

**Request for Statements of Interest
Funding Opportunity Announcement**

Federal Awarding Agency:

U.S. Army Corps of Engineers,
Engineer Research and Development Center
3909 Halls Ferry Road
Vicksburg, MS 39180-6199

Funding Opportunity No: W81EWF-20-SOI-0017

CFDA No: 12.630

Statutory Authority: 10 USC 2358

Program Title: Effects of Navigation Locks on Threatened and Endangered Species

Announcement Type: Initial announcement or modification of previously announced opportunity

Issue Date: 17 April 2021

Statement of Interest/Qualifications Due Date: 16 May 2021; 1700 CDT

Full Application Package Due Date, if Invited: 18 June 2021; 1700 CDT

Estimated Award Ceiling: \$900,000

Estimated Total Program Funding (optional): \$900,000

Expected Number of Awards: One award

Section I: Funding Opportunity Description

Background:

Many locks and dams throughout the southeast including the Alabama River are thought to limit fish movement and potential impact fish populations. None of the dams on the Alabama River have any fish movement infrastructure (ladders, lifts etc.). Questions remain as to whether operation of navigational lock chambers along the Alabama River helps large riverine fishes move upstream of dams and allow for their natural and historic long-distance migrations, most often for spawning. Species such as sturgeons (including the endangered Alabama sturgeon), paddlefish, and striped bass, as well as lesser known, nongame species like the southeastern blue sucker, smallmouth buffalo, and highfin carpsucker have historically migrated along Alabama's rivers. Navigational lock chambers have been used elsewhere to restore natural fish migrations.

Fisheries researchers tagged fish and installed an array of 19 receivers that spanned the distance from the Mobile Delta to the Cahaba River (including inside the lock chambers at Claiborne and Millers Ferry); these receivers automatically detect the signal of tagged fish that pass by them, allowing the researchers to follow fish movements. During preliminary research, the U.S. Army Corps of Engineers conducted daily special non-navigational lockages to allow fish the chance to move past the lock structures. This provided a large number of additional opportunities for fish to move into and through the lock chambers beyond the regular navigational operations of the locks. Preliminary research demonstrated that fish can and do enter lock chambers during these specialized lock operations, just as they can during regular navigational lockages. However, if lock operations are halted or reduced, then these opportunities for fishes to move upstream past the dams on their historic spawning migrations are eliminated, leading to a greatly reduced chance of fish moving upstream to spawn and eventual decline or elimination of the species.

Brief Description of Anticipated Work:

The goal of the project is to evaluate the impact of reduced lock operations on endangered, threatened, and game fish species in so called low-use waterways and effective mitigation methods to ensure the viability of impacted fishes while maintaining existing navigation operations on the Alabama River. In addition, information is needed on the feasibility of managing navigation infrastructure for fish passage and what contribution to long-term population recovery can be made. There are concerns that a reduction in or elimination of navigational lock operations is having a negative impact on the ability of a number of endangered, threatened and game fish species to migrate through waterways, particularly during critical spawning periods. Preliminary research indicates reduced lock operations on certain low-use waterways is directly impacting migration and that there are effective means to mitigate the impacts. Additional work is needed to determine how to increase the numbers of fish entering the locks and how to get them to stay in the lock longer, maximizing the ability of fish to use these locks to move past the dams, possibly restoring natural and historic long-distance river migrations. Central issues for this research include not only quantifying fish movement near and with navigation locks, but also the economic cost and benefits of modified lock operations. A mix of field studies, supporting laboratory studies and model studies are envisioned to help address the project goal.

Public Benefit:

These studies will help ensure the preservation and protection of numerous threatened & endangered (T&E) fish species in the Alabama River that could be impacted by a reduction in locks use. The protection of these fish species has been determined to be of national significance due to their past population decline. In addition to T&E species, other aquatic species will also benefit from providing this hydrologic connectivity and thereby help maintain natural ecosystem trophic balances and biodiversity. Additionally, anticipated increases in public ecosystem goods and services include aesthetic and economic value for present and future generations in areas such as: recreational use, sports fishing, improved water quality, and naturally functioning ecosystems.

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 field, laboratory and

technical support for measuring fish movement near infrastructure. The estimated level of funding for FY20 is approximately \$900K.

Government Involvement:

ERDC researchers will work cooperatively with the investigator to develop data needs and field protocols and will help make decisions on analytical methods and findings. An ERDC representative will be available for meetings with the investigator whenever necessary. Opportunities for student training at ERDC facilities exist. ERDC personnel will also be available to assist with all aspects of the research.

Section III: Eligibility Information

1. Eligible Applicants – This opportunity is restricted to non-federal partners of the Gulf Coast Cooperative Ecosystems Studies Unit (CESU).
2. Cost Sharing – This action will be 100% funded by USACE.

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: chelsea.m.whitten@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 Chelsea Whitten; 601-634-4279;
chelsea.m.whitten@usace.army.mil

2. Statement of Interest/Qualifications shall be submitted NO LATER THAN 16 May 2021; 1700 CDT

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

The administrative point of contact is Chelsea Whitten; 601-634-4279;

chelsea.m.whitten@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 but is required if you choose to utilize the subaward budget form. 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. Subaward budget form can also be used as a guide.
 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 18 June 2021; 1700 CDT.

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 chelsea.m.whitten@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

Chelsea Whitten, Grants Officer
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Engineer Research and Development Center
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