

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-0023

CFDA No: 12.630

Statutory Authority: 10 USC 2358

Project Title: Environmental DNA Sampling in the Lower Roanoke River

Announcement Type: Initial announcement

Issue Date: 4 June 2020

Statement of Interest/Qualifications Due Date: 3 July 2020, 1pm CDT

Full Application Package Due Date, if Invited: 31 July 2020, 1pm CDT

Estimated Award Ceiling: **\$40,000**

Expected Number of Awards: **1**

Section I: Funding Opportunity Description

Background:

The Roanoke River is considered one of the most important riverine systems for diadromous fish reproduction on the Atlantic seaboard. Beginning in 2016, the Corps revised flood operations at John H. Kerr Hydropower project to implement a more naturally variable flow regime, referred to as Quasi-Run-of-River (QRR). Under QRR, flood control releases mimic the natural inflows to the project to the extent possible while maintaining other project purposes. Intensive monitoring of diadromous fish recruitment has occurred on the Roanoke both pre and post QRR, yet limited work to date has connected observed population data for juvenile alosines (blueback herring, alewife, hickory shad) with river flow events.

The Roanoke River is in the nationwide Sustainable Rivers Program as one of the original eight rivers from 2002. It is an ideal river to test new technologies to understand effects of water management decisions, and to relate this work to how it can be used nationwide. In this instance, the Corps is interested in using environmental DNA (eDNA) to understand the relationship between flows and the response from rare fish. This includes spatial and temporal variability to gather more information about where the juveniles are congregating, the condition of that habitat, and the flow regimes associated with the presence of the fish. The eDNA technology will be assessed to understand if it is an appropriate tool to inform release decisions at Corps reservoirs.

Brief Description of Anticipated Work:

The objectives of this work are to:

- Test eDNA as a tool to study the relationships between river flows and fish species;
- Gather more data about flow effects on juvenile fish in the Roanoke River;
- Provide the Corps insight about the effect of reservoir releases on juvenile fish;
- Increase the knowledge of a critical missing element of fisheries knowledge
- Put the work in a broader context to consider ways the Corps can use eDNA technology in other rivers.

Public Benefit:

Shad and other fish species support important commercial and recreational fisheries along the East Coast. It is a highly valued resource, that for some is immeasurable, but is estimated to bring over \$4 million annually to the basin. This research will provide valuable insight into technology and fisheries, especially for fish that are important to the public (blueback herring, alewife, shad). It will also

provide the Corps with increased tools to evaluate water releases out of other dams, with potential for improving the ecological conditions downstream.

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 Wilmington District and the Engineer Research and Development Center to provide an assessment of eDNA as a tool for water managers in the Roanoke basin and beyond, especially for juvenile alosine fish. The estimated level of funding for FY20 is approximately \$40,000 for a 16 month period of performance.

Government Involvement:

The Corps will be gathering researchers to understand how new tools can be used to better understand water management releases out of reservoirs. The goal is using several test locations to gather knowledge that can be applied nationwide. The Corps will involve the researchers in a broader monitoring team that includes other federal agencies, state agencies, and NGOs.

Section III: Eligibility Information

1. **Eligible Applicants** – This opportunity is restricted to non-federal partners of the Piedmont-South Atlantic 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, 601-634-4679;
chelsea.m.whitten@usace.army.mil

2. Statement of Interest/Qualifications shall be submitted NO LATER THAN
3 July 2020, 1pm 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, 601-634-4679;
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. 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
31 July 2020, 1pm CDT

4. Submission Instructions

Applications may be submitted by mail, 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

US Army Corps of Engineers, Engineer Research and Development Center

3909 Halls Ferry Road

Vicksburg, MS 39180-6199

chelsea.m.whitten@usace.army.mil

601-634-4679