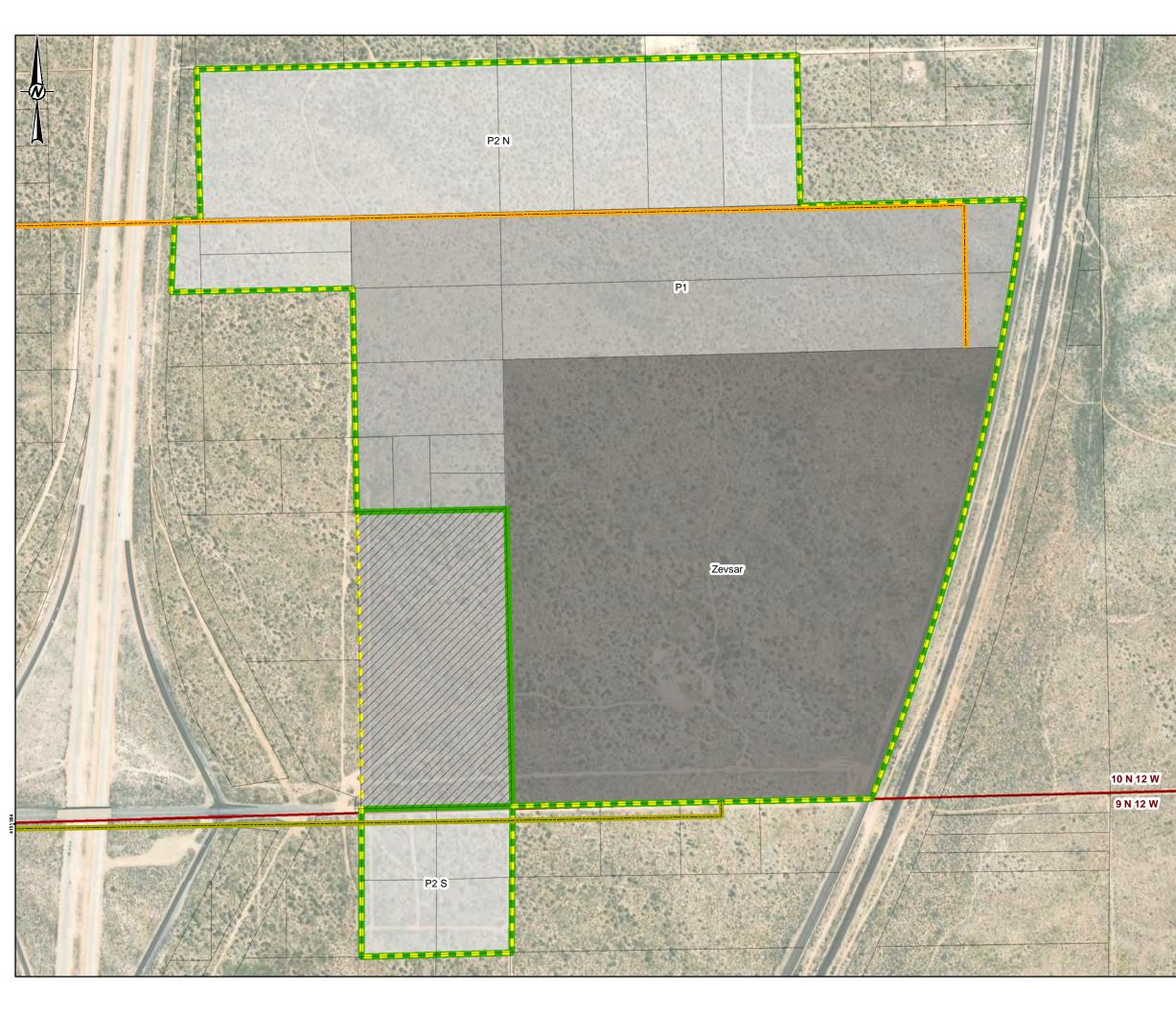
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| Consulting Party Contact Information | Federally Recognized | Letter Sent | Certified Mail Tracking No. | Delivered | Emailed / Called | Comments |
|---|-------------------------|----------------------|--------------------------------|-------------------------|--|--|
| Ms. Candice Garza, CRM Scheduler Tejon Indian Tribe 4941 David Road Bakersfield, CA, 93307 Phone: (661) 345-0632 <u>cgarza@tejonindiantribe- nsn.gov</u> Kitanemuk Kern County | Х | MAILED: 1/12/2024 | 70183090000 060171049 | DELIVERED: 1/16/2024 | EMAILED: 1/12/2024 | 2/7/2024: RESPONDED <u>VIA PHONE CALL:</u> Ms. Candice Garza responded: Appreciated the previous conversations regards to previous Tejon representatives being present at past boreholes and grading. Requested that Tejon representatives continue to monitor additional boreholes and ground disturbances. |
| Mr. Neil Peyron, Chairperson <i>Tule River Indian Tribe</i> P.O. Box 589 Porterville, CA, 93258 Phone: (559) 781-4271 Fax: (559) 781-4271 neil.peyron@tulerivertribe- nsn.gov <i>Yokut</i> Alameda, Amador, Calaveras, Contra Costa, Fresno, Inyo, Kern, Kings, Madera, Mariposa, Merced, Monterey, Sacramento, San Benito, San Joaquin, San Luis Obispo, Stanislaus, Tulare, Tuolumne Counties | X | MAILED: 1/12/2024 | 70183090000 060171056 | DELIVERED: 1/15/2024 | CALLED: 2/15/2024 CALLED: 2/7/2024 EMAILED: 1/12/2024 | 2/15/2024: Called, Secretary transferred to voicemail of Chairperson Charmaine McDarment, left a voicemail 2/7/2024: Called, Secretary transferred to new Chairperson Charmaine McDarment - Left a voicemail on her Secretary's voicemail box (Amanda Peyron) |



| Consulting Party Contact Information | Federally Recognized | Letter Sent | Certified Mail Tracking No. | Delivered | Emailed / Called | Comments |
|--|-------------------------|----------------------|--------------------------------|-------------------------|--|--|
| Ms. Donna Yocum, Chairperson San Fernando Band of Mission Indians P.O. Box 221838 Newhall, CA, 91322 Phone: (503) 539-0933 Fax: (503) 574-3308 dyocum@sfbmi.org Kitanemuk, Vanyume & Tataviam Kern, Los Angeles, San Bernardino and Ventura County | | MAILED: 1/12/2024 | 70183090000 060171025 | DELIVERED: 1/19/2024 | CALLED: 2/15/2024 CALLED: 2/7/2024 EMAILED: 1/12/2024 | 2/15/2024: Called, left a voicemail 2/7/2024: Called, left a voicemail |
| Ms. Alexandra McClary, Cultural Lands Manager San Manuel Band of Mission Indians 26569 Community Center Drive Highland, CA, 92346 Phone: (909) 633-0054 alexandra.mccleary@sanmanu el-nsn.gov Serrano Kern, Los Angeles, Riverside and San Bernardino County | X | MAILED: 1/12/2024 | 70183090000 060171032 | DELIVERED: 1/17/2024 | EMAILED: 1/12/2024 | 1/17/2024: RESPONDED VIA EMAIL Raylene Borrego, Cultural Resources Technician O: (909) 864-8933 x50- 2035 M: (909) 737-3349 26569 Community Center Drive Highland, CA 92346 "San Manuel appreciates the opportunity to review the project documentation received by the Cultural Resources Management Department on Jan. 12, 2024. Based on our current knowledge, the proposed project site is considered highly culturally sensitive by the Tribe due to its proximity to several previously recorded sites and the likelihood of encountering subsurface resources in the project area. As the area is of concern, the Tribe will wish to engage in government- to-government consultation pursuant to AB52 with the Lead Agency for the project." |



| Consulting Party Contact Information | Federally Recognized | Letter Sent | Certified Mail Tracking No. | Delivered | Emailed / Called | Comments |
|---|-------------------------|----------------------|--------------------------------|-------------------------|--|---|
| Ms. Delia Dominguez, Chairperson <i>Kitanemuk & Yowlumne</i> <i>Tejon Indians</i> 115 Radio Street Bakersfield, CA, 93305 Phone: (626) 339-6785 <u>2deedominguez@gmail.com</u> <i>Kitanemuk & Southern</i> <i>Valley Yokut</i> <i>Kern and Los Angeles County</i> | | MAILED: 1/12/2024 | 70183090000 060170981 | DELIVERED: 1/17/2024 | CALLED: 2/15/2024 CALLED: 2/7/2024 EMAILED: 1/12/2024 | 2/15/2024: Called, left a voicemail 2/7/2024: Called, left a voicemail |
| Mr. Manfred Scott, Acting Chairman - Kw'ts'an Cultural Committee Quechan Tribe of the Fort Yuma Reservation P.O. Box 1899 Yuma, AZ, 85366 Phone: (928) 210-8739 <u>culturalcommittee@quechantri</u> <u>be.com</u> Quechan Imperial, Kern, Los Angeles, Riverside, San Bernardino & San Diego Counties | x | MAILED: 1/12/2024 | 70183090000 060170998 | DELIVERED: 1/18/2024 | CALLED: 2/7/2024 EMAILED: 1/12/2024 | 2/7/2024: <u>RESPONDED</u> <u>VIA PHONE CALL</u> "No concern or comment and defer to the other tribes. " |
| Ms. Jill McCormick, Historic Preservation Officer <i>Quechan Tribe of the Fort</i> <i>Yuma Reservation</i> P.O. Box 1899 Yuma, AZ, 85366 Phone: (928) 210-8739 <u>historicpreservation@quechan</u> <u>tribe.com</u> <i>Quechan</i> <i>Imperial, Kern, Los Angeles,</i> <i>Riverside, San Bernardino &</i> <i>San Diego Counties</i> | Х | MAILED: 1/12/2024 | 70183090000 060171001 | DELIVERED: 1/18/2024 | EMAILED: 1/12/2024 | REFERENCE ABOVE 2/7/2024: Called, left a voicemail No longer in this department Manfred Scott, moved on since April last year NAHC needs to be updated |
| Mr. Jordan Joaquin, President, Quechan Tribal Council <i>Quechan Tribe of the Fort</i> <i>Yuma Reservation</i> P.O. Box 1899 Yuma, AZ, 85366 Phone: (760) 919-3600 <u>executivesecretary@quechantr</u> <u>ibe.com</u> <i>Quechan</i> <i>Imperial, Kern, Los Angeles,</i> <i>Riverside, San Bernardino &</i> <i>San Diego Counties</i> | Х | MAILED: 1/12/2024 | 70183090000 060171018 | DELIVERED: 1/18/2024 | EMAILED: 1/12/2024 | <u>REFERENCE ABOVE</u> |



| Consulting Party Contact Information | Federally Recognized | Letter Sent | Certified Mail Tracking No. | Delivered | Emailed / Called | Comments |
|---|-------------------------|----------------------|--------------------------------|--|--|---|
| Ms. Sarah Brunzell, CRM Manager <i>Fernandeño Tataviam Band</i> <i>of Mission Indians</i> 1019 Second Street San Fernando, CA, 91340 Phone: (818) 837-0794 <u>CRM@tataviam-nsn.us</u> <i>Tataviam</i> <i>Kern,Los Angeles & Ventura</i> <i>County</i> | | MAILED: 1/12/2024 | 70183090000 060170967 | DELIVERED: 1/16/2024 | EMAILED: 1/12/2024 | 1/16/2024: RESPONDED <u>VIA EMAIL</u> CRM Department (no mention of individual) responded : "We will not be providing Tribal input or requesting consultation pursuant to Section 106 for the Willow Rock Energy Storage Center (WRESC) Project." 1/12/2024: RESPONDED <u>VIA EMAIL</u> <u>Automatic Message</u> <u>Response</u> "Thank you for contacting the Cultural Resources Management Division of the Tribal Historic and Cultural Preservation Department for the Fernandeño Tataviam Band of Mission Indians. Please have the project applicant complete the mandatory Digital Project Intake Form for 1) Proposed Projects and/or 2. Consultation requests. A representative will reach out to you shortly after your |
| Mr. Robert Robinson, Chairperson <i>Kern Valley Indian</i> <i>Community</i> P.O. Box 1010 Lake Isabella, CA, 93240 Phone: (760) 378-2915 bbutterbredt@gmail.com <i>Kawaiisu, Tubatulabal &</i> <i>Koso</i> <i>Inyo, Kern, Los Angeles, San</i> <i>Bernardino & Tulare County</i> | | MAILED: 1/12/2024 | 70183090000 060170974 | MOVING THROUGH NETWORK: 1/16/2024 | CALLED: 2/15/2024 CALLED: 2/7/2024 EMAILED: 1/12/2024 | submission is received." 2/15/2024: <u>RESPONDED</u> <u>VIA PHONE CALL</u> Called, spoke with Chairman Robinson Was unable to receive the physical letter, but email was correct and requested to receive an email with the letter. Requested to be present for any future boreholes under cultural monitoring. Due to long distance traveled and short staff, wanted to confirm if mileage or hotels were provided for. Requested a copy of the CEC Report and any information on cultural resources sent out once done so. 2/7/2024: Called, left a voicemail |



| Consulting Party Contact Information | Federally Recognized | Letter Sent | Certified Mail Tracking No. | Delivered | Emailed / Called | Comments |
|---|-------------------------|----------------------|--------------------------------|-------------------------|---|---|
| Mr. James Rambeau, Chairperson Big Pine Paiute Tribe of the Owens Valley P. O. Box 700 | | | | | CALLED: 2/15/2024 | 2/15/2024: Called, Secretary Katelyn answered transferred to extension 223, left voicemail |
| Big Pine, CA, 93513 Phone: (760) 938-2003 Fax: (760) 938-2942 <u>j.rambeau@bigpinepaiute.org</u> | x | MAILED: 1/12/2024 | 70183090000 060170929 | DELIVERED: 1/17/2024 | CALLED: 2/7/2024 EMAILED: | 2/7/2024: Called, left voicemail "Tribal state of emergency, |
| Paiute – Shoshone Inyo, Kern, Mono & San Bernardino Counties | | | | | 1/12/2024 | please leave a message." 1/12/2024: Email was undeliverable |
| Ms. Sally Manning, Environmental Director Big Pine Paiute Tribe of the Owens Valley P. O. Box 700 Big Pine, CA, 93513 Phone: (760) 938-2003 <u>s.manning@bigpinepaiute.org</u> Paiute – Shoshone Inyo, Kern, Mono & San Bernardino Counties | x | MAILED: 1/12/2024 | 70183090000 060170936 | DELIVERED: 1/17/2024 | CALLED: 2/15/2024 CALLED: 2/7/2024 EMAILED: 1/12/2024 | 2/15/2024: Called, left voicemail 2/7/2024: Called, left voicemail "Tribal state of emergency, please leave a message." |
| Mr. Julio Quair, Chairperson Chumash Council of Bakersfield 729 Texas Street Bakersfield, CA, 93307 Phone: (661) 322-0121 chumashtribe@sbcglobal.net Chumash Kern, Los Angeles, San Luis Obispo, Santa Barbara & Ventura County | | MAILED: 1/12/2024 | 70183090000 060170943 | DELIVERED: 1/19/2024 | CALLED: 2/15/2024 : 2/7/2024 EMAILED: 1/12/2024 | 2/15/2024: Phone number has been disconnected 2/7/2024: Phone number has been disconnected 1/12/2024: Email was undeliverable "There's a problem with the recipients mailbox." |
| Mr. Gabe Frausto, Chairman Coastal Band of the Chumash Nation P.O. Box 40653 Santa Barbara, CA, 93140 Phone: (805) 568-8063 fraustogabriel28@gmail.com Chumash Kern, Los Angeles, San Luis Obispo, Santa Barbara & Ventura County | | MAILED: 1/12/2024 | 70183090000 060170950 | DELIVERED: 1/24/2024 | EMAIL RESENT: 2/7/2024: CALLED: 2/7/2024 EMAILED: 1/12/2024 | 2/7/2024: <u>RESPONDED</u> <u>VIA PHONE CALL</u> Called, spoke with Chairman Frausto Email often doesn't come through, please re-send to email provided over the phone: <u>Aandgconsulting805@gmai</u> <u>I.com</u> Requested to be present for future boreholes and when any testing is done. Appreciated that an Archaeologist and monitors from Tejon were present. Email was resent |





























Dear Allegria,

Thank you for contacting the San Manuel Band of Mission Indians concerning the proposed project area. San Manuel appreciates the opportunity to review the project documentation received by the

Cultural Resources Management Department on January 12th, 2024. Based on our current knowledge, the proposed project site is considered highly culturally sensitive by the Tribe due to its proximity to several previously recorded sites and the likelihood of encountering subsurface resources in the project area.

As the area is of concern, the Tribe will wish to engage in government-to-government consultation pursuant to AB 52 with the Lead Agency for the project.

Thank you again for your correspondence, if you have any additional questions or comments please reach out to me at your earliest convenience.

Regards,

Raylene Borrego Cultural Resources Technician Raylene.Borrego@sanmanuel-nsn.gov O:(909) 864-8933 x 50-2035 M:(909) 737-3349 26569 Community Center Dr Highland, California 92346 SAND OF MANUEL BAND OF MISSION INDIANS

| From: | CRM |
|----------|---|
| To: | Garcia, Allegria |
| Subject: | Automatic reply: Willow Rock Energy Storage Center (WRESC) Project for Ms. Brunzell |
| Date: | Friday, January 12, 2024 5:47:09 PM |

Hamiinat (Hello): Thank you for contacting the Cultural Resources Management Division of the Tribal Historic and Cultural Preservation Department for the Fernandeño Tataviam Band of Mission Indians.

Requests Pursuant to Section 106, AB 52, SB 35: Please have the project applicant complete the mandatory Digital Project Intake Form (<u>https://www.tataviam-nsn.us/project-intake/</u>) for one or more of the following: 1. Proposed Projects, and/or 2. Consultation requests. A representative will reach out to you shortly after your submission is received.

Requests Pursuant to SB 18: Please email <u>THCP@tataviam-nsn.us</u>.

Requests made by CRM Firms and Independent Researchers. Please complete the mandatory Tribal Input Request Form (https://www.tataviam-nsn.us/government/departments/THCP/#single/0)

For more information about the THCP Department, please visit: <u>https://www.tataviam-nsn.us/government/departments/THCP/</u>

| RM |
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| <u> Sarcia, Allegria; CRM</u> |
| morelli, Michael; Harmening, Sierra |
| E: Willow Rock Energy Storage Center (WRESC) Project for Ms. Brunzell |
| uesday, January 16, 2024 11:51:57 AM |
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Dear Ms. Garcia,

On behalf of the Cultural Resources Management Division of the Fernandeño Tataviam Band of Mission Indians, thank you for the formal notification and opportunity to provide Tribal input for the Willow Rock Energy Storage Center (WRESC) Project. We will not be providing input for this project or requesting consultation pursuant to Section 106.

From: Garcia, Allegria <allegria.garcia@wsp.com>
Sent: Friday, January 12, 2024 5:46 PM
To: CRM <crm@tataviam-nsn.us>
Cc: Amorelli, Michael <michael.amorelli@wsp.com>; Harmening, Sierra
<sierra.harmening@wsp.com>
Subject: RE: Willow Rock Energy Storage Center (WRESC) Project for Ms. Brunzell

[CAUTION] EXTERNAL Email. Exercise caution.

Dear Ms. Brunzell,

GEM A-CAES, LLC (GEM) proposes to construct and operate a new Advanced Compressed Air Energy System (A-CAES) facility in the unincorporated community of Ansel, north of the town of Rosamond, Kern County, California, called the Willow Rock Energy Storage Center (WRESC). Previously in 2021, PaleoWest sent notifications concerning the project however the footprint has since changed and the facility has been moved. This project is subject to review by both the California Energy Commission (CEC) and the Department of Energy (DoE) and GEM has contracted WSP to conduct a cultural resources assessment of the project, in compliance with the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act.

A letter with details of the project was mailed to you on 1/12/2024; additionally, a PDF copy of the letter and associated APE map is attached to this email for your convenience. Please do not hesitate to contact me at <u>allegria.garcia@wsp.com</u> or (661) 247-7516 should you have any knowledge of cultural resources in the project vicinity, or concerns related to the Project. We would greatly appreciate a response within 30 days of receipt of this letter.

Thank you for your time!

Sincerely,

wsp

Allegria Garcia, RPA Archaeologist

M.A., B.S., B.A. She / Her

T+ 1 951-346-2092 M+ 1 661-247-7516

in

WSP USA Environment & Infrastructure Inc. 11870 Pierce Street, Suite 160 Riverside, CA. 92505

wsp.com

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APPENDIX 5.3B Cultural Resource Assessment

(This appendix is filed under a request for confidential designation)