

DOCKETED

Docket Number:	21-AFC-02
Project Title:	Willow Rock Energy Storage Center
TN #:	248950
Document Title:	Flores MGS MOU 26 June 2018
Description:	Letter from State of California - Natural Resources Agency regarding Memorandum of Understanding re: Mohave ground squirrel
Filer:	Kari Miller
Organization:	Golder Associates USA Inc.
Submitter Role:	Applicant Consultant
Submission Date:	2/24/2023 11:41:21 AM
Docketed Date:	2/24/2023



State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Wildlife Branch
1812 9th Street
Sacramento, CA 95811
<http://www.wildlife.ca.gov/nongame>

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



June 26, 2018

Karla Flores
Principal Investigator
Environmental Science Associates

Dear Ms. Flores,

In response to your written request received on March 23, 2018, the Department of Fish and Wildlife (Department) hereby authorizes you to take California Endangered Species Act (CESA)-listed threatened Mohave ground squirrel (*Xerospermophilus mohavensis*) for scientific research purposes related to conservation and recovery of the species.

The authorization is in the form of a Memorandum of Understanding (MOU) between you and the Department. The MOU is a special permit prepared pursuant to CESA. For the purpose of this agreement, we consider you both the executive signatory and the principal investigator.

Enclosed are two originals of the Mohave ground squirrel MOU, including a List of Authorized Individuals (LAI). If you concur with the terms of the MOU, please sign and date both CESA MOU documents in the appropriate space on page seven. Retain the LAI and one fully signed MOU for your records and as a master for making copies for your field personnel to ensure compliance with all terms and conditions. Please return the other signed MOU to the address in the letterhead, with attention to: Esther Burkett.

Should you have any questions about the MOU, please contact Dr. Scott Osborn, Senior Environmental Scientist (Specialist), by e-mail at Scott.Osborn@wildlife.ca.gov or by telephone at (916) 324-3564.

Sincerely,

Erin Chappell, Environmental Program Manager
Wildlife Branch, Nongame Wildlife Program

cc: Scott Osborn, Esther Burkett
Wildlife Branch, Nongame Wildlife Program



Expiration Date: December 31, 2021

MEMORANDUM OF UNDERSTANDING

Karla Flores (SC-010572)
Principal Investigator
Environmental Science Associates

Research on Mohave Ground Squirrel in California

June 26, 2018

This Memorandum of Understanding (MOU) is issued pursuant to California Code of Regulations Title 14 Section 783.1(a), and Fish and Game Code (FGC) Section 2081(a) of the California Endangered Species Act (CESA) whereby through permits or memorandums of understanding, the Department of Fish and Wildlife (Department) may authorize individuals, public agencies, universities, zoological gardens, and scientific or educational institutions, to import, export, take, or possess any endangered species, threatened species, or candidate species for scientific, educational, or management purposes.

This MOU is a legal instrument connected to your Scientific Collecting Permit (SCP; SC-010572) pursuant to Fish and Game Code Section 1002 and CCR Title 14 Section 650, referenced herein for the purpose of linking the two regulatory documents and all authorized research activities.

MOUs issued pursuant to Fish and Game Code 2081(a) generally do not cover "movement out of harm's way" during project activities (as defined in Public Resources Code 21065) unless part of the project's purpose is to contribute to recovery of the species. Incidental take, as well as movement out of harm's way to avoid lethal take, of CESA-listed or fully protected species associated with project activities is typically authorized by the Department Regional Office with jurisdiction over the project site through separate permits issued pursuant to other Fish and Game Code sections such as 2081(b) or 2835.

Authorized Species and Research Activities

The Department authorizes you to conduct the following scientific research methods and activities on the CESA-listed threatened Mohave ground squirrel (*Xerospermophilus mohavensis*; squirrel):

- a) search (survey) for, including the capture using live-traps;
- b) handle for the purpose of identification;

- c) take measurements, weigh, examine, and photograph;
- d) mark;
- e) collect genetic samples; and
- f) salvage dead or moribund individuals.

This research is authorized in response to your proposal received by the Department on March 23, 2018 and may be conducted throughout the geographic range of the squirrel in accordance with the conditions below.

The primary Department contact for this research is Dr. Scott Osborn, Scott.Osborn@wildlife.ca.gov, 916-324-3564, address in the letterhead above.

General Conditions

1. Prior to conducting work at a new study site, you shall contact the landowner to determine if other squirrel researchers are working there. You shall coordinate with other researchers to avoid duplicative work and undue disturbance of local squirrel populations and to share information to maximize sample sizes for all research projects with the least amount of take. You shall not conduct work on a site under known active study by another squirrel researcher, unless the primary Department contact allows it via written correspondence.
2. Advanced notification (at least 15 days' notice) of intent to conduct activities pursuant to your MOU shall include the primary Department contact and the appropriate Regional contact (<https://www.wildlife.ca.gov/Regions>):

Region 4: Craig Bailey, Craig.Bailey@wildlife.ca.gov, (559) 243-4014x227
Region 5: Scott P. Harris, Scott.P.Harris@wildlife.ca.gov, (805) 644-6305
Region 6: Rebecca Jones, Rebecca.Jones@wildlife.ca.gov, (661) 285-5867
3. All traps or trapping locations shall be marked with your SCP permanent ID (**SC-010572**) and checked at least once every four hours.
4. You shall generally follow standard practices for the humane capture and release of desert rodents using live-traps. You shall specifically follow the Department's *Mohave Ground Squirrel Survey Guidelines* (dated January 2003; revised 2010, or subsequent versions of the survey guidelines), while conducting work with the squirrel. You shall carry a copy of the survey guidelines with your permit paperwork for inspection by law enforcement officers. The survey methods may be modified with the written approval of your primary Department contact. In addition, you shall clean and sanitize all traps prior to setting them at each site. To help avoid the risk of Hantavirus, we recommend handling mammals in open areas and using a respirator when cleaning traps.

5. You may collect a genetic tissue sample from captured squirrels. Collection and disposition of such samples shall be coordinated with your primary Department contact. Samples from individual squirrels will consist of a single tissue sample (approximately 1 mm by 2-3 mm) taken from the margin of the external ear of captured squirrels. You shall apply antibiotic cream to the site of the wound. Handling time of individuals shall be minimized and measures shall be taken to avoid excessive bleeding or infection and the transfer of infectious agents between squirrels.
6. You are authorized to mark squirrels using temporary means such as applying non-toxic indelible ink to the fur or clipping small patches of fur.
7. You are authorized to mark squirrels with subcutaneous transponder ("PIT") tags. You shall take all necessary precautions to avoid transmitting infectious agents between individuals, or causing excessive bleeding or infection.
8. You shall not hold any individual squirrel in captivity, except briefly to allow a trap-chilled or -heated, wet, disoriented, or slightly-injured squirrel to recover. You shall not sacrifice any individual squirrel, except in the circumstance in which a debilitating injury requires humane euthanasia.
9. Incidentally-captured Mammal Species of Special Concern (MSSC) may be handled to take standard measurements and to assess reproductive and general condition of the animal. You may also take small MSSC as authorized under your SCP and federal permit.
10. In the event that an incidentally-captured Threatened or Endangered, Candidate, Fully Protected, or Special Concern species¹ is found to be marked, you may handle it to the extent necessary to identify features of the marking (e.g., numbers and colors). You shall make a reasonable attempt to notify the researcher who placed the mark, if known, or if not, the primary Department contact, of the recapture data (see Condition #2).
11. The number of squirrels allowed to be seriously injured (i.e., compromising survival in the wild) or killed during permitted activities is zero (0) in any calendar year. Any incidental serious injury or mortality of a squirrel, or CESA-listed or Fully Protected species shall be reported to the primary Department contact. In the event the number of squirrels allowed to be seriously injured or killed is exceeded during the performance of permitted activities, you shall:
 - a. Immediately notify the Department contact by telephone.
 - b. All work shall cease after completion of that day's trap check, until reauthorized by the Department contact. After analysis of the

¹ See the Special Animals List for a complete list of these species.

- circumstance of injury or mortality, the Department may revoke, amend, or reauthorize this MOU.
- c. A written report shall be sent to the Department contact via e-mail within 10 days of the mortality event.
 - d. In the written notification, you shall describe the circumstances that led to the injury or mortality. A description of recommended changes in methods that will be implemented to reduce the likelihood of such injury or mortality from happening again should be included, if appropriate. All injuries and mortalities shall also be summarized in the annual report that is subsequently submitted (see Reporting below).
12. Inadvertent casualties and salvaged specimens of the authorized species shall be retained and disposed in a manner consistent with the "Authorizations and Conditions for Scientific Collecting Permit" for **SC-010572**. A copy of this MOU shall accompany salvaged specimens at all times to validate the specimens were taken pursuant to this MOU.
 13. If you identify a die-off or a substantial portion of sick or infected individuals at a site, you shall notify the primary Department contact and Dr. Deana Clifford (Wildlife Investigations Lab), (916) 358-2378, Deana.Clifford@wildlife.ca.gov, as soon as possible (but no more than 48 hours after the discovery) with the following details: date, location, approximate number, physical condition, possible cause, and disposition if collected. Salvage of a sick squirrel requires prior approval by the primary Department contact.

Reporting Requirements

14. Annual Report: You are required to submit an Annual Report to the Department on or before January 31st of the year following each year of research. The Annual Report shall be submitted via email to the Department contact for your MGS MOU (Scott.Osborn@wildlife.ca.gov), the Department lead for wildlife research MOUs (Esther.Burkett@wildlife.ca.gov), and the lead zoologist for the California Natural Diversity Database (Brian.Acord@wildlife.ca.gov).

The Annual Report shall include a summary of your activities for the year using standard scientific report format including:

- a. Title, Date, Author(s) and Affiliations
- b. Introduction
- c. Methods, including Study Area (with map). Photographs may be included as needed. Survey site(s) shall be mapped, with sufficient reference information to allow georeferencing the locations of survey grids and squirrel detections into a GIS.
- d. Results/Discussion. A tabular summary of trapping results for each study site shall be included, including the USGS quad name, datum, UTM

coordinates and UTM zone, or datum and latitude-longitude of each trapping grid's centroid, description of the study site including dominant vegetation, number of trap nights, dates, and number of squirrels detected (including information on any incidentally-captured threatened, endangered, candidate, fully protected, and special concern species). If any mortalities or serious injuries of captured squirrels or other animals occurred, then include a description of the numbers and causes of such incidents. Provide the name of the repository of each salvaged dead or injured specimen.

e. Literature Cited

If no activities were conducted with the squirrel during the previous year, please state this in writing in your annual report.

15. **Other Reporting:** You shall also provide copies of other publications, abstracts, journal articles, popular articles, and progress/annual, or final reports that you prepare or assist in preparing for a client or other third party that involves work conducted under the authority of this MOU.
16. **MGS BIOS Database:** You shall provide trapping data for the MGS BIOS Database. Use the Department's MGS spreadsheet (see "Mohave ground squirrel presence/absence surveys"², dated March 31, 2014) to summarize MGS surveys, including captures, visual or auditory detections, and negative survey results for entry into the Department's BIOS database for Mohave ground squirrel. Submission of the MGS spreadsheet fulfills the CNDDDB reporting requirements for MGS observations.
17. **California Natural Diversity Database (CNDDDB):** For any Threatened or Endangered, Candidate, Fully Protected, or Species of Special Concern encountered and correctly identified (see the Special Animals List), you shall send occurrence data to the CNDDDB. You shall submit point data to the CNDDDB at least annually. Data can be submitted on the standard CNDDDB Field Survey Forms, in an electronic spreadsheet with an attached map depicting locations of observations, or via the CNDDDB Online Field Survey Form. If submitting data in tabular form, you shall include known threats to the species and cross-reference your annual report(s).
18. **Report of Specimens Captured or Salvage (RSCS):** When you submit your RSCS form, which is a requirement of your SCP, you may simply reference your annual scientific reports and CNDDDB data that have been submitted to the Department. There is no need to repeat the more detailed information contained in your annual reports and CNDDDB forms on the RSCS form; however, any incidental take (e.g.,

² <http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=133014>

capture) of non-target species as a result of your field activities shall be reported on the RSCS form.

19. Reporting Compliance and Data Exchange: It is mutually understood there will be a free exchange of data and information during the course of study covered by this MOU. Draft documents, raw/field data, photographs, notes, and other information resulting from work conducted under the authority of this MOU shall be submitted to the Department contact upon request. Failure to comply with reporting requirements may result in non-renewal or suspension/revocation of this MOU.

Standard Provisions

Standard MOU Provisions (see Attachment 1; dated February 18, 2014) shall also be followed, in addition to the conditions of your SCP (**SC-010572**), including the Standard Conditions for all SCP holders (dated October 31, 2017) attached thereto.

List of Authorized Individuals

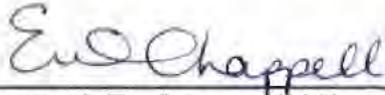
A List of Authorized Individuals (LAI) has been designated under the terms of this MOU (Attachment 2). The Principal Investigator may request to add Independent Researchers or Field Assistants to be named on the LAI, to perform field studies as described above, by submitting to the Department contact the following: a) name of the individual; b) species the individual is working with; c) research activities the individual will conduct; d) whether or not these research activities will be conducted independently, or under direct supervision; and e) statements of qualifications that describe the individual's experience with the authorized species, and experience with the methods to be employed in the study. Letters of recommendation may also be required as supplemental information. A current LAI shall be in possession of all field personnel while conducting work authorized by this MOU.

Term

This MOU shall be in your possession, along with a current SCP, while conducting the work described above, and is valid through **December 31, 2021**, provided your SCP is current and valid. Should you have any questions, please contact Dr. Scott Osborn.

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE on June 26, 2018.

THE PARTIES HAVE EXECUTED THIS MOU TO BE IN EFFECT AS OF THE DATE LAST WRITTEN BELOW.



Erin Chappell, Environmental Program Manager
Wildlife Branch, Nongame Wildlife Program

ACKNOWLEDGMENT

The undersigned: (1) warrants that he or she is acting as the Principal Investigator, (2) acknowledges receipt of this MOU, and (3) agrees to comply with all terms and conditions of the MOU.



Karla Flores
Principal Investigator
Environmental Science Associates

7/24/18
Date



State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Wildlife Branch
Nongame Wildlife Program
1812 9th Street
Sacramento, CA 95811
<http://www.wildlife.ca.gov>

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



Attachment 1

Standard Memorandum of Understanding (MOU) Provisions February 18, 2014

Authorized Individuals

All individuals authorized to conduct activities pursuant to this MOU have been designated on the List of Authorized Individuals, which is an attachment to this MOU (Attachment 2). The list, printed on Department letterhead, may identify special conditions or circumstances under which individuals are authorized to conduct permitted activities and shall be retained with this MOU. Each named individual shall be responsible for compliance with the MOU terms and conditions. To request changes to the list, the Principal Investigator shall submit a written request to the Department contact listed in this MOU. The request shall be signed and dated by the Principal Investigator, and shall contain names and qualifications of all individuals to be added to the list and/or names of individuals to be deleted. Changes in authorized personnel shall constitute a change only to the List of Authorized Individuals and not an amendment to the MOU.

Amendments

The conditions of this MOU may be amended by mutual consent of the permittee and the Department. Amendment requests shall be in writing, and shall be sent to the Department contact. The permittee should allow a minimum of 30 days for the Department to review and respond in writing to a request.

MOU Term

This MOU may be renewed within 60 days prior to the termination date with the approval of both the permittee and the Department. If a request for renewal is received within 60 days prior to expiration, the MOU shall remain in effect until the Department takes written action to renew the agreement or to deny the request. The Department may terminate this MOU at its sole discretion at any time.

Obligation to Obtain Other Permits

This MOU does not relieve the MOU-holder from the obligation to obtain any other federal, state, or local permits that may be required.

Department Coordination

At the discretion of the Department, a Department employee may accompany the permittee during any field activity authorized by the MOU.

Landowner Permission

The permittee is responsible for obtaining permission from the owners or operators of all properties, whether public or private, prior to entering to conduct the studies authorized herein.

Jurisdiction

This MOU does not relieve the permittee of the responsibility to comply with any other Federal, State, or local laws or regulations.

Correspondence

All correspondence from the Department regarding this MOU shall be sent to the Principal Investigator(s).

Fiscal Obligation

The Department assumes no fiscal obligation as a result of this MOU.



State of California – Department of Fish and Wildlife
2018 SCIENTIFIC COLLECTING PERMIT APPLICATION
AUTHORIZATIONS AND CONDITIONS
DFW 1379 (REV. 10/31/17)

STANDARD CONDITIONS FOR ALL SCIENTIFIC COLLECTING PERMIT (SCP) HOLDERS

- A. No collections may be made in any Marine Protected Area (wildlife.ca.gov/mlpa/mpa_summary.asp) (i.e. State Marine Reserve, State Marine Conservation Area, State Marine Park, State Marine Recreational Management Area), State Reserve, Marine Life Refuge, Fish Refuge, Wildlife Area, Ecological Reserve, Rockfish Conservation Area, or Cowcod Conservation Area without approval from both the Department through an SCP with specific concurrence from the Department manager for that area.
- B. Pursuant to California Fish and Game Code (FGC), Sections 1002 and 1003, and Section 650, Title 14, of the California Code of Regulations (CCR) the permittee is authorized to collect specimens of fish and wildlife according to the conditions listed on this permit. The permittee must be present and carry this Scientific Collecting Permit, any amendments to the permit and additional authorizations (letters or MOUs) at all times when collecting. These forms must be in possession when collecting and must be shown upon request to any person authorized to enforce Fish and Game laws and regulations.
- C. You must carry the Report of Specimens Captured or Salvaged (DFW 1379a) with your Scientific Collecting Permit and any amendments while collecting. The report must be filled out immediately upon completion of each collecting trip. The disposition portion of the report may be filled out when final disposition of the animals is known. Pursuant to Section 650(l), Title 14, of the CCR, permittees are required to submit a report, unless otherwise specified in the SCP, within 30 days after the expiration of the permit or sooner if submitting an application to renew a SCP, whichever comes first.
- D. You must notify the local Department office of the event and location of your activities prior to collecting. Notification must be made during normal business hours, at least 24 hours prior to collecting and can be made using the Notification of Intent to Collect for Scientific Purposes form (DFW 1379f) available at wildlife.ca.gov/Licensing/Scientific-Collecting. You may use your own template or format as long as the required information shown on the form is provided.
- E. This permit does not relieve the permittee of the responsibility to obtain any other permits, or comply with any other Federal, State, or local laws or regulations. It is the responsibility of the permittee to know the boundaries and managing authority of specially designated protected areas or sanctuaries.
- F. No other sport or commercial fishing activities or collection of unauthorized species is allowed on the same trips or time periods as scientific collection activities.
- G. You must submit data to the California Natural Diversity Database (CNDDDB) in an acceptable format or complete California Native Species Field Survey (CNSFS) form for any Threatened, Endangered, or Special Concern Species captured. Mail to the address listed on the CNSFS form. The CNSFS form and other accepted formats are at wildlife.ca.gov/Data/CNDDDB/Submitting-Data.
- H. Once removed from the wild, animals may not be returned to the wild without prior written permission from the Department.
- I. Marking or tagging of any kind is not authorized by this permit unless it is specifically requested by the permittee and authorized in writing by the Department.
- J. Use of pitfall traps is not authorized by this permit unless it is specifically requested by the permittee and authorized in writing by the Department.
- K. To band or to take birds protected by the Migratory Bird Treaty Act, you must attach a copy of all current federal permit(s) authorizing this activity with your SCP application.
- L. You must mark each trap set to capture mammals with your Scientific Collecting Identification Number (SCIN) before placing the trap in the field. Marking traps with an identification number is a requirement of FGC Section 4004. The SCIN shall be stamped clearly on the trap or on a metal tag attached directly to any part of the trap (Section 465.5(g), Title 14, of the CCR). Tagging the trap allows the person to remove the tag before another permittee uses the same trap and attaches his/her own tag.



Expiration Date: December 31, 2021

**Attachment 2
LIST OF AUTHORIZED INDIVIDUALS**

**Karla Flores (SC-010572)
Principal Investigator
Environmental Science Associates**

**Research on Mohave Ground Squirrel in California
June 26, 2018**

1. Individuals authorized to conduct activities pursuant to this California Endangered Species Act (CESA) Memorandum of Understanding (MOU) for scientific research on Mohave ground squirrel (*Xerospermophilus mohavensis*):

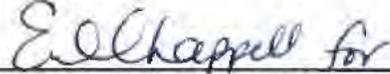
Principal Investigator: Karla Flores.

Independent Researchers: None listed at this time.

Field Assistants: None listed at this time.

2. When approved by the Department, Independent Researchers may conduct activities pursuant to this MOU without the direct supervision of the Principal Investigator, and as authorized by the appropriate federal permit(s), when applicable.
3. Field Assistants listed must work under the direct, on-site supervision of the Principal Investigator or an Independent Researcher, and may assist on survey and capture efforts, until such time as the Principal Investigator can certify in writing to the Department, and the Department concurs in writing, that the individual may work independently. Field Assistants should have sufficient training or experience with small mammal trapping in general prior to conducting any activities under this MOU.

June 26, 2018
Date



Scott D. Osborn, Ph.D.
Senior Environmental Scientist

This List of Authorized Individuals is valid only if dated on or after the issuance date of the MOU.