

<b>Funding Agency:</b> US Army Corps of Engineers, Alaska District 2204 3 <sup>rd</sup> street JBER, AK. 99506	<b>Funding Instrument:</b> Cooperative Agreement <b>Funding Opportunity No:</b> POA-CESU-19-02 <b>CFDA No:</b> 12.632 <b>Program Title:</b> Legacy Resource Management Program, Sikes Act 670c-1
<b>Issue Date:</b> 14 December 2018	<b>Application Due Date:</b> 15 January 2019
<p><b>Overview: POA-CESU 19-01 Natural Resources Support MGT-Species Nellis Air Force Base Nevada. Cooperative Ecosystems Studies Unit.</b></p> <ol style="list-style-type: none"> <li>1. MGT, Species, Reptiles &amp; Amphibians.</li> <li>2. MGT, Species, Wildhorse &amp; Large Mammal.</li> <li>3. MGT, Species Golden Eagle.</li> <li>4. MGT, Habitat, Vegetation Classification, South Range.</li> <li>5. Government Furnished Equipment (GFE).</li> <li>6. Data Collection &amp; GIS Requirements.</li> <li>7. Deliverables.</li> </ol> <p>See Scope of Work for detailed information.</p> <p>Period of Performance is: 18 months from date of award.</p>	
<b>Estimated Total Funding:</b> \$594,315	<b>Anticipated Number of Awards:</b> 1
<b>Contents of Full Text Announcement</b>	
<b>I. Funding Opportunity Description</b>	<b>1. Project description, objectives &amp; background</b>
<b>II. Award Information</b>	<b>2. Objectives</b>
<b>III. Eligibility Information</b>	<b>3. Major Tasks and Requirements</b>
<b>IV. Application Information</b>	<b>4. Government Furnished Info &amp; Equipment</b>
<b>V. Application Review Information</b>	<b>5. Data Collection &amp; GIS Requirements</b>
	<b>6. Deliverables</b>
	<b>7. Period of Performance</b>
	<b>8. Points of Contact</b>
<p><b>Contact Information:</b> Questions that are related to Grants.gov including registration and system requirements should be directed to the Grants.gov contact center at 1-800-518-4726. For assistance with this funding Opportunity Announcement please contact Olen.R.Northern@usace.army.mil</p>	

**Instructions to Applicant:** The complete Funding Opportunity Announcement, application forms and Instructions can be downloaded directly from Grants.gov.

Applications in response to this Funding Opportunity Announcement must be submitted by 2:00PM Alaska time, on the Application Due Date shown above. Applications may be submitted by mail, e-mail, or via the internet through Grants.gov. Each applicant is responsible to ensure their application has been received timely.

Applicants will have a Dun and Bradstreet Data Universal Numbering System (DUNS) number, and registered

See section IV of the Funding Opportunity Announcement for complete application submission information.

### **Section I: Funding Opportunity Description**

#### **POA-CESU 19-02 Natural Resources Support Nellis Air Force Base Nevada. Cooperative Ecosystems Studies Unit.**

Section II: Award Information  
Cooperative Agreement, \$594,315 with a 18 month period of performance beginning on the date of award.

#### **Section III: Eligibility Information**

Eligible Applicants – CESU participants.

#### **Section IV: Application and Submission Information**

##### **1. Address to Request Application Package**

The complete funding opportunity announcement, application forms, and instructions are available for download at Grants.gov. USACE is not responsible for any loss of internet connectivity or for an applicant's inability to access documents posted at the referenced website.

The administrative point of contact is Olen Northern, (907) 753-2525,  
Olen.R.Northern@usace.army.mil.

##### **2. Content and Form of Application Submission**

All mandatory forms and any applicable optional forms must be completed in accordance with the instructions on the forms and the additional instructions below.

a. SF 424 - Application for Federal Assistance

b. SF 424 A – Budget Information for Non-Construction Programs

c. SF 424 B – Assurances – Non-Construction Programs

d. Program Narrative – Brief program description illustrating applicant's ability to meet the goals and objectives described in Section I of the announcement.

Application shall be submitted NO LATER THAN 15 January-2019

### 3. Submission Instructions

Applications may be submitted via e-mail and, or the internet.

#### a. Internet:

Applicants are required to submit proposals through Grants.gov. Applicants are responsible for ensuring that their Grants.gov proposal submission is received in its entirety. The Government bears no responsibility for data errors resulting from transmission of conversion processes associated with electronic submissions. The Government will bear no responsibility for delays in submissions due to technical difficulties at or with the Grants.gov website.

All applicants using Grants.gov to submit proposals must be registered and have an account with Grants.gov. It may take up to three weeks to complete Grants.gov registration. For more information on registration, go to <http://www.grants.gov/ForApplicants>.

#### b. E-mail:

If there is an issue with submission to Grants.gov, please contact the Corps at the email addresses below. Format all documents to print on Letter (8 ½ x 11”) paper. E-mail proposal to [Olen.R.Northern@usace.army.mil](mailto:Olen.R.Northern@usace.army.mil)

### **Section V: Application Review Information**

1. Evaluation for Selection to receive consideration for award, the proposal must meet the requirements set forth in this FOA and be presented with adequate detail to assure the evaluator(s) have a good understanding of the proposed requirement(s). All proposals will be evaluated to determine the extent to which each offeror demonstrates a clear understanding of the requirements of the announcement, Scope of Work (SOW), and FOA.

Each potential recipient shall submit a proposal that completely addresses all evaluation criteria and specifically identifies how each requirement will be satisfied. Technical proposal shall be no longer than 15-pages, font 12 (This page limitation is in addition to all required forms). All questions shall be submitted no later than 17 December 2018 at 2:00PM Alaska time.

2. Basis of Award: The selection decision will be based on the NFE offering the best overall value to the Government, with consideration given to all factors described below (weighted in descending order of importance). Proposals will not be ranked. The Government will not award a Cooperative Agreement to a grantee whose proposal contains a deficiency. The selection will not be based on lowest proposed cost, it will be based on an analysis of each criteria listed below. The proposal document shall be outlined as shown below.

**SCOPE OF WORK  
NATURAL RESOURCES SUPPORT-MGT, SPECIES  
NELLIS AIR FORCE BASE (NAFB), NEVADA**

**Project Cost Ceiling: \$594,315**

**1. GENERAL**

Projects for execution under this CA by USACE do not include any functions to be performed that are inherently governmental. This determination is made with the assessment that places emphasis on the degree to which conditions and facts restrict the discretionary authority, decision-making responsibility, or accountability of Government officials using recipient services or work products.

This CA shall not be used for performance of personal services. These tasks provided by the customer for execution under this CA by USACE do not include functions to be performed that are personal services.

Any modifications to Cooperative Agreement activities as outlined by this SOW must be coordinated through the Grants Officer's Technical Representative (GOTR) and authorized by the Grants Officer (GO) prior to Non-Federal Entity (NFE) implementation.

**2. OBJECTIVES**

The objectives of the work to be performed under this cooperative agreement are to conduct natural resource tasks on federal lands belonging to Nellis Air Force Base (AFB), and to prepare reports detailing the results of this work for submission to the USACE Alaska District point of contact (POC), AFCEC Nellis Installation Support Section (ISS) POC, and Nellis Natural Resource POC.

**3. MAJOR REQUIREMENTS AND TASKS**

**3.1.1. MGT, SPECIES, REPTILES AND AMPHIBIANS (RKXF197319)**

This study will continue the process of surveying the NTTR, Nellis AFB, and Creech AFB for populations of reptiles and amphibians as authorized under the Sikes Act and to determine if there are any rare, sensitive species of concern, threatened or endangered species, as defined under the Endangered Species Act, present on the NTTR, Nellis AFB, and Creech AFB. The Sikes Act authorizes the Secretary of Defense to develop lands for conservation and rehabilitation of military reservations. The Endangered Species Act provides a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, and to provide a program for the conservation of these species. Currently, NTTR, Nellis AFB, and Creech AFB contain habitats for many reptile and amphibian species. Additional data is needed for the Air Force to support or oppose potential habitat listings, resulting in the State, federal and other agencies dictating courses of action under the Endangered Species Act. Failure to investigate these resources could result in land restrictions impacting the military mission of the NTTR.

The purpose of this task is for the NFE to conduct reptile and amphibian surveys on areas on the NTTR, Nellis AFB, and Creech AFB determined as suitable habitat. Areas to be studied will be prioritized based on habitat, vegetation types and areas which might be developed in the future for military test and training missions. The NFE will have adequate experience in performing wildlife surveys, plant identification, and habitat mapping. Based on range access restrictions and mission training activities, field work will often be required to be conducted on weekends and holidays, in addition to normal weekdays. Required field work must be completed during biologically accepted activity (breeding, migratory, wintering, nesting, blooming,) seasons, based on range access availability. Surveys may be required to be conducted outside of the normal seasons if stipulated by various land/wildlife managing agencies and as approved by the AFCEC/Nellis ISS and Nellis-Natural Resources Program Manager.

### **Scope**

The overall purpose of this task is to continue to document reptile and amphibian populations and seasonal habitat use on the NTTR, Nellis AFB, and Creech AFB, and provide best management practices to sustain military air training operations and readiness. The project's product will be the continuation of mapping and updating NTTR/Nellis AFB/Creech AFB reptile and amphibian populations, habitat use, and seasonal distribution. GIS data such as species occurrence, seasonal habitat use, and estimated population densities will be collected and entered into the Natural Resources GIS data base.

NFE personnel must be able to obtain clearance for the Nellis range and will be escorted by a Government employee at all times while on the range. All specialized equipment must be cleared for use on the range prior to start of the project. The NFE will use only rental or company vehicles, or GOVs as available, or helicopters for use on the range. No POVs are allowed on the range. Areas for wildlife surveys will be determined based on scheduled activities and range access.

Required photographs will be taken by a Government employee and not released for NFE use until after being cleared through the NTTR XPN office.

### **Initial Meeting**

Within 30 days of award, the NFE will schedule an initial project kick off meeting with all parties involved (Nellis AFB, AFCEC/Nellis ISS, NFEs, etc) to develop a project work schedule to implement the SOW. All deliverables/tasks will be submitted within the required timeframes as identified.

The NFE shall work with the Nellis-Natural Resources Program Manager to establish priority areas of survey areas to evaluate reptile and amphibian populations, habitats, seasonal use and species distribution on the NTTR, Nellis AFB, and Creech AFB. This determination should be made based on mission priority, range access, or by habitat priority as determined by the Nellis-Natural Resources Program Manager. Due to NTTR mission and training prioritization schedules and access restrictions, implementation of fieldwork activity/schedules may be required to be changed, as agreed upon as necessary by the NFE, AFCEC/Nellis ISS, and the Nellis-Natural Resources Program Manager.

## **Review Existing Data/Fieldwork Preparation**

Review historic reptile and amphibian population data, and habitat use on the NTTR, Nellis AFB, and Creech AFB. Utilize existing datasets and GIS layers/aerial imagery to plan out locations for fieldwork and coordinate proposed locations with Nellis-Natural Resources Program Manager by submitting a proposed schedule for the year. The schedule shall be updated by the first of each month. Field requests and maps shall be submitted at least 30 days prior to each field event for coordination and approval.

Coordinate with the Nellis-Natural Resources Program Manager to arrange and prepare for supplies, equipment, personnel, transportation, range access information, etc. in preparation for field events. Certain equipment and supplies must be picked up at Nellis AFB from the Natural Resources Program Office at the start of the field season or as needed and returned after the field season is completed.

## **Fieldwork**

Required field work must be completed during biologically accepted seasons (breeding, migratory, wintering, nesting) as delineated for each type of survey listed below, based on range access availability. Surveys may be required to be conducted outside of the normal seasons if stipulated by various land/wildlife managing agencies and as approved by the Nellis-Natural Resources Program Manager. Protocols for surveys will be coordinated with the Nellis-Natural Resources Program Manager during the initial meeting and submitted prior to the start of field work. Approved survey protocols will be followed where possible, while ensuring compliance with Range access/restrictions. Adjustments to the protocols will be documented and submitted with data sheets to the Nellis-Natural Resources Program Manager.

The NFE will conduct surveys and monitoring fieldwork on the NTTR, Nellis AFB, and Creech AFB. Surveys will be conducted for specific species as approved by the Nellis-Natural Resources Program Manager. This determination should be made based on mission priority, range access, or by species priority as determined by the Nellis-Natural Resources Program Manager. Seasonal timing and locations of surveys will be approved on a case by case basis. Survey types may include but are not limited to diurnal reptile surveys, nocturnal amphibian surveys, night driving/spotlighting surveys, live trapping, call recordings, pit fall trapping, etc.

## **Draft/Final Project Reports**

Three (3) copies of a draft project report will be submitted within 60 days of the conclusion of the field season. Nellis AFB will coordinate and consolidate Air Force comments/corrections on the draft within 30 days. Upon receipt of comments/corrections, on the draft project report, 3 copies of a final draft project report will be submitted within 30 days for final review. Air Force review and comments on the final draft project report will be conducted within 30 days. Ten (10) hard copies and ten (10) electronic copies of the final project report will be due within 30 days upon receipt of Nellis AFB comments on the final draft project report. The reports shall be submitted on a staggered schedule with no more than three reports submitted per week. If more than three reports are submitted in a week, then additional time will be needed for governmental review. The project report format and contents will be approved during the initial project meeting by the Air Force. The report will include but is not limited to an executive summary, site characterization, survey methods, field notes and data sheets, results, population trend data where applicable, discussion and management recommendations, and

military mission implications. Maps and drawings will be provided. All documents shall be provided in Microsoft Word and pdf formats. All photographs, data, and original data forms will be provided to 99 CES/CEIEA.

### **3.1.2. MGT, SPECIES, WILDHORSE & LARGE MAMMAL (RKXF196318)**

This study will continue the survey, inventory, and monitoring of large mammal wildlife species, bighorn sheep, and wild horses found on the NTTR. Numerous large mammal wildlife species and wild horses are known or suspected to exist on NTTR. Additional data for these large mammal wildlife species and their occurrence on the NTTR is required to evaluate each species population health status and potential impacts to the natural ecosystem as well as impacts to sustaining the military mission. Baseline population data and continued monitoring of wild horses is necessary to evaluate this species status and trends in order to evaluate potential impacts to wildlife species, habitat conditions, personnel safety and mission activities. Failure to monitor and manage these resources could result in land degradation and potential restrictions impacting the military mission of the NTTR.

The purpose of this task is for a NFE to conduct large mammal wildlife species surveys and wild horse population monitoring on areas on the NTTR determined as suitable habitat. Areas to be studied will be prioritized based on habitat, vegetation types and areas which might be developed in the future for military test and training missions. The NFE will have adequate experience in performing wildlife surveys, plant identification, and habitat mapping. Based on range access restrictions and mission training activities, field work will often be required to be conducted on weekends and holidays, in addition to normal weekdays. Required field work must be completed during biologically accepted activity (breeding, migratory, wintering, nesting, blooming,) seasons, based on range access availability. Surveys may be required to be conducted outside of the normal seasons if stipulated by various land/wildlife managing agencies and as approved by the AFCEC/Nellis ISS and Nellis-Natural Resources Program Manager.

#### **Scope**

The overall purpose of this task is to conduct large mammal surveys and inventories for the purpose of collecting species composition, distribution, population health and trends, and ecosystem degradation/ rangeland utilization. Wild horse monitoring will be conducted to assist in determining wild horse herd impacts to over utilization of natural resources, potential safety issues to NTTR personnel and equipment, and impacts to continuation of the military mission. Bighorn sheep work will entail the use of Satellite subscription for location tracking and data management of satellite downloads for 9 months (to run consecutive to the conclusion of the 1 yr subscription done in FY18), and helicopter support to retrieve the collars after drop.

The task's product will be the evaluation of large mammal, bighorn sheep, and wild horse populations, habitat use, range impacts, and seasonal distribution. GIS data such species, size or age, sex, and habitat occurrence of large mammals and wild horses will be collected and entered into the Natural Resources GIS data base.

NFE personnel must be able to obtain clearance for the Nellis range and will be escorted by a Government employee at all times while on the range. All specialized equipment must be cleared for use on the range prior to start of the project. The NFE will use only rental or

company vehicles, or GOVs as available, or helicopters for use on the range. No POVs are allowed on the range. Areas for wildlife species at risk surveys will be determined based on scheduled activities and range access.

Required photographs will be taken by a Government employee and not released for NFE use until after being cleared through the NTTR XPN office.

### **Initial Meeting**

Within 30 days of award, the NFE will schedule an initial project kick off meeting with all parties involved (Nellis AFB, AFCEC/Nellis ISS, NFEs, etc) to develop a project work schedule to implement the SOW. All deliverables/tasks will be submitted within the required timeframes as identified.

The NFE shall work with the Nellis-Natural Resources Program Manager to establish priority areas of survey areas to evaluate, map, monitor, and document large mammal species populations and seasonal habitat on the NTTR. Wild horse monitoring will be conducted to assist in determining wild horse herd impacts to over utilization of natural resources, potential safety issues to NTTR personnel and equipment, and impacts to continuation of the military mission. This determination should be made based on mission priority, range access, or by habitat priority as determined by the Nellis-Natural Resources Program Manager. Due to NTTR mission and training prioritization schedules and access restrictions, implementation of fieldwork activity/schedules may be required to be changed, as agreed upon as necessary by the NFE, AFCEC/Nellis ISS, and the Nellis-Natural Resources Program Manager.

### **Review Existing Data/Fieldwork Preparation**

Review historic large mammal, BHS, and wild horse population data, and habitat use on the NTTR. Utilize existing datasets and GIS layers/aerial imagery to plan out locations for fieldwork and coordinate proposed locations with Nellis-Natural Resources Program Manager by submitting a proposed schedule for the year. The schedule shall be updated by the first of each month. Field requests and maps shall be submitted at least 30 days prior to each field event for coordination and approval.

The NFE will generate a summary report on BHS distribution, migration and movement using the downloaded data and combining it with data collected the prior year beginning in Nov 2018 until collars drop in May 2020. The NFE will develop a spreadsheet or database to organize the sheep movement data obtained from the database which will be provided to the AF as a final deliverable. The spreadsheet will cover the timeframe of Nov 2018 to May 2020. The NFE will be responsible for generating analogous figures to those provided at the kick off meeting. These figures shall cover the new monitoring window to document BHS distribution, movement and migration patterns from Nov 2018 to May 2020. The summary report, including figures should not exceed 30 pages (excluding appendices) and should provide a discussion, narrative of results, and recommendations for further study.

Coordinate with the Nellis-Natural Resources Program Manager to arrange and prepare for supplies, equipment, personnel, transportation, range access information, etc. in preparation for field events. Certain equipment and supplies must be picked up at Nellis AFB from the Nellis AFB Natural Resources Program Office. Equipment may be checked out at the start of the field season and returned after the field season is completed.



## **Fieldwork**

Required field work must be completed during biologically accepted seasons as delineated for each type of survey listed below, based on range access availability. Surveys may be required to be conducted outside of the normal seasons if stipulated by various land/wildlife managing agencies and as approved by the Nellis-Natural Resources Program Manager. Protocols for surveys will be coordinated with the Nellis-Natural Resources Program Manager during the initial meeting and submitted prior to the start of field work. Approved survey protocols will be followed where possible, while ensuring compliance with Range access/restrictions. Adjustments to the protocols will be documented and submitted with data sheets to the Nellis-Natural Resources Program Manager.

The NFE will coordinate with NDOW for established bighorn sheep surveys conducted on the NTTR to obtain survey data for the south ranges of NTTR. Habitat utilization and sheep inventory of the North range will be conducted by the NFE. The NFE will conduct aerial surveys/inventories of bighorn sheep on the NTTR north range during the fall field season (1 September – 1 November). The NFE will conduct aerial surveys/inventories of pronghorn on the NTTR north range during the summer field season (1 July – 1 September). The NFE will set up, maintain and evaluate trail cameras for large mammal utilization of springs or water sources on the NTTR. Locations, directions, and settings will be approved by the Nellis-Natural Resources Program Manager and coordinated with the NTTR prior to installation of the cameras, ensuring compliance with Range access/restrictions. The NFE will coordinate with BLM for established range utilization surveys conducted on the NTTR to obtain survey data for the north ranges of NTTR. Conduct additional range utilization surveys for near natural water sources to supplement BLM survey efforts. Utilization surveys will be conducted for various springs or water sources on the NTTR during the spring season (1 May – 31 May).

## **Draft/Draft Final/Final Project Reports**

Three (3) copies of a draft project report will be submitted within 60 days of the conclusion of the field season. Nellis AFB will coordinate and consolidate Air Force comments/corrections on the draft within 30 days. Upon receipt of comments/corrections, on the draft project report, 3 copies of a final draft project report will be submitted within 30 days for final review. Air Force review and comments on the final draft project report will be conducted within 30 days. Ten (10) hard copies and ten (10) electronic copies of the final project report will be due within 30 days upon receipt of Nellis AFB comments on the final draft project report. The reports shall be submitted on a staggered schedule with no more than three reports submitted per week. If more than three reports are submitted in a week, then additional time will be needed for governmental review. The project report format and contents will be approved during the initial project meeting by the Air Force. The report will include but is not limited to an executive summary, site characterization, survey methods, field notes and data sheets, results, population trend data where applicable, discussion and management recommendations, and military mission implications. Maps and drawings will be provided. All documents shall be provided in Microsoft Word and pdf formats. All photographs, data, and original data forms will be provided to 99 CES/CEIEA.

### **3.1.3. MGT, SPECIES, GOLDEN EAGLE (RKXF197323)**

Golden eagles are declining throughout the western United States. Decline in population numbers and major impacts to eagle habitat have placed the golden eagle as a priority species with the U.S. Fish and Wildlife Services (USFWS). New guidance from the USFWS for the management of eagles and take permitting requires extensive inventory and monitoring of the eagles, their habitat, nesting success, and prey base population trends. The collection of this data will aid in the golden eagle take permitting process to support mission requirements that occur in golden eagle habitat and have the potential to impact golden eagles. Failure to collect data will delay mission projects and/or violate requirements of Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act. Resident and migratory golden eagles are also a Bird Aircraft Strike Hazard (BASH) concern on the NTTR. The NTTR is one of the military's largest air operations training ranges.

The purpose of this task is for the NFE to conduct required golden eagle surveys and inventories on areas on NTTR, Nellis AFB and Creech AFB. The NFE will have adequate experience in working with golden eagles and raptors in the western United States. Based on range access restrictions and mission training activities, field work will often be required to be conducted on weekends and holidays, in addition to normal weekdays. Required field work must be completed during biologically accepted activity (breeding, migratory, wintering, nesting, blooming,) seasons, based on range access availability. Surveys may be required to be conducted outside of the normal seasons if stipulated by various land/wildlife managing agencies and as approved by the AFCEC/Nellis ISS and Nellis-Natural Resources Program Manager.

#### **Scope**

The overall purpose of this task is to implement the required golden eagle surveys, inventories, and monitoring to document golden eagle populations that occur on the NTTR, Nellis AFB and Creech AFB and provide best management practices to sustain military air training operations, readiness and reduce potential BASH issues. These best management practices will provide guidance for eagle conservation while sustaining the military mission. The project's product will be the continuation of mapping and updating the NTTR, Nellis AFB and Creech AFB golden eagle populations, productivity, foraging and nesting habitat, and prey population trends. Appropriate GIS data, as determined by the Nellis-Natural Resources Program Manager, will be collected and entered into the Natural Resources GIS data base.

NFE personnel must be able to obtain clearance for the NTTR and will be escorted by a Government employee/escort at all times while on the range. All specialized equipment must be cleared for use on the range prior to start of the project. The NFE will use rental or company vehicles, or helicopters, and as available GOVs for use on the range. No POVs are allowed on the range. Areas for surveys will be determined based on scheduled activities and range access.

Required photographs will be taken by a Government employee and not released for NFE use until after being cleared through the NTTR XPN office.

#### **Initial Meeting**

Within 30 days of award of this task order, the NFE will schedule an initial project kick off meeting with all parties involved (Nellis AFB, AFCEC/Nellis ISS, NFEs, etc) to develop a

project work schedule to implement the SOW. All deliverables/tasks will be submitted within the required timeframes as identified.

The NFE shall work with the Nellis-Natural Resources Program Manager to establish priority areas of survey areas to evaluate golden eagle populations, habitats, seasonal use and species distribution on the NTTR, Nellis AFB, and Creech AFB. This determination should be made based on mission priority, range access, or by habitat priority as determined by the Nellis-Natural Resources Program Manager. Due to NTTR mission and training prioritization schedules and access restrictions, implementation of fieldwork activity/schedules may be required to be changed, as agreed upon as necessary by the NFE, AFCEC/Nellis ISS, and the Nellis-Natural Resources Program Manager.

### **Review Existing Data/Fieldwork Preparation**

Review and map golden eagle population data, and habitat use on the NTTR, Nellis AFB, and Creech AFB. Utilize existing datasets and GIS layers/aerial imagery to plan out locations for fieldwork and coordinate proposed locations with Nellis-Natural Resources Program Manager by submitting a proposed schedule for the year. The schedule shall be updated by the first of each month. Field requests and maps shall be submitted at least 30 days prior to each field event for coordination and approval.

Coordinate with the Nellis-Natural Resources Program Manager to arrange and prepare for supplies, equipment, personnel, transportation, range access information, etc. in preparation for field events. Certain equipment and supplies may be checked out at Nellis AFB from the Natural Resources Program Office prior to the field season and returned after the field season is completed.

### **Fieldwork**

Required field work must be completed during biologically accepted seasons (breeding, migratory, wintering, nesting) as delineated for each type of survey listed below, based on range access availability. If optics restrictions are in place, surveys will be cancelled for that day and rescheduled. Surveys may be required to be conducted outside of the normal seasons if stipulated by various land/wildlife managing agencies and as approved by the Nellis-Natural Resources Program Manager.

The NFE will conduct eagle nest surveys and inventory all of the known golden eagle nests on the NTTR during the nesting season (South Range: March-May /North Range: April-June). The inventory will require fieldwork utilizing a helicopter during all surveys. Active nests (eggs/chicks) will be documented and the chicks aged for determination of fledging date. During the inventory, new nests will also be noted when found and added to the existing nest data. Survey guidelines from USFWS will be followed where possible, while ensuring compliance with Range access/restrictions. Adjustments to the protocols will be documented and submitted with data sheets to the Nellis-Natural Resources Program Manager.

The NFE will conduct eagle productivity surveys on all active (contained eggs or chicks during the nest inventory) golden eagle nests on the NTTR once the young are at least 51 days old, but not yet fledged from the nest (Approx 75 days). Dates for these surveys will be dependent on the estimated fledging dates determined during the nest inventory (South Range: late May-early June/ North Range: late June – early July). The survey will require fieldwork utilizing a

helicopter during all surveys. Productivity success will be documented for all active nests. During the inventory, new nests will also be noted when found and added to the existing nest data for future surveys. Survey guidelines from USFWS will be followed where possible, while ensuring compliance with Range access/restrictions. Adjustments to the protocols will be documented and submitted with data sheets.

The NFE will conduct raptor driving and prey base surveys on the NTTR twice a year. Raptor driving surveys will be conducted on the North range and the South Range on established survey routes. The raptor driving and prey base surveys will be conducted once in the spring (March-April) timeframe and once in the fall (October - November) timeframe. Protocol for raptor driving surveys as well as location of established routes will be provided by the Nellis-Natural Resources Program Manager during initial meeting.

### **Draft/Draft Final/Final Project Reports**

Three (3) copies of a draft project report will be submitted within 60 days of the conclusion of the field season. Nellis AFB will coordinate and consolidate Air Force comments/corrections on the draft within 30 days. Upon receipt of comments/corrections, on the draft project report, 3 copies of a final draft project report will be submitted within 30 days for final review. Air Force review and comments on the final draft project report will be conducted within 30 days. Ten (10) hard copies and ten (10) electronic copies of the final project report will be due within 30 days upon receipt of Nellis AFB comments on the final draft project report. The reports shall be submitted on a staggered schedule with no more than three reports submitted per week. If more than three reports are submitted in a week, then additional time will be needed for governmental review. The project report format and contents will be approved during the initial project meeting by the Air Force. The report will include but is not limited to an executive summary, site characterization, survey methods, field notes and data sheets, results, population trend data where applicable, discussion and management recommendations, and military mission implications. Maps and drawings will be provided. All documents shall be provided in Microsoft Word and pdf formats. All photographs, data, and original data forms will be provided to 99 CES/CEIEA.

All new findings and data analysis conducted for specific species studied during this project will be incorporated into the existing Special Status Species Management Guidelines, a living document used by the Nellis-Natural Resources Program Manager for ecosystem management of the base and range.

#### **3.1.4. MGT, HABITAT, VEGETATION CLASSIFICATION, SOUTH RANGE (RKXF197321)**

Currently the NTTR South Range contains habitats for various sensitive species such as burrowing owls, various bat species, gila monsters, southwest willow flycatchers, and other sensitive Mojave Desert species. Vegetation classification is an important tool for the management of habitats of these sensitive species. Habitats classified by vegetation composition will be used to determine the potential for specific plant and wildlife species that are currently listed or being evaluated for listing and their associated habitats that could be designated as Critical Habitat. Vegetation classification is required for the NTTR to support or refute potential critical habitat designations if species were to become listed in the future.

Areas to be studied will be prioritized based on priority areas that are projected to be potential impacts to the Air Force mission. The NFE will have adequate experience in performing vegetation classification and mapping of these areas. Based on range access restrictions and mission training activities, field work will often be required to be conducted on weekends and holidays, in addition to normal weekdays. Required field work must be completed during biologically accepted activity (breeding, migratory, wintering, nesting, blooming,) seasons, based on range access availability. Surveys may be required to be conducted outside of the normal seasons if stipulated by various land/wildlife managing agencies and as approved by the AFCEC/Nellis ISS and Nellis-Natural Resources Program Manager.

### **Scope**

The overall purpose of this task is to initiate the process of surveying and mapping habitats through vegetation classification on the South Range of the NTTR. GIS data such as designated vegetation community boundaries will be collected and entered into the Natural Resources GIS data base.

NFE personnel must be able to obtain clearance for NTTR and will be escorted by a Government employee or authorized escort at all times while on the NTTR. All specialized equipment must be cleared for use on the range prior to start of the project. The NFE will use only rental or company vehicles and as available GOVs for use on the range. No POVs are allowed on the NTTR.

If photographs are required they will be taken by a Government employee and not released for NFE use until after being cleared through the NTTR XPN office.

### **Initial Meeting**

Within 30 days of award, the NFE will schedule an initial meeting with all parties (Nellis AFB, AFCEC/Nellis ISS, and the NFE) to develop a project work schedule to implement this SOW. All deliverables/tasks will be submitted within the required timeframes as identified.

The NFE shall work with the Nellis-Natural Resources Program Manager to establish priority areas of survey locations to evaluate and map vegetation communities on the north range of the NTTR. This determination should be made based on mission priority, range access, or by habitat priority as determined by the Nellis-Natural Resources Program Manager. Due to the NTTR mission and training prioritization schedules and access restrictions, implementation of fieldwork activity/schedules may be changed, as agreed upon by the NFE, the Nellis-Natural Resources Program Manager, and the AFCEC/Nellis ISS.

### **Review Existing Data/Fieldwork Preparation**

The NFE shall review historic vegetation mapping and utilize available aerial imagery for the South Range of the NTTR to map distinctive vegetation communities using ArcView software.

Location of mapping efforts shall be coordinated during the initial meeting with the Nellis-Natural Resources Program Manager. Mapping efforts shall include the creation of distinct polygons using ArcView, preliminary identification of uniform plant community's types throughout the mapped area, and selection of ground truth points with an emphasis on accessibility, distribution, and coverage of the various preliminary identified types. Established mapping protocols will be provided by Nellis-Natural Resources Program Manager.

The NFE shall coordinate with the Nellis-Natural Resources Program Manager to arrange and prepare for supplies, equipment, personnel, transportation, range access information, etc. in preparation for field events. Certain equipment and supplies may be checked out at Nellis AFB from the Natural Resources Program Office prior to the field season and returned after the field season is completed.

### **Fieldwork**

The NFE shall utilize existing datasets and GIS layers/aerial imagery to plan out locations for fieldwork and coordinate proposed locations with Nellis-Natural Resources Program Manager by submitting a proposed schedule for the year. The schedule shall be updated by the first of each month. Field requests and maps shall be submitted at least 30 days prior to each field event for coordination and approval.

The NFE shall perform the required fieldwork for this project in order to conduct vegetation community surveys on the NTTR South Range. Vegetation composition data will be collected according to the protocol established by the Nellis-Natural Resources Program Manager. Helicopter use will be necessary to access the remote areas of the designated survey area. Protocols for surveys will be provided by the Nellis-Natural Resources Program Manager during the initial meeting.

### **Draft/Draft Final/Final Project Reports**

Three (3) copies of a draft project report will be submitted within 60 days of the conclusion of the field season. Nellis AFB will coordinate and consolidate Air Force comments/corrections on the draft within 30 days. Upon receipt of comments/corrections, on the draft project report, 3 copies of a final draft project report will be submitted within 30 days for final review. Air Force review and comments on the final draft project report will be completed within 30 days. Ten (10) hard copies and ten (10) electronic copies of the final project report will be due within 30 days upon receipt of comments on the final draft project report. The reports shall be submitted on a staggered schedule with no more than three reports submitted per week. If more than three reports are submitted in a week, then additional time will be needed for governmental review. The project report format and contents will be approved during the initial project meeting by the Nellis AFB, and the AFCEC/Nellis ISS. The report will include, but is not limited to an executive summary, site characterization, survey methods, field notes and data sheets, results, population trend data where applicable, discussion and management recommendations, and military mission implications. Maps and drawings will be provided. All documents shall be provided in Microsoft Word and pdf formats. All photographs, data, and original data forms will also be provided.

All new findings and data collected during this project will be analyzed and incorporated into the existing Unique Habitats Guidelines, a living document used by the Nellis-Natural Resources Program Manager for ecosystem management of the NTTR ranges.

## **4. GOVERNMENT FURNISHED EQUIPMENT**

The Government will not furnish any supplies or manpower in support of this agreement. The Government may furnish some sensitive equipment for use during field surveys as available and appropriate for specified field work. Sensitive equipment furnished may include GPS, binoculars, and digital cameras in an effort to standardize data collected as well as comply with

sensitive equipment rules/restrictions while on the NTTR. The Government will also supply survey protocols and data sheet templates as appropriate for field surveys. The NFE will be required to fund helicopters as needed to expedite collection of data using an approved Air Force helicopter company for the NTTR. However, at the convenience of the Government lodging and meals may be made available at facilities on the north range complex to NFE personnel on a cost reimbursement basis.

## **5. DATA COLLECTION AND GIS REQUIREMENTS**

Original data sheets will be delivered to the Nellis-Natural Resources Program Manager no later than seven (7) days after the completion of each field event. Data sheet format will be approved by the Nellis-Natural Resources Program Manager prior to first field event.

GPS waypoints will be submitted electronically using any Environmental Systems Research Institute's (ESRI) compatible GIS format or Garmin GPS exchange format (.gpx) if NFE equipment was used. All Government issued GPS /sensitive equipment will be turned in to the Nellis-Natural Resources Program Manager immediately after each field event. GPS waypoint files will be provided electronically to the NFE for use in the data analysis.

All GIS data must be accepted and approved to be compatible by the 99 CES GIS office to ensure compliance with AF GIS format. Data for this project will be collected using in compliance with Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE). The latest version should be used for data collection. Maps generated from GIS data will be reduced and included in reports. Data collection will be accurate enough to ensure reasonable accuracy on large scale maps. The collected data will be made available in layers as agreed by the NFE and the Nellis-Natural Resources Program Manager. All GIS information and data shall be delivered in the required format.

## **6. DELIVERABLES**

### **6.1 Prior to Field Work**

Within ten (10) business days of the initial meeting, the proposed work schedule for the year will be submitted for review/approval to the AFCEC/Nellis ISS and the Nellis-Natural Resources Program Manager. The schedule shall be updated by the first of each month.

### **6.2 Field Work Events**

Original data sheets will be delivered to the Nellis-Natural Resources Program Manager no later than seven (7) days after the completion of each field event. Data sheet format will be approved by the Nellis-Natural Resources Program Manager prior to first field event.

### **6.3 Prior to Project Closeout**

The NFE shall provide all draft/draft final/final reports as identified. All reports and information collected shall not be released to the public unless permission is obtained in advance from the AFCEC/Nellis ISS, and the Nellis-Natural Resources Program Manager. All GIS data must be reviewed and approved by 99 CES GIS office to ensure compliance with AF GIS compatibility.

### **6.4 Quarterly Progress Reports**

Progress reports shall be submitted to the USACE Project Manager and AFCEC POC quarterly via electronic mail no later than the 10th calendar day following the end of the reporting period. Invoices for partial payment shall be submitted to coincide with receipt of the quarterly progress reports. No partial payment will be approved unless the government has received all progress reports which are due.

## **7. PERIOD OF PERFORMANCE**

The period of performance is 18 months from date of award.

## **8. POINTS OF CONTACT**

**8.1** The USACE GOTR and POC for Project Management is Ms. Charis Cooper. Cooperative agreement questions should be addressed to the Grants Officer, Mr. Olen Northern.

Correspondence should be addressed as follows:

Charis Cooper  
U.S. Army Corps of Engineers  
Environment & Special Projects Branch  
ATTN: CEPOA-EC-EE  
P.O. Box 6898  
JBER, AK 99506-0898  
Phone: 907-753-5692  
Email: [Charis.A.Cooper@usace.army.mil](mailto:Charis.A.Cooper@usace.army.mil)

Olen Northern  
U.S. Army Corps of Engineers  
Contracting Division  
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Phone: (907) 753-2525  
Email: [Olen.R.Northern@usace.army.mil](mailto:Olen.R.Northern@usace.army.mil)

**8.2** The Air Force POC is:

Stephanie McCary  
AFCEC/CZOW – Nellis ISS  
(702) 652-9865  
[stephanie.mccary@us.af.mil](mailto:stephanie.mccary@us.af.mil)



**Proposal Submission Evaluation Criteria and Basis of Award**  
**NATURAL RESOURCES SUPPORT, NELLIS AIR FORCE BASE (NAFB)**  
**MGT, SPECIES**

The Government will evaluate technical proposals in accordance with the criteria described herein and award a Cooperative Agreement task order to the responsible grantee whose proposal is determined to represent the best overall value to the Government. The Government will not award a Cooperative Agreement to a grantee whose proposal contains a deficiency.

The evaluation factors for this action are:

- Factor 1, 40%: Experience (most important factor)
- Factor 2, 35%: Technical Approach (2<sup>nd</sup> most important factor)
- Factor 3, 25%: Cost (3<sup>rd</sup> most important factor)

The Government will assign an adjective rating of Outstanding, Good, Acceptable, Marginal, or Unacceptable to each technical factor which reflects the Government's confidence in each offeror's ability, as demonstrated in its proposal, to perform the requirements stated in the grant. The ratings shall be assigned, using the following criteria, which incorporate a proposal risk assessment:

<b>Weight</b>	<b>Adjectival Rating</b>	<b>Description</b>
4	Outstanding	Proposal indicates an exceptional approach and understanding of the requirements and contains multiple strengths.
3	Good	Proposal indicates a thorough approach and understanding of the requirements and contains at least one strength.
2	Acceptable	Proposal indicates an adequate approach and understanding of the requirements.
1	Marginal	Proposal has not demonstrated an adequate approach and understanding of the requirements or contains an element of risk.
0	Unacceptable	Proposal does not meet requirements of the solicitation and, thus, contains one or more deficiencies and is unawardable.

## **PROPOSAL AND SELECTION CRITERIA**

The Cooperator shall be evaluated in accordance with the selection criteria below. The selection criteria are listed in descending order of importance.

### **Factor 1 Experience**

The Cooperator shall demonstrate prior project experience relevant to the attached SOW, completed within 5 years of the RFP, and other qualifications and technical competence in all of the following areas:

- (1) Experience supporting DoD natural resource programs, understanding conservation elements necessary to monitor, manage, protect, and conserve training areas and range facilities for optimal management of public lands under military control.
- (2) Scientists capable of performing studies, surveys, and inventories for habitats, endangered species, reptiles and amphibians, large mammals, and rare plants.
- (3) Planning and managing time critical work, performing studies, projects or plans in accordance with applicable guidance and regulations
- (4) Experience writing documents and coordinating material from multiple multi-disciplinary subject matter experts into consolidated, concise documents.
- (5) Experience coordinating GIS natural resource data such as critical habitats, threatened and endangered species, and other applicable data.

The Cooperator shall provide examples of up to three (3) past projects of similar size, scope and complexity that best demonstrate the above qualifications. The example project summaries shall be limited to one (1) page each. The example project summaries shall identify:

- Title/Subject
- Location
- Duration
- Brief description
- Roles and work self-performed
- Date project began and if completed
- Complexities or key accomplishments
- Client contact information

The Government will utilize the example project summaries to evaluate the capability and experience as a basis for comparing offerors to determine best value.

### **Factor 2 Technical Approach**

The Cooperator shall provide a brief narrative of their technical approach and a milestone schedule. The narrative shall be no more than 2 pages per main task and must include:

- A discussion of the technical approach to accomplish the performance work statement requirements, detailing number of hours anticipated to complete the project deliverables.
- A discussion of the quality assurance, quality control, and other technical activities that will be implemented to ensure that quality data are collected to support project data quality objectives
- A discussion of applicable regulatory requirements and how project requirements will be implemented.
- A discussion of all assumptions.

The Cooperator shall also provide an organizational chart with the proposed project team with defined roles, responsibilities, and lines of communication for all key personnel and sub-cooperators.

The evaluation standard has been met when the Cooperator demonstrates an understanding of the work that adequately addresses the task order requirements. The inclusion of numerous assumptions that significantly “assume away” Cooperator risk with regard to major issues or problems that may be encountered on the project will be considered unacceptable.

### **Factor 3            Cost**

Provide proposed cost to the government. Allowable costs incurred by institutions of higher education is determined in accordance with the provision of OMB Circular A-21, "Cost Principles for Educational Institutions," ONR negotiated rates, and institutional policies. OMB's cost principles are contained in 2 CFR 200.400-.475 et seq.

Cost is considered less important than non-cost factors and will be evaluated for fairness and reasonableness per OMB cost principles. If more than one proposal are rated as having equal non-cost factors, the lowest cost tender of the proposals received would be granted as the preferred tender unless there are extraordinary reasons for not doing so.

Compete POA-CESU-19-02  
Natural Resources Support-MGT, Species  
Nellis Air Force Base NV.

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**Project Past Performance**

Project Name,	
Project Location:	
Contract or Cooperative Agreement #:	
Size (Value):	
Technical Complexity:	
Technical Team Utilized:	
Point of Contact(s):  Provide Email and phone number	

Compete POA-CESU-19-02  
 Natural Resources Support-MGT, Species  
 Nellis Air Force Base, NV.

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**Lease vs. Buy Evaluation Factors**

The NFE shall provide a cost analysis for Lease vs. Buy factors. The following factors shall be considered at a minimum, and shall contain numerical values where applicable.

<b>Factors</b>	<b>Lease</b>	<b>Buy</b>
Estimated Period of Use/Extent of Use		
Financial Advantages		
Cumulative Rental Payments for Estimated Time Period		
Transportation and Installation Costs		
Maintenance & Other Service Costs		
Potential Obsolescence of equipment due to imminent technological improvements		
Availability of Purchase Options		
Potential for Use by other Agencies after preliminary use has ended		
Trade-in or Salvage Value		
Imputed Interest		
Can the equipment be serviced by the government or other sources if it is purchased?		
<b>Total Cost:</b>		

<b>Factors</b>	<b>Lease</b>	<b>Buy</b>
Estimated Period of Use/Extent of Use		
Financial Advantages		
Cumulative Rental Payments for Estimated Time Period		
Transportation and Installation Costs		
Maintenance & Other Service Costs		
Potential Obsolescence of equipment due to imminent technological improvements		
Availability of Purchase Options		
Potential for Use by other Agencies after preliminary use has ended		
Trade-in or Salvage Value		
Imputed Interest		
Can the equipment be serviced by the government or other sources if it is purchased?		
<b>Total Cost:</b>		