

Section I: Funding Opportunity Description

Background: This procurement represents an opportunity to enter into a cooperative agreement for research and monitoring of endangered migratory bird species and at-risk pollinators at Fort Hood, Texas. Fort Hood is home to large numbers of federally endangered species, delisted species, and numerous at risk migratory bird species. Work under this proposal will provide research support to determine distribution, abundance and demographic information for endangered and at-risk migratory bird species that reside at Fort Hood.

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, sensitive karst 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, 6) monitor for pathogens associated with sensitive karst species and 7) support natural resources outreach activities at Fort Hood, Texas.

The objective is to conduct surveys and demographic monitoring of at-risk migratory bird, pollinator and invasive species to track population distribution. GIS data, photos, and maps will be submitted as final products. Technical Support will be provided for research and monitoring of endangered and at-risk species 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 2019 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 2020 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 2020. 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 2020 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 2020, 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 2020, 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: Monitor karst fungal pathogens.

Fungal pathogens, particularly those associated with white-nose syndrome, have decimated bat populations through the northeastern US. Fort Hood maintains a large number of karst features, including several which house bat populations. Throughout 2020, this task will survey for the presence of white-nose syndrome on the installation using a variety of methods including visual surveys and molecular tools. Surveys and survey location determination will be conducted in collaboration with Fort Hood Natural Resources staff and ERDC-CERL.

Task 7: 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.

Public Benefit: The benefits of biodiversity to public good have long been recognized. The public will benefit from this work through enhanced wildlife biodiversity, both on the installation and on nearby public and private lands. Designation of a species as federally endangered by the U.S. Fish and Wildlife Service recognizes that a species is a nationally important component of biodiversity in the United States and that federal agencies must support as necessary recovery conservation and recovery objectives for listed species. Further, conservation of at-risk pollinator species and, conversely, management of invasive species, has nationwide benefits in the form of improved regional ecosystem services.

Section II: Award Information:

Responses to this Request for Statements of Interest will be used to identify potential investigators for studies to be sponsored by the Engineer Research and Development Center to provide research support to determine distribution, abundance and demographic information for endangered and at-risk migratory bird species that reside at Fort Hood. The estimated level of funding for FY20 is approximately up to \$1,084,000.00.

Government Involvement: The Government will significantly contribute to the execution of the project. The Government will participate in the planning, technical execution, evaluation, and reporting phases of the project. The Government provides knowledge of the problem, data, and interpretation of results that are only available within the Government organization. The Government's technical contributions toward this project include 1) expertise in military installation natural resource management, 2) coordination between installation personnel and university researchers and 3) participation in study design and execution.

Section III: Eligibility Information

1. Eligible Applicants – This opportunity is restricted to non-federal partners from the Great Rivers and Great Plains Cooperative Ecosystems Studies Units (CESU).
2. Cost Sharing – This action will be 100% funded by USACE. Cost sharing is allowable but not mandatory.

Section IV: Application and Submission Information – Two Phase Process

Phase I: Submission of a Statement of Interest/Qualifications.

1. Materials Requested for Statement of Interest/Qualifications:
 - a. Please provide the following via e-mail attachment to: Angela.D.Holcomb@usace.army.mil
(Maximum length: 2 pages, single-spaced 12 pt. font).
 1. Name, Organization and Contact Information
 2. Brief Statement of Qualifications (including):
 - Biographical Sketch,
 - Relevant past projects and clients with brief descriptions of these projects,
 - Staff, faculty or students available to work on this project and their areas of expertise,
 - 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.

The administrative point of contact is Angela Holcomb, 217-373-3372; Angela.D.Holcomb@usace.army.mil

2. Statement of Interest/Qualifications shall be submitted NO LATER THAN 10 March 2020. **11:59 AM Central Time**

Based on a review of the Statements of Interest received, an investigator or investigators will be invited to move to Phase II which is 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.

Phase II: Submission of a complete application package to include a full technical proposal including budget, if invited.

1. Address to Request Application Package:

U.S. Army Corps of Engineers, Engineer Research and Development Center
ERDC-CERL Contracting Office - Champaign, IL
2902 Newmark Drive
Champaign, Illinois 61822-1076

The complete funding opportunity announcement, application forms, and instructions are available for download at Grants.gov.

The administrative point of contact is Angela Holcomb, 217-373-3372; Angela.D.Holdomb@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 R&R - Application for Federal Assistance
- b. Full Technical Proposal – Discussion of the nature and scope of the research and technical approach. Additional information on prior work in this area, descriptions of available equipment, data and facilities, and resumes of personnel who will be participating in this effort should also be included.
- c. Cost Proposal/Budget – Clear, concise, and accurate cost proposals reflect the offeror's financial plan for accomplishing the effort contained in the technical proposal. As part of its cost proposal, the offeror shall submit cost element breakdowns in sufficient detail so that a reasonableness determination can be made. The SF 424 Research & Related Budget Form can be used as a guide. The cost breakdown should include the following, if applicable:
 1. Direct Labor: Direct labor should be detailed by level of effort (i.e. numbers of hours, etc.) of each labor category and the applicable labor rate. The source of labor rates shall be identified and verified. If rates are estimated, please provide the historical based used and clearly identify all escalation applied to derive the proposed rates.
 2. Fringe Benefit Rates: The source of fringe benefit rate shall be identified and verified.
 3. Travel: Travel costs must include a purpose and breakdown per trip to include destination, number of travelers, and duration.
 4. Materials/Equipment: List all material/equipment items by type and kind with associated costs and advise if the costs are based on vendor quotes and/or engineering estimates; provide copies of vendor quotes and/or catalog pricing data.
 5. Subrecipient costs: Submit all subrecipient proposals and analyses. Provide the method of selection used to determine the subrecipient.
 6. Tuition: Provide details and verification for any tuition amounts proposed.
 7. Indirect Costs: Currently the negotiated indirect rate for awards through the CESU is 17.5%.
 8. Any other proposed costs: The source should be identified and verified.

3. Application package shall be submitted NO LATER THAN 15 days from official notification of Request for Proposal. 11:59 AM Central Time

4. Submission Instructions

Applications may be submitted by e-mail, or Grants.gov. Choose ONE of the following submission methods:

- a. E-mail:

Format all documents to print on Letter (8 ½ x 11") paper. E-mail proposal to Angela.D.Holdomb@usace.army.mil

- b. Grants.gov: <https://www.grants.gov/>:

Applicants are not required to submit proposals through Grants.gov. However, if applications are submitted via the internet, applicants are responsible for ensuring that their Grants.gov proposal submission is received in its entirety.

All applicants choosing to use 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

<https://www.grants.gov/web/grants/applicants.html>.

Section V: Application Review Information

1. **Peer or Scientific Review Criteria:** In accordance with DoDGARs 22.315(c), an impartial peer review will be conducted. Subject to funding availability, all proposals will be reviewed using the criteria listed below (technical and cost/price). All proposals will be evaluated under the following two criteria which are of descending importance.
 - a. **Technical (items i. and ii. are of equal importance):**
 - i. Technical merits of proposed R&D.
 - ii. Potential relationship of proposed R&D to DoD missions.
 - b. **Cost/Price:** Overall realism of the proposed costs will be evaluated.

2. Review and Selection Process

a. **Categories:** Based on the Peer or Scientific Review, proposals will be categorized as Selectable or Not Selectable (see definitions below). The selection of the source for award will be based on the Peer or Scientific Review, as well as importance to agency programs and funding availability.

- i. **Selectable:** Proposals are recommended for acceptance if sufficient funding is available.
- ii. **Not Selectable:** Even if sufficient funding existed, the proposal should not be funded.

Note: The Government reserves the right to award some, all, or none of proposals. When the Government elects to award only a part of a proposal, the selected part may be categorized as Selectable, though the proposal as a whole may not merit such a categorization.

b. No other criteria will be used.

c. Prior to award of a potentially successful offer, the Grants Officer will make a determination regarding price reasonableness.

Section VI: Award Administration Information

1. Award Notices

Written notice of award will be given in conjunction with issuance of a cooperative agreement signed by a Grants Officer. The cooperative agreement will contain the effective date of the agreement, the period of performance, funding information, and all terms and conditions. The recipient is required to sign and return the document before work under the agreement commences. **Work described in this announcement SHALL NOT begin without prior authorization from a Grants Officer.**

2. Administrative Requirements

The cooperative agreement issued as a result of this announcement is subject to the administrative requirements in 2 CFR Subtitle A; 2 CFR Subtitle B, Ch. XI, Part 1103; and 32 CFR Subchapter C, except Parts 32 and 33.

3. Reporting

See 2 CFR Sections 200.327 for financial reporting requirements, 200.328 for performance reporting requirements, and 200.329 for real property reporting requirements.

Section VII: Agency Contact

Angela Holcomb, Grants Specialist

U.S. Army Corps of Engineers, Engineer Research and Development Center
ERDC-CERL Contracting Office - Champaign, IL
2902 Newmark Drive
Champaign, Illinois 61822-1076