



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
ENGINEER RESEARCH AND DEVELOPMENT CENTER, CORPS OF ENGINEERS
CONSTRUCTION ENGINEERING RESEARCH LABORATORY
P.O. BOX 9005
CHAMPAIGN, ILLINOIS 61826-9005

REQUEST FOR STATEMENTS OF INTEREST (SOI)
NUMBER W81EWF-21-SOI-0015
PROJECT TO BE INITIATED in FY 2021

Project Title: Natural Resources and Endangered Species Research and Support at Fort Hood, Texas

Responses to this Request for Statements of Interest will be used to identify potential investigators for a project to be funded by the Engineer Research and Development Center – Construction Engineering Research Laboratory (ERDC-CERL), which seeks to conduct research and provide support for natural resources and endangered species management at Fort Hood, Texas.

Approximately \$977,000 is expected to be available to support this project for a period of eighteen (12) months after award.

Note that the CESU F&A rate will be applied to any awards that result from this Request for SOIs.

Background:

Many of the land bases where US Army installations reside are ecologically significant – providing refuge for a large number of the nation's threatened and endangered plants and animals. The benefits of biodiversity to the public and the environment have long been recognized and the Army's role as land managers can influence the floral and faunal diversity both within the installation and on nearby lands. To fulfill long-term mission requirements, the military must achieve environmental objectives of sustainability of training lands and full compliance with conservation requirements under law. The Army is committed to maintaining its role as a national leader in the conservation and management of sensitive natural resources on Army lands.

Fort Hood currently supports the heaviest Army training activity as the only installation providing training facilities for the equivalent of two mechanized divisions as well as support units. Within this military context, Fort Hood is also home to large numbers of a federally endangered bird species (golden-cheeked warbler), a recently delisted species (black-capped vireo), numerous migratory bird species, and at-risk plant

pollinators. Fort Hood must balance military training requirements with species conservation requirements imposed by the Sikes Act, Endangered Species Act (ESA), and Migratory Bird Treaty Act (MBTA). Work under this proposal will provide logistical and research support to 1) summarize and analyze previously collected data to determine distribution, abundance and population status of endangered and migratory bird species, 2) monitor demographic parameters for golden-cheeked warblers and black-capped vireos, 3) survey and monitor migratory bird species, 4) survey and monitor at-risk pollinator species, 5) survey and manage for invasive feral hogs and 6) support natural resources outreach activities at Fort Hood, Texas.

Brief Description of Anticipated Work:

The government seeks research and technical support for data analyses, surveying and monitoring of endangered, migratory bird, pollinator and invasive species on Fort Hood, Texas. Study design and focal study sites will be decided based upon input from Fort Hood, ERDC-CERL, and CESU partners. It is anticipated that results from Fort Hood will be relevant for management throughout the focal species range. Details of primary tasks are as follows:

Task 1: Analyses of distribution, abundance and population status of endangered and migratory bird species.

Data collected during the 2021 avian breeding season will be made available for analyses of distribution, abundance, and population status of endangered and migratory bird species on Fort Hood. Available data will include point count surveys, nest location, nest monitoring, and productivity. Work accomplished under this task will include data summarization and analysis to determine Fort Hood population size and trends as well as impacts of species management on regional population goals. Data will be used to populate annual report on status of endangered species at Fort Hood, Texas.

Task 2: Monitoring of demographic parameters of endangered bird species.

During the 2022 breeding season (March-July) this task will collect required demographic data on endangered bird (black-capped vireo and golden-cheeked warbler) occurrence, density and reproductive success at selected field monitoring sites on Fort Hood. This work will require population census by conducting point count surveys on established point count routes for both species. Reproductive success will be investigated by locating and monitoring vireo nests at established monitoring plots. This work will require repeated nest visits and banding of nestlings. Adult warbler demography will be conducted by capturing and banding of breeding adults. This work will require personnel that either have current experience capturing passerine species using mist net capture techniques or can be trained and supervised by permitted personnel. This work will be conducted under current state and federal permits held by Fort Hood staff. This monitoring will be performed in accordance with protocols outlined in the Fort Hood

ESMC. Work will begin upon authorization to proceed with anticipated start in spring 2022. Following the completion of the avian breeding season, demographic data will be analyzed to determine Fort Hood population size and trends as well as impacts species management on regional population goals.

Task 3: Surveying and monitoring of migratory bird species.

During the 2022 breeding season (March-August) this task will collect required demographic data on migratory bird occurrence, density and nest placement at selected field monitoring sites on Fort Hood. Sites will include areas with and without maneuver lane habitat modifications. Nest placement will be investigated by locating and monitoring nests of all migratory species at established monitoring plots. This work will be conducted under current state and federal permits held by Fort Hood staff. This monitoring will be performed in accordance with protocols outlined in the Fort Hood ESMC.

Task 4: Surveying and monitoring of pollinator species.

During spring/summer 2022, this task will collect baseline data on butterfly populations on Fort Hood, with a focus on Monarch Butterflies. Surveys will include transect surveys through grassland habitats on the installation. Data will be collected on butterflies detected and milkweed stem counts. Any monarchs detected will be netted and tagged for the Monarch Watch Program. Surveys and survey location determination will be conducted in collaboration with Fort Hood Natural Resources staff and ERDC-CERL.

Task 5: Survey and management of feral hogs.

Feral hogs cause massive habitat degradation through trampling and rooting. Largely because of the potential impacts on endangered and sensitive species habitats, Fort Hood actively monitors and manages the feral hog population. Throughout fall 2021 and spring 2022, this task will survey for feral pigs on the installation using a variety of methods including visual surveys for animals and/or rooting, aerial surveys and trapping. Surveys and survey location determination will be conducted in collaboration with Fort Hood Natural Resources staff and ERDC-CERL.

Task 6: Support for natural resources outreach activities.

This task will provide support for natural resources outreach activities for the local and installation communities. Specific activities will be determined based on input from Fort Hood Natural Resources personnel and ERDC-CERL but examples include Christmas and Breeding Bird Count, outreach to local schools regarding natural resource activities conducted at Fort Hood, learning materials for adults and children, and hosting nature walks on the installation for natural resources education.

Substantial government involvement is anticipated for this project. The Government's technical contributions include:

- 1) Expertise in military installation natural resource management,
- 2) Coordination between installation personnel and university researchers
- 3) Participation in study design and execution.

Materials Requested for Statement of Interest/Qualifications:

Please provide the following via e-mail attachment (Maximum length: 2 pages, single-spaced 12 pt. font).

1. Name, Organization 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 proposed budget is NOT requested at this time.

Review of Statements Received: 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:

Angela D. Holcomb

U.S. Army Engineer Research and Development Center (ERDC)

Construction Engineering Research Laboratory (CERL)

P O Box 9005

Champaign, IL 61826-9005

Angela.D.Holcomb@usace.army.mil

Timeline for Review of Statements of Interest: Review of Statements of Interest will begin **Thirty (30) working days** after posting of SOI.