DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P.O. BOX 17300
FORT WORTH, TX 76102-0300

10 June 2020

REQUEST FOR STATEMENTS OF INTEREST
Number W9126G-20-2-SOI-4603
Project to be initiated in 2020

***INTERESTED PARTIES MUST BE a partner in one of the Cooperative Ecosystem Studies Units (CESU) National Network*:**
Colorado Plateau, W9126G-14-2-0018
Desert Southwest, W9126G-16-2-0001

Project Title: Natural Resource Support, BMGR and Luke AFB.

Responses to this Request for Statements of Interest will be used to identify potential investigators for a project to be funded by **the US Air Force**, which provides professional and technical support for its **Integrated Natural Resources Management Plan (INRMP)** in order to facilitate successful implementation of the **16 USC 670c-1 Sikes Act**. Approximately $**169,414.50** is expected to be available to support this project for the base year. Six option periods are anticipated to continue this effort in future years, subject to availability of funds.

Background:

The Barry M. Goldwater Range (BMGR) and Luke Air Force Base Environmental Program ensures military mission activities are conducted in compliance with all applicable environmental laws, regulations and policies with cooperation and assistance from the Air Force Civil Engineer Center's (AFCEC). Article I B of the master agreement states the objectives of the CESU are to: provide research, technical assistance and education to federal land management, environmental and research agencies and their potential partners; develop a program of research, technical assistance and education that involves the biological, physical, social sciences needed to address resource issues and interdisciplinary problem-solving at multiple scales and in an ecosystem context at the local, regional, and national level; and place special emphasis on the working collaboration among federal agencies and universities and their related partner institutions.

The objectives of the work to be performed under this task order are to conduct natural resource tasks on the federal lands belonging to BMGR and Luke (AFB), and to prepare reports detailing the results of this work for submission to the USACE Omaha Project Manager (PM), AFCEC Installation Support Section (ISS) POC, and BMGR and Luke Natural Resource POCs.

Type of Award:

In accordance with the *Sikes Act* (Sec. 103A [16 USC 670c-1]) "the Secretary of a military department may enter into cooperative agreements with States, local governments, Indian Tribes, non-governmental organizations, and individuals" This project is in support of the Integrated Natural Resources Management Plan, as directed in the *Sikes Act*, and as a result, it is anticipated that a cooperative agreement through the CESU program will be awarded. Such awards may be administered through a CESU only upon mutual agreement and official authorization by both parties of the acceptance of the application of the CESU Network IDC rate (17.5%).

Note: Must be a non-federal partner in the CESU Unit to be qualified to be considered.

Brief Description of Anticipated Work:

This project focuses on the following tasks and locations:

	Section	Task	Title	Location
AFCEC Project No.				
NURDA53206119	3.1	Task 1	**MGT, Habitat, Avian protection plan**	BMGR
NURDOS3920 / NURDA53206120	3.2	Task 2	**MGT, SPECIES, Migratory birds**	BMGR
NURDA53206119	3.3	Task 3	**MGT, HABITAT**	E BMGR
NUEXA53206121	3.4	Task 4	**MGT INVASIVES**	Luke AFB

Task 1: MGT, HABITAT, AVIAN PROTECTION PLAN (AVIAN PROTECTION PLAN FOR THE BARRY M. GOLDWATER RANGE EAST & GILA BEND AUXILIARY FIELD, ARIZONA MGT, HABITAT, NURDA53206119)
The objective of this task is to develop an APP for BMGR East and the Gila Bend AFAF, including an avian Risk Assessment. The APP shall be developed using the most recent APLIC and USFWS guidelines. To achieve this objective, available data will be examined and field investigations conducted in order to develop the APP.
In order to accomplish the work specified in this task order, it shall be necessary for the cooperator to complete the following tasks:

Task 1.1: Review Existing Data
Conduct literature review of relevant studies on the range. Through this literature review and working with the 56 RMO geographer, compile relevant GIS data for the range (e.g. topographic, hydrologic, land-use, avian use, power line, and vegetation).

Task 1.2: Conduct Avian Risk Assessment
Develop avian risk maps for potential avian electrocution risks on the BMGR system; develop and conduct an avian Risk Assessment.

Task 1.3: Draft/Final Avian Protection Plan
The APP format and contents will be approved during the initial project meeting by the government project managers and will follow established APLIC and USFWS guidelines. The

plan should include specialized training for Air Force power line maintenance personnel and technical support to on the purchase of bird protection hardware for poles.

Task 2: MGT, SPECIES, MIGRATORY BIRDS

The purpose of this task is to conduct *Sonoran Desert Breeding Bird Surveys* on BMGR East. The NFE must have experience and knowledge to administer all aspects of the environmental work and administrative aspects described under this statement of work. The NFE shall have adequate experience in working with Sonoran Desert birds in the southwestern United States. The period of performance will be 18 months from date of award. Based on 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 seasons. 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 NRM (NRM). The NFE shall provide all the necessary labor, facilities, equipment, materials, transportation, and supplies necessary to perform the services depicted in this SOW. The NFE shall visit the installation, as well as Federal, state, and local agencies as necessary to acquire the information to complete the tasks listed below. The NFE shall perform all necessary travel as part of the task requirements, and the costs thereof shall be included with the estimate.

Review Survey Plots:

Review survey plots and data from the 2012-2014 survey on the BMGR East. Determine total number of plots that can be surveyed on BMGR East per breeding season based on available funding.

Sonoran Desert Breeding Bird Surveys on BMGR East:

In coordination with the NRM, the NFE will select and stratify plots on BMGR East as described in Corman et al 2018 and conduct bird surveys using an area survey protocol (Corman et al. 2018). Surveyors will document territories on field plot maps and attempt to find the first season's nest for each pair. The majority of Sonoran Desert bird species attempt their first breeding activity during late winter and spring. Therefore, all plots will be surveyed using a rapid survey method (i.e., two visits) during February through May. Surveys will begin 30 minutes before sunrise and last 3.5 to 4.5 hours in order for surveyors to monitor the entire plot. Surveyors will assign birds they detect to zones as either "desert" or "wash" habitats, and designate them as "breeding" or "incidentals" if they believe the birds are migrants or breeding outside the plot. Intensive surveys (similar to rapid surveys), but including more visits (i.e., 6-12 times in the Lower Sonoran Desert and 8-16 times in the Upper Sonoran Desert) may be conducted in a sub sample of plots.

Data management at the conclusion of the field season will consist of updating the Arizona Game and Fish Department's Coordinated Bird Monitoring database and providing results to the Department's Heritage Data Management System. A technical report summarizing the results of surveys will be produced at the conclusion of the multi-year surveys.

Task 3: MGT, Habitat, VEGETATION COMMUNITY MAPPING

FINAL COMPLETION OF VEGETATION COMMUNITY MAPPING ON THE BARRY M. GOLDWATER RANGE EAST (BMGR EAST), ARIZONA MGT, HABITAT (NURDA53206119)

The purpose of this effort is to complete a comprehensive vegetation map and GIS database for the BMGR East. Specifically, this project allows for field work within any portion of BMGR East in which previous mapping efforts need to be revisited or revalidated. Revalidation of previous vegetation mapping efforts will allow for a comprehensive vegetation map to be completed. This agreement is to perform fieldwork necessary to collect the data needed to support that effort, synthesis of these field data into seamless GIS shapefiles integrating the new vegetation association data compiled via the SOO and previous vegetation association data collection efforts performed by the University of Arizona for the BMGR East and its adjacent lands. The results of this effort will be geospatial data depicting the previously missing or incomplete vegetation associations and all related attributes. In addition, all information, field methods, field data and GIS techniques and descriptions will be synthesized into a detailed summary of all efforts encompassed by the SOO.

Task 4: MGT, HABITAT, INVASIVE PLANT SPECIES

The objectives of the work to be performed under this task order are to manage invasive weeds on federal lands belonging to Luke AFB (Luke main installation & Fort Tuthill Recreation Area), and Arizona state lands for which Luke AFB has a special land use permit (AUX-1).

Reports detailing the results of this work will be submitted to the USACE Omaha District GOTR, AFCEC/Nellis Installation Support Section (ISS) NRPM and the Luke AFB NRPM.

The influence of invasive plant species introduction and colonization within native biotic communities has been a major concern to biologists and land managers, due to the potential for negative and lasting influences on native flora and fauna (Hohmann, et al. 2013, Marler 2013, Blossey 1999, Enserink 1999, Dickson, et al. 2015). Military installations are also affected by invasive species, where invasive plants and the management of them can affect mission readiness as well as the local ecology (Cofrancesco 2004). While the effects of invasive plants include competition for resources and changes in habitat characteristics and soil chemistry, modification to natural fire regimes is perhaps the most immediate threat to natural desert environments, where most plant species are not adapted to fire (Esque and Schwalbe 2002, Keeley 2006). Some invasive species such as bufflegrass (*Pennisetum ciliare*) are also an increasing hazard in urban areas and the urban wildlands interface due to the highly flammable characteristics of this plant. Without intervention and use of control measures, such as mechanical removal and herbicide use, the proximity of large patches of invasive plants to residential, military and commercial properties and infrastructure create the potential for property losses due to fire. In addition, other invasive species with an affinity for low-lying areas where moisture is retained for extended periods may block culverts and drainage ways creating increased maintenance costs and the risk of water damage during storm runoff.

Military bases are particularly vulnerable to invasive species introductions due to the high volume and wide variety of passenger, commercial and military vehicles entering and exiting the facilities from all areas of the state and many parts of the country as well as from around the world. In addition, maintenance, storage and training activities often create disturbed areas where

conditions are favorable for invasive plant seed collection and germination. Military lands can be impacted from invasive species through 1) negating realistic conditions for training and testing operations or limiting training activities and available lands; 2) increasing training and operations costs due to invasive species management; and 3) creating safety and security risks (US Army Corps of Engineers 2014) .

The purpose of this project is to manage non-native, invasive and/or noxious weeds and prevent the future spread of these plants at Luke AFB, Auxiliary Field 1 (AUX 1), and the Fort Tuthill Recreation Area (FTRA), Arizona. Noxious weeds including globe chamomile/stink net (*Oncosiphon piluliferum*) fountain grass (*Cenchrus setaceus*), Sahara mustard (*Brassica tournefortii*), and salt cedar (*Tamarix sp.)* provide unnatural fuel for wildfires and crowd out native flora, which leads to an alteration of habitats and a non-professional appearance in otherwise non-vegetated managed areas around buildings across base. Continual management efforts are needed to ensure invasive weeds do not continue to spread. Luke AFB is especially concerned with the spread of stink net to the Barry M. Goldwater Range – East.

The NFE must have experience and knowledge to administer all aspects of the environmental work and administrative aspects described under this statement of work. The NFE will be a qualified biologist with adequate experience in working with unique habitat and rare plants and in identifying noxious and invasive species in the southwestern United States. All personnel will be approved by AFCEC/Nellis ISS NRPM and the Luke AFB NRPM prior to award of the task order. NFE personnel must be able to obtain clearance for Luke AFB and at times may be required to be escorted by a government employee.

NOTE: At this time we are only requesting that you demonstrate available qualifications and skills for performing similar or same type of work. You will be evaluated for request for a proposal based on skills, qualifications and certifications demonstrated in your SOI.

Period of Performance.
The base period of performance is 18 months from date of award ***(12 month technical period for conducting field work, followed by 6 months administrative for completion of reports only with no new work)***. Option periods: Six 18-month option periods, dependent on the funding availability.

Materials Requested for Statement of Interest/Qualifications:

Please provide the following via e-mail attachment to:
Alisa.Marshall@usace.army.mil and Kali.L.Evans@usace.army.mil

(Maximum length: 2 pages, single-spaced 12 pt. font).

1. Name, Organization, Cage Code, Duns number, and Contact Information
2. Brief Statement of Qualifications (including):
a. Biographical Sketch,
b. Relevant past projects and clients with brief descriptions of these projects,
c. Staff, faculty or students available to work on this project and their areas of expertise,

d. Any brief description of capabilities to successfully complete the project you may wish to add (e.g. equipment, laboratory facilities, greenhouse facilities, field facilities, etc.).

Note: A full study proposal and proposed budget are NOT requested at this time.

Review of Statements Received: All statements of interest received will be evaluated by a board comprised of one or more people at the receiving installation or activity, who will determine which statement(s) best meet the program objectives. Based on a review of the Statements of Interest received, an investigator or investigators will be invited to prepare a full study proposal. Statements will be evaluated based on the investigator's specific experience and capabilities in areas related to the study requirements.

Please send responses or direct questions to:

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Timeline for Review of Statements of Interest: The RSOI is required to be posted for 30 days prior to the Government making a decision and requesting full proposals. Responses due by 5:00 P.M., Central Time, on **10 July 2020**.

[End of RSOI]