

**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-21-SOI-0013

CFDA No: 12.630

Statutory Authority: 10 USC 2358

Program Title: Monitoring *Phragmites australis* biological control agent movement into the US

Announcement Type: Initial announcement

Issue Date: 10 March 2021

Statement of Interest/Qualifications Due Date: 09 April 2021 by 5:00 pm CST.

Full Application Package Due Date, if Invited: 30 April 2021 by 5:00 pm CST.

Estimated Award Ceiling: \$35,000 for Year 1.

Estimated Total Program Funding (optional): There is a possible award of \$140,000 over 4 years: One year (\$35,000 per year) and an additional three option years (\$35,000 per year).

Expected Number of Awards: The government expects 1 award from this announcement.

Section I: Funding Opportunity Description

Background:

Phragmites australis (Cav.) Trin. Ex Steudel (common reed, Roseau cane) is a cosmopolitan wetland grass, native to Eurasia but widespread and damaging in North America. Although populations are seen in Europe as valuable and endangered habitats, *P. australis* is regarded as invasive and negatively impacts biodiversity in North America. Molecular studies have suggested that the spread of *P. australis* in recent decades in North America is due to an introduced population from Europe, which displaces native North American genotypes. Native North American populations of common reed were recently recognized as the subspecies, *P. australis americanus*, distinct from the European introduction, *P. australis australis*. Management tools have been developed for common reed control in the US, but so far the only targeted option is biological control. Investigations to evaluate the potential for classical biological control of the introduced genotype of common reed has been ongoing for more than 20 years. Two promising agents that have been developed by CABI- Switzerland are *Archanara neurica* and *A. geminipuncta*, both European stem-boring moths.

An application for release of *Archanara* spp. as biological control agents of *P. australis australis* in the United States is currently under review by USDA APHIS. Until the permit is issued, agents will not be available for release in the US. However, Canadian authorities have approved the release of *Archanara* spp., and first releases were made along the northeastern shore of Lake Ontario in Fall 2019. A critical component of any management program, but especially biocontrol, is the measurement of pre-management conditions at sites to develop a baseline for comparison and determination of management efficacy. Thus, there is an urgent need to 1) identify potential release plots and survey *Phragmites australis* stands in the US Great Lakes for baseline measurement of infestation densities and extent, 2) document species diversity and presence of native and introduced *Phragmites australis* haplotypes, and 3) monitor for immigration of *Archanara* spp. from Canadian release locations. Monitoring should therefore occur primarily along the southern shore of Lake Ontario and possibly Lake Erie, given their proximities to Canadian releases.

Brief Description of Anticipated Work:

The objectives of the proposed effort include:

Objective 1: Establish long-term *Phragmites* monitoring sites near the Canadian border on Lake Ontario (Ant. Year 1).

Objective 2: Develop standardized monitoring protocols that can be used at any site by USACE or other personnel (Ant. Year 1).

Objective 3: Monitor at established sites for arrival of *Archanara* spp. from Canada (Ant. Years 1-4)

Description of proposed effort is as follows:

Establish long-term *Phragmites* monitoring sites near the Canadian border on Lake Erie: Stands of European *Phragmites australis australis* should be identified that are in the vicinity of original *Archanara* release locations. Criteria for choosing sites will be discussed in coordination with ERDC. We anticipate up to 10 study sites to be established in coordination with the vendor.

Develop standardized monitoring protocol that can be used at any infested site: To determine impacts of biological control agents once they are detected in *P. australis* stands, monitoring protocols should be developed. Protocols may include a method to assess presence of *Archanara* spp. adults and/or larvae; density, extent and health of *Phragmites* (both native and introduced subspecies) and identification of *Phragmites* haplotypes. For larval detection, winter surveys may be necessary. This will create important baseline information for long-term monitoring efforts and to document population-level changes in *Phragmites* abundance and associated impacts. The protocol should be standardized and easily transferrable to non-experts for use in a larger monitoring network within the Great Lakes region.

Monitor at established sites for arrival of *Archanara* spp. from Canada: Once the protocol is developed and approved, monitoring should commence in order to record baseline data (described above) and detect *Archanara* spp. presence. This objective will likely be a multi-year effort because it is unclear whether 1) *Archanara* spp. are established at Canadian release sites, and 2) what their rate of dispersal from release sites will be.

Site Location:

This work will occur in the Great Lakes region, primarily in the vicinity of *Archanara* release sites near northeastern Lake Ontario. A portion of the effort (e.g., *Phragmites* stem dissections) may occur at the vendor's laboratory. *Phragmites australis australis* is widespread in the Great Lakes (Figure 1), but sites will be identified during year 1. ERDC will largely rely on the vendor for site identification and establishment but will provide feedback on site selection, as needed.

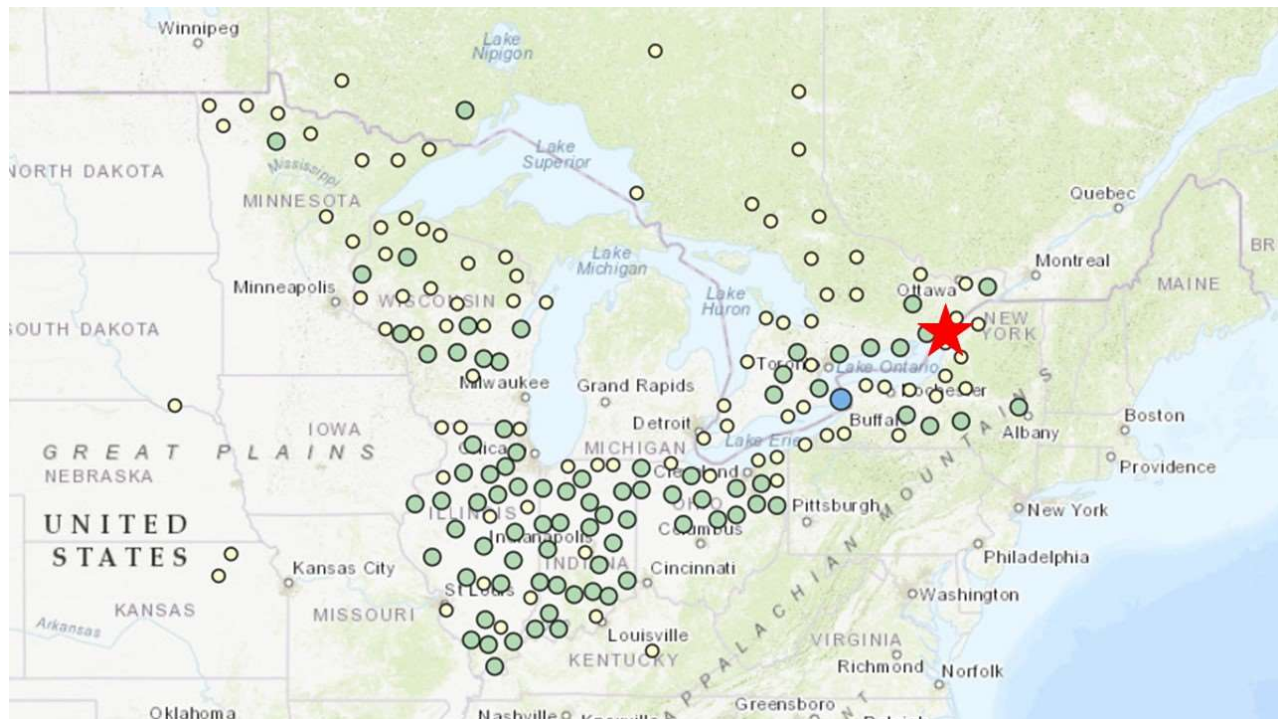


Figure 1. Map of the Great Lakes region with records of *Phragmites australis australis* stands. The red star is the approximate location of *Archanara* spp. release in 2019.

Public Benefit:

These data will benefit the public by establishing pre-biological control conditions in *Phragmites* stands, and detecting migration of biological control agents. Development of biological control is necessary to create a long-term self-sustaining control mechanism for beneficial uses of waterbodies, such as recreation, drinking water supply, and flora and fauna habitat, long after the initial program phases are complete.

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 long-term study sites and monitoring for *P. australis* biological control agents. The estimated level of funding for FY21 is up to approximately \$35,000. Additional funds of up to \$35,000/year for 3 additional years may be available, providing the potential funding of \$140,000 over 4 years to the successful Recipient/Awardee.

Government Involvement:

The Government will work cooperatively with the investigator to identify issues the protocol must address, develop field and training materials, and experimental design. The Government will also assist in data analysis review and writing journal articles, as necessary.

Section III: Eligibility Information

1. Eligible Applicants – This opportunity is restricted to non-federal partners of the Great Lakes 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 Anna.Crawford@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 Anna Crawford, 601-634-5320;
Anna.Crawford@usace.army.mil

2. Statement of Interest/Qualifications shall be submitted NO LATER THAN 09 April 2021 by 5:00 pm CST.

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](https://www.grants.gov).

The administrative point of contact is Anna Crawford, 601-634-5320,
Anna.Crawford@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 30 April 2021 by 5:00 pm CST.

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 Anna.Crawford@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

Anna Crawford, Grants Specialist
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Vicksburg, MS 39180-6199
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601-634-5320