

**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-0001

CFDA No: 12.630

Statutory Authority: 10 USC 2358

Program Title: Apple Snail (*Pomacea spp.*) Monitoring: Evaluating apple snail population response to changes in hydrology in the Everglades.

Announcement Type: Initial announcement

Issue Date: 16 November 2021

Statement of Interest/Qualifications Due Date: 16 December 2021, 1300 Central Time Zone

Full Application Package Due Date, if Invited: 14 January 2022, 1300 Central Time Zone

Estimated Award Ceiling: Approximately \$100,000.00 is expected to be the estimated award ceiling for a single year of the contract.

Estimated Total Program Funding (optional): Additional funding may be available for work in subsequent fiscal years up to 4 years at \$100,000.00 per year for a total of \$500,000.00 over 5 years.

Expected Number of Awards: One award is expected from this announcement for the base year of the contract.”.

Section I: Funding Opportunity Description

Background:

The persistence of the Everglade snail kite (*Rostrhamus sociabilis plumbeus*) in Florida depends upon maintaining hydrologic conditions that support the specific vegetative communities that compose snail kite habitat, along with sufficient apple snail availability across their range each year. Since 1999, the snail kite population in Florida has progressively and dramatically decreased and its primary food source, the Florida apple snail (*Pomacea spp.*), has experienced declines within wetlands designated as critical habitat for snail kites. Water Conservation Area 3A (WCA 3A) has been previously identified as the most critical component of snail kite habitat in Florida, in terms of its influence on demography. Historically, the WCAs, and WCA 3A in particular, have fledged, proportionally, the large majority of young in the region. However, within the past decade nesting success has declined. WCA 3A continues to exhibit low numbers of nesting snail kites. This trend of lowered regional reproduction is a cause of concern regarding the sustainability of the population.

Previous research has identified three major potentially adverse effects associated with current water management in WCA 3A as: (1) prolonged high water levels in WCA 3A during September through January; (2) prolonged low water levels in WCA 3A during the early spring and summer; and (3) rapid recession rates. All three of these hydrological variables have the potential to adversely affect apple snail populations directly and indirectly. The apple snail is the primary prey of the Everglade snail kite, a federally listed endangered species. Apple snail populations respond quickly to changes in hydrology and to the longer-term indirect effects of hydrology on vegetation structure.

In order to address these adverse effects, the U.S. Fish and Wildlife Service (USFWS) in conjunction with species researchers developed a series of water depth recommendations for WCA 3A that address the needs of the snail kite, apple snail, and vegetation characteristic of their habitat. This water management strategy is divided into three periods representing the height of the wet season (September 15 to October 15), the pre-breeding season (January) and the breeding season (May 1 to June 1) and illustrates appropriate water depths to attain within each period. These water depth recommendations were acknowledged as an important consideration during development of the 2020 Combined Operational Plan (COP) water control plan. The 2020 COP water control plan guides operations of water management structures in the Everglades, including WCA 3 and Everglades National Park (ENP).

This agreement represents an opportunity to enter into a cooperative agreement for monitoring apple snail distribution, density, and reproduction in the Everglades. This project will play a critical role in building the knowledge base for understanding apple snails in the Everglades. Adequate distribution and densities, and successful apple snail reproduction may indicate that the combination of several hydrological and biological functions in the Everglades has been correctly restored, improving the probability of successful snail kite foraging and nesting.

Brief Description of Anticipated Work:

The purpose of this research is to provide estimates of apple snail distribution, density, and reproduction in response to hydrologic changes associated with the current water control plan (e.g. Combined Operational Plan (COP)) that guides operations in south Florida. This project should be designed to determine apple snail population response to changes in hydrology associated with implementation of the 2020 COP Water Control Plan.

The objectives of the proposed research are to:

Objective 1: Determine statistically robust annual estimates of native and nonnative apple snail distribution, density, and egg cluster production in the Everglades wetlands ecosystem, with a focus on WCA 3A and in Everglade snail kite foraging areas when present (as determined by the U.S. Army Corps of Engineers (USACE)), and assess how conditions and management actions affect these estimates.

Objective 2: Determine the habitat characteristics, hydroperiod, gage-specific seasonal water levels and transitions, recession and ascension rates, and other factors that are most supportive of apple snail density, survival, recruitment, and egg cluster production and survival; and estimate values of these parameters that result in maximum apple snail densities and maximum densities/per capita egg production (PCE) within the Everglades wetlands ecosystem.

Objective 3: Provide data in support of scientific studies of inter-relationships among apple snail demography, hydrologic regime, habitat characteristics, and other factors.

Objective 4: Synthesize new data with existing information to provide annual updates on the factors that are most supportive of apple snail density, survival, recruitment, and egg cluster production and survival. Each year, summarize apple snail responses to management and conditions and provide specific management recommendations to increase apple snail density and reproductive success in the Greater Everglades wetlands ecosystem

Deliverables:

Quarterly Status Reports: Quarterly status reports will be delivered every 90 days on a quarterly basis. Each report will summarize work done and problems encountered during the reporting period, as appropriate.

Annual Report: A draft and final annual report will be submitted at the completion of each year of the cooperative agreement. The draft and final annual report will contain at minimum, an introduction section, a description of the methods used, an evaluation of the data collected during the reporting period for a given year, and a conclusion section. A draft annual report will be submitted upon completion of each year of the cooperative agreement and will be reviewed by the USACE, Jacksonville District, with comments provided as appropriate. Submittal of the final annual report will occur after incorporation of the provided comments as necessary. An accompanying dataset will also be made available.

Final Report: A final report will be submitted one month prior to completion of the cooperative agreement. The final report will be a substitute for the annual report described above. The final report will contain at minimum an introduction section, a description of the

methods used, an evaluation of the data collected during each year of the cooperative agreement, and a conclusion section. The purpose of the final report will be to provide a summary of all years of work conducted under the cooperative agreement. A draft of the final report will be submitted and reviewed by the USACE, Jacksonville District, with comments provided as appropriate. Final submittal of the report will occur after incorporation of the provided comments as necessary. An accompanying dataset will also be made available.

Meetings:

Kick-Off Meeting: A kick-off meeting will be scheduled with the USACE, Jacksonville District to introduce the recipient of the cooperative agreement to the USACE point of contact and to discuss the proposed plan of work for the base year of the cooperative agreement.

Yearly Meetings: A yearly meeting will be scheduled with the USACE, Jacksonville District following completion of the final annual report and final report, as described above, to discuss work accomplished.

Public Benefit:

This information is important to the public as apple snails are the primary prey of the Everglade snail kite, a federally listed endangered species. Snail kites act as ecosystem indicators for the Everglades, hence providing information on ecosystem health. Successful apple snail reproduction may indicate that the combination of several hydrological and biological functions in the Everglades have been correctly restored, improving the probability of successful snail kite foraging and nesting. Improvements in ecosystem health provide a direct benefit to the public. Recreational benefits provided include outdoor recreation opportunities and improved access to Everglades marshes for tourists and Floridians.

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 USACE, Jacksonville District and the Engineer Research and Development Center to provide information regarding apple snail reproduction in the Everglades in response to hydrologic changes associated with the current water control plan (e.g. COP). The estimated level of funding for FY22 is approximately \$100,000.00. Additional funds of \$100,000.00/year for four additional years may be available, providing the potential funding of \$500,000.00 over 5 years to the successful Recipient/Awardee.

Government Involvement:

The USACE, Jacksonville District, will participate in study site selections, design, and work plan development. The Jacksonville District will also participate in field data collection efforts as appropriate, will review quarterly and annual reports, and will provide input to data interpretation. The Jacksonville District will assist in the dissemination of study results through local scientific presentations and website postings and will incorporate the data and analysis into a system-wide database that assesses and evaluates ecosystem restoration efforts in central and southern Florida.

Section III: Eligibility Information

1. Eligible Applicants – This opportunity is restricted to non-federal partners of the South Florida - Caribbean 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 16 December 2021, 1300 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

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 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 but is required if you chose 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.
 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 14 January 2022, 1300 Central Time Zone

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
US Army Corps of Engineers
Engineer Research and Development Center
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Vicksburg, MS 39180-6199
Chelsea.M.Whitten@usace.army.mil
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