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-22-SOI-0026

CFDA No: 12.630

Statutory Authority: 10 USC 4001

Program Title: Analytical Support for Aquatic Herbicide Tracing in Field and Mesocosm

Research to Optimize Herbicide Efficacy and Use-Efficiency

Announcement Type: Initial announcement

Issue Date: 22 June 2022

Statement of Interest/Qualifications Due Date: 22 July 2022 by 1200 noon CST Full Application Package Due Date, if Invited: 12 August 2022 by 1200 noon CST

Estimated Award Ceiling: \$100,000.

Estimated Total Program Funding (optional): \$100,000 per year for 5 years for a total of

\$500,000.

Expected Number of Awards: The Government will issue only 1 award from this announcement.

Section I: Funding Opportunity Description

Background:

Aquatic herbicides are a critical component for invasive plant management in public waters of the United States. However, environmentally compatible use of these products can require rapid residue analysis of herbicides registered for aquatic sites, both within and outside of treatment areas. Recently, there has been increased interest in establishing residue data profiles for all of the USEPA registered aquatic herbicides in order to address guestions related to herbicide effectiveness, persistence and degradation in the aquatic environment, and impacts on non-target organisms. Consequently, water resource managers, scientists, and the regulatory community would greatly benefit from a cost-effective, third-party laboratory partner that could provide accurate, rapid, and cost-effective assessment of herbicide residues in water, and how that information is linked to herbicide use patterns. This analytical capability would enhance decisions for using aquatic herbicides, based on sound science, and provide timely information on potential interactions of aquatic pesticide residues with agricultural and drinking water intakes as related to human health issues. In addition to operational field programs, this service will be invaluable to research projects that need rapid turnaround of herbicide residues to support results of experiments refining application rates to improve species-selective control of invasive plants. Moreover, these data will provide a more complete understanding of site-specific fate and dissipation processes following applications and documenting realistic impacts on target and non-target organisms in and near treatment areas.

Brief Description of Anticipated Work:

The following objective summarizes the work for a maximum of two unique, stand-alone projects. Over the life of the cooperative agreement (5 years), it is anticipated that 2 projects would be completed.

Objective 1: Develop analytical protocols. Investigator will collaborate with ERDC researchers to develop sampling, preservation, and analytical protocols for multiple projects to determine aqueous herbicide residues. This will include analytical protocols for registered aquatic herbicides including but not limited to: 2,4-D, bispyribac, carfentrazone, copper, diquat, endothall, florpyrauxifen-benzyl, flumioxazin, fluridone, glyphosate, imazamox, imazapyr, penoxsulam, topramezone, and triclopyr. Access to laboratory equipment such as liquid and gas chromatography-mass spectrometry, liquid chromatography-UV detection, immunoassays, and ultra-high performance liquid chromatography is required. All analytical protocols must comply with accepted US standards as required by the USEPA Offices of Pesticides and Water.

Objective 2: Sample processing, data analysis, and technical transfer. Water, sediment, or plant tissue samples will be collected by ERDC researchers, preserved, and transferred to the investigator for preparation, extraction, and quantification. Data provided by investigator(s) will be incorporated into ERDC reports and peer reviewed scientific literature to provide guidance on herbicide deposition and dissipation in the aquatic environmental.

All data shall be incorporated in a report using peer-review publication format. Status and draft reports shall be submitted for ERDC review on a quarterly basis. Electronic raw data files for each project will be stored at the analytical laboratory facility while ensuring integrity of the files, with copies of each data file being provided to the ERDC on a regular basis. These data cannot be shared with outside parties unless agreed upon by the ERDC.

Public Benefit:

These data will benefit the general public through development of more efficient and cost-effective herbicide application techniques to mitigate environmental and economic impacts caused by invasive aquatic plants. Consequently, reduced occupancy of freshwater resources by invasive aquatic plants will allow greater public recreational use, reduced negative impacts to fish and wildlife habitat (including threatened and endangered species), increased navigation and access, reduced risk of flooding, and enhanced water management for hydropower.

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 for aqueous herbicide residue analyses. The estimated level of funding for the base period is approximately \$100,000. Additional funds of \$100,000 for 4 additional years may be available, providing the potential funding of \$500,000 over 5 years to

the successful Recipient/Awardee.

Government Involvement:

ERDC researchers will work with the selected investigator to develop research protocols for sample collection, data analysis, and preparing technical reports, and peer reviewed journal articles. ERDC will provide technical review of all products and co-author journal articles and facilitate and participate in coordination and meetings with local, state and Federal agencies as needed to disseminate results from these studies. Travel to/from the project location site and/or presentation venues will be the responsibility of the investigator(s).

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: <u>Kisha.M.Craig@usace.army.mil</u> (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 Kisha M. Craig, 601-634-5397; Kisha.M.Craig@usace.army.mil

2. Statement of Interest/Qualifications shall be submitted NO LATER THAN 22 July 2022

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 Kisha M. Craig, 601-634-5397; Kisha.M.Craig@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 the subrecipient uses it. The cost breakdown should include the following, if applicable:
 - 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 12 August 2022

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 Kisha.M.Craig@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 and 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

- 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.
 - 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.

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

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