

PROJECT ANNOUNCEMENT

**US Army Corps of Engineers (USACE)
Engineer Research and Development Center (ERDC)**

Title: Annual Recruitment and Survival of Juvenile Gulf Sturgeon in the Apalachicola River

Announcement Type: Initial Announcement

Funding Opportunity Number: W81EWF-23-SOI-0024

Assistance Listing Number: 12.630

Date Issued: 14 June 2023

Key Dates: Phase I announcement will be open to receive statements of interest continuously until 12:00pm Central Time (CT), 14 July 2023, at which point all statements of interest must be received.

If invited to Phase II, full proposal applications will be due at 12:00pm Central Time (CT), 14 August 2023.

Estimated Award Ceiling: \$110,000_Amount of Initial Funding

Estimated Total Program Funding: \$370,000 over 5 years: \$110,000 for the base plus \$65,000 will be available each year for 4 options years (\$260,000).

Agency Contact: Kisha M. Craig, Kisha.M.Craig@usace.army.mil

I. Program Description

A. Short Description of Funding Opportunity

ERDC seeks applications for a multi-year study on Gulf Sturgeon in the Apalachicola River to assess annual recruitment and survival of juvenile sturgeon.

B. Background

Research supports year class strength of Gulf Sturgeon can be influenced by annual hydrologic patterns. Randall and Sulak (2007) noted that recruitment in the Suwannee River was highly correlated with high monthly mean flows in September and December. High flows during these months were hypothesized to decrease salinity in estuarine zones therefore providing greater foraging area for young sturgeon near river mouths in December and reducing periods of low dissolved oxygen in lower river reaches during September. Assessing annual recruitment patterns in juvenile Gulf Sturgeon is critical in terms of promoting overall recovery objectives (USFWS and NMFS 2009) but requires long-term monitoring efforts coupled with quantified estimates of annual abundance of juvenile sturgeon. Within the Apalachicola River system, the U.S. Fish and Wildlife Service Panama City Fish and Wildlife Conservation Office (USFWS Panama City FWCO) has coordinated juvenile Gulf Sturgeon sampling since 2013 using targeted netting to monitor abundance and year class strength in addition to utilizing acoustic telemetry to address movement patterns of juvenile Gulf Sturgeon within the estuary. For this effort, year class abundance was estimated at Age 1 and cohort abundance has varied from about 50-200 fish per year (Marbury 2016).

In 2016, the USFWS issued a Biological Opinion (BO) regarding the USACE update to the Water Control Manual (WCM) for the ACF (Apalachicola-Chattahoochee-Flint system) and determined those operational actions may adversely affect a number of listed species occurring within the basin, including Gulf Sturgeon. One concern that was highlighted was a reduction in the duration and frequency of floodplain inundation following the updated WCM which could potentially impact young of year and juvenile Gulf Sturgeon survival and growth. The BO identified three Reasonable and Prudent Measures (RPMs) to minimize impacts of incidental take of the listed species. RPM 2016-3 requires USACE to monitor the level of take associated with the ACF WCM by monitoring the distribution, abundance, survival, growth, and fecundity of the listed mussels and Gulf Sturgeon in the action area.

A primary objective of this project is to use the sampling methodology and analytical approaches outlined by USFWS Panama City FWCO to conduct targeted sampling for juvenile Gulf Sturgeon. These data will be used to address concerns highlighted in the BO issued by USFWS regarding USACE ACF WCM operations at Jim Woodruff Lock and Dam and its potential impact to juvenile sturgeon recruitment. These baseline data will provide insight on the potential influences of USACE ACF Water Control Manual operations as well as annual variability in juvenile Gulf Sturgeon growth and recruitment.

C. Program Description/Objective:

We propose that juvenile Gulf Sturgeon sampling occur periodically from May through July using anchored monofilament gill nets and targeted sampling conducted in the lower reaches

of the Apalachicola River including sections of the Brothers River where netting has been successful in the past (Marbury 2016). Nets should consist of three, 50m panels of 7.6-cm, 8.9-cm, and 10.2-cm monofilament mesh (stretch measure) and effort should include the deployment of six to 12 nets daily during the overall sampling period. Captured sturgeon will be weighed (nearest 0.1 kg) and measured (FL, TL cm), and assessed for previous capture by the presence of external tags and/or internal passive integrated transponder (PIT) tags. New captures will be tagged with T-bar and PIT tags. A genetic tissue sample (e.g., fin clip) will be taken from each processed sturgeon and handled according to Dugo et al. (2004). A section of secondary pectoral fin ray will be removed from near the basal articulating process of the fin and retained for subsequent aging assessments (Baremore and Rosati 2013, 2014; Andres et al. 2018). A subsample of processed fish will be equipped with internal acoustic telemetry tags following standard procedures (USFWS 1993; Kahn & Mohead 2010). Following recovery, fish will be released downstream of the original capture location. In addition, the awardee will construct, deploy, maintain, download, and retrieve an acoustic telemetry array within the lower portion of the Apalachicola River and estuary. Final number of receivers and locations will be decided following consultation with ERDC before the contract has been awarded. The array will be deployed prior to the netting/tagging phase in 2019, downloaded quarterly and maintained in position until the completion of the project.

Identified project tasks are:

1. Quantify the recruitment of Age-1 Gulf Sturgeon in the Apalachicola River using a standardized mark-recapture survey. The awardee will evaluate age and size structure of processed Gulf Sturgeon based on annual monitoring efforts to address recruitment dynamics (Peterson et al. 2000; Neumann and Allen 2007; Schueller and Peterson 2010; Paukert and Spurgeon 2017). These data will assist in evaluating environmental and WCM operational influences on Age-1 cohorts and determine if any variations in cohort abundance are in response to existing USACE project operations.
2. Quantify overwinter survival of Age-1 Gulf Sturgeon in Apalachicola Bay. Telemetry tagged fish will be monitored by passively tracking individuals through a deployed acoustic array to evaluate overall movement patterns within the lower river and associated estuary. Understanding the movement of these fish within the estuarine environment and their association with specific habitat and/or zones (e.g., upper, middle, lower bay; nearshore, open water) will provide important information to address the concern on whether WCM operations influences estuarine invertebrate production, which is critical to juvenile sturgeon growth and survival, particularly the Age-1 cohort.

Successful applicants should have expert knowledge of Gulf Sturgeon life history and extensive familiarity and experience with netting and handling of endangered fish species. Netting within riverine habitats and tagging will follow the general guidelines recommended by the USFWS and NOAA. The candidates should have sufficient experience with telemetry-based projects and a record that demonstrates research experience with collecting and analyzing these types of data. In addition, the candidates will secure all necessary permits (state and/or federal) required for conducting the proposed research. The candidates will be required to prepare a Statement of Work and Work Plan regarding the research to be conducted. The candidates will also be required to submit status reports to accompany billing

invoices (monthly or quarterly) and one (1) annual report each year of the cooperative agreement to provide updates on data collection and analysis.

Deliverables will include written products that address the following:

1. Age-1 recruitment estimates for the Apalachicola River Gulf Sturgeon population during the overall project period.
2. An analysis of the effects of flow on Gulf Sturgeon recruitment, based on this study and data collected by previous studies in the river.
3. Timing and duration of juvenile Gulf Sturgeon occurrences within the Apalachicola acoustic telemetry array.
4. Estimates of juvenile Gulf Sturgeon overwinter survival rates.

D. Public Benefit

Success in these studies will benefit the public through development of guidance and best management practices which will promote improved recovery guidelines for the endangered Gulf Sturgeon. These guidelines will provide advances for successful management actions that will result in a reduction in future costs for recovery actions thus providing cost saving measures for the public. Successful integration of these actions will maintain, improve and eventually expand critical habitat features necessary for recovery of the species and ultimately respond in increases in population levels across the species range.

E. Authorization: 10 USC 4001

F. Legal Requirements

Each Cooperative Agreement awarded under this announcement will be governed by 2 CFR 200, “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards”, 2 CFR 1100 Subchapter D—Administrative Requirements Terms and Conditions for Cost-Type Grants and Cooperative Agreements to Nonprofit and Governmental Entities and the DoD research general terms and conditions located at <https://www.nre.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions>.

G. Program-Specific Requirements

II. Federal Award Information

The following information applies to awards issued under this announcement:

- This is a new program or a one-time initiative
- The Government anticipates __1__ Federal awards from this announcement, but reserves the right to award more or less

- The total amount of funding expected to be awarded through this announcement is \$370,000.00
- The expected amount of funding for each award is \$110,000.00 for Year 1, \$65,000.00 for Year 2, \$65,000 for Year 3, \$65,000 for Year 4, and \$65,000 for Year 5.
- Award(s) from this announcement will be Cooperative Agreement(s)
- The anticipated period of performance is 5 years
- Applications for renewal or supplementation of existing projects are eligible to compete with applications for new Federal awards
- The government reserves the right to accept only portions of an application and to negotiate with potential awardees
- Government's substantial involvement includes: The USACE will provide acoustic telemetry tags and participate in study site selection, design, logistics and work plan development. USACE will participate in field data collection efforts as appropriate, review status reports and provide input to data interpretation for final reports. USACE will assist in the dissemination of study results through local scientific presentations and website postings. USACE will incorporate the data and analyses into a centralized database that will be used to evaluate project outcomes and provide guidance and justification for proposed restoration measures.

III. Eligibility Information

A. Eligible Applicants

This opportunity is restricted to non-federal partners of the Piedmont-South Atlantic Coast Cooperative Ecosystems Studies Unit (CESU).

Disclosures of current and pending support made in this application may render an applicant ineligible for funding. Prior to award and throughout the period of performance, ERDC may continue to request updated continuing and pending support information, which will be reviewed and may result in discontinuation of funding.

Religious organizations are entitled to compete on equal footing with secular organizations for Federal financial assistance as described in E.O. 13798, "Promoting Free Speech and Religious Liberty."

B. Cost Sharing or Matching

This action will be 100% funded by USACE.

C. Conflict of Interest

a) General Requirement for Disclosure

You and your organization must disclose any potential or actual scientific or nonscientific conflict of interest(s) to us. You must also disclose any potential or actual conflict(s) of interest for any identified sub recipient you include in your

application. We may have to ask you more questions if we need more information.

At our discretion, we may ask you for a conflict-of-interest mitigation plan after you submit your application. Your plan is subject to our approval.

b) Scientific Conflict of Interest

Scientific collaborations on research and development projects are generally the result of close collaboration prior to the submission of applications for support. Accordingly, these collaborations should be considered when considering potential conflicts of interest. The potential conflict is mitigated by the disclosure of these collaborations, and the list of current and pending support you provide for senior and key researchers. Therefore, you must include in your list of current and pending support all collaborators, even if they did not formally provide support.

D. Other

a) Licensure or Certification

You must include the Acknowledgment of Support and Disclaimer on all materials created or produced under our awards. This language may be found in the Terms and Conditions included in the award documents.

E. Certifications, representations, and assurances

1. To apply for grants and other funding opportunities the applicant entity must have an active registration in the System for Award Management (SAM). Applications will not be accepted through Grants.gov or other methods unless the entity is registered in SAM. Registration in SAM now includes the acceptance of Certifications and Assurances. See <https://www.grants.gov/web/grants/grantors/grantor-standard-language.html> for details on how to register in SAM, and Grants.gov
2. The Federal Assistance Certifications Report is an attestation that the entity will abide by the requirements of the various laws and regulations; therefore, as applicable, you are still required to submit any documentation, including the SF-LLL Disclosure of Lobbying Activities (if award value exceeds \$100,000.00), and, if applicable, informing DoD of unpaid delinquent tax liability or a felony conviction under any Federal law.
3. Certification Regarding Disclosure of Funding Sources. By checking "I Agree" on the SF 424 (R&R) block 17 you agree to abide by the following statement: "By signing this application, I certify the proposing entity is in compliance with Section 223(a) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 which requires that: (a) the PI and other key personnel certify that the current and pending support provided on the proposal is current, accurate and complete; (B) agree to update such

disclosure at the request of the agency prior to the award of support and at any subsequent time the agency determines appropriate during the term of the award; and (c) the PI and other key personnel have been made aware of the requirements under Section 223(a)(1) of this Act. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. code, Title 218, Section 1001)."

IV. Application and Submission Information (2 Phase Process)

A. Phase I: Submission of Statement of Interest (SOI)

1. Materials Requested for Statement of Interest/Qualifications:

a. Please provide the following via e-mail attachment to: Kisha M. Craig, Kisha.M.Craig@usace.army.mil (Maximum length: 2 pages, single-spaced 12 pt. font).

i. Name, Organization and Contact Information

ii. 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, Kisha.M.Craig@usace.army.mil

2. ERDC will only accept SOIs submitted on or before 14 July 2023, 12:00pm Central Time (CT).

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.

B. Phase II (if invited): Submission of Full Application Package

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, 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 a full budget in sufficient detail so that a reasonableness determination can be made. A recommended template will be included in the invitation to Phase II. The SF 424 Research & Related Budget Form can be used as a guide but is required if the sub-recipient uses it. 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.
- d. R&R Senior/Key Person Profile
 1. Biographical Sketch
 2. Disclosure of Current and Pending Support:
 - i. A list of all current projects the individual is working on, in

addition to any future support the individual has applied to receive, regardless of the source.

- ii. Title and objectives of the other research projects.
- iii. The percentage per year to be devoted to the other projects.
- iv. The total amount of support the individual is receiving in connection to each of the other research projects or will receive if other applications are awarded.
- v. Name and address of the agencies and/or other parties supporting the other research projects.
- vi. Period of performance for the other research projects.

e. SF-LLL Disclosure of Lobbying Activities (if award value exceeds \$100,000.00)

f. Data Management Plan:

A data management plan is a document that describes which data generated through the course of the proposed research will be shared and preserved, how it will be done, or explains why data sharing or preservation is not possible or scientifically appropriate, or why the costs of sharing or preservation are incommensurate with the value of doing so. See also: DoD Instruction 3200.12.

<https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/320012p.pdf?ver=2019-04-30-073122-220>

Data management plans are generally 2 pages in length, and must include the following considerations:

- (1) The types of data, software, and other materials to be produced.
- (2) How the data will be acquired.
- (3) Time and location of data acquisition, if scientifically pertinent.
- (4) How the data will be processed.
- (5) The file formats and the naming conventions that will be used.
- (6) A description of the quality assurance and quality control measures during collection, analysis, and processing.
- (7) A description of dataset origin when existing data resources are used.
- (8) A description of the standards to be used for data and metadata format and content.
- (9) Appropriate timeframe for preservation.
- (10) The plan may consider the balance between the relative value of data preservation and other factors such as the associated cost and administrative burden. The plan will provide a justification for such decisions.

3. ERDC will only accept full application packages submitted on or before 14 August 2023, 12:00pm Central Time (CT).

4. Submission Instructions

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, 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 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>.

Organizations must have a Unique Entity Identifier (UEI) and active System for Award Management (SAM) registration to apply for Federal financial assistance.

C. Application Withdrawal:

An applicant may withdraw an application at any time before award by written notice via email. Notice of withdrawal shall be sent to the agency point of contact identified in this announcement and are effective upon receipt.

D. Funding Restrictions

Per 2 CFR § 200.216, funds may not be used to procure telecommunications equipment or video surveillance services or equipment produced by

- Huawei Technologies Company,
- ZTE Corporation Hytera Communications Corporation,
- Hangzhou Hikvision Digital Technology Company,
- Dahua Technology Company
- any subsidiary or affiliate of such entities

Funds from an award may not be used to attain fee or profit.

V. Application Review Information

A. Selection Criteria

Applications will be evaluated using the following criteria, listed in descending order of importance:

- Technical merits of the proposed research and development; and
- Potential relationship of the proposed research and development to Department of Defense missions
- Any other criteria: The successful applicant should have experience evaluating recruitment and analysis of juvenile Gulf Sturgeon survival in the Apalachicola River and estuary.

B. Review and Selection Process:

Each application will be reviewed based on the selection criteria above rather than against other applications submitted under this Announcement.

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.

In addition to the technical/program review, the DoD performs a budget review and a risk review as directed by 2 CFR 200.206, including a review of the Federal Awardee Performance and Integrity Information System (FAPIIS). Applicants may review information in FAPIIS and comment on any information entered into that system. Comments made by applicants will be taken into account in addition to other information in considering applicants' integrity, business ethics, and record of performance.

VI. Federal Award Administration Information

The notification e-mail regarding a selection is not authorization to commit or expend DoD funds. A DoD grants officer is the only person authorized to obligate and approve the use of federal funds. This authorization is in the form of a signed Notice of Award. Applicants whose applications are recommended will be contacted by a DoD grants officer to discuss any additional information required for award. This may include representations and certifications, revised budgets or budget explanations, or other information as applicable to the proposed award. The award start date will be determined at this time.

VII. Reporting Requirements

The terms and conditions of the award will provide the specifics on how to submit the reports and any required sections for those reports.

In accordance with 2 CFR 200.328 (Financial Reporting) and 2 CFR 200.329 (Program Performance)

Report	Requirements/Form	Frequency	Means of Submission
ERDC Progress Report		Quarterly	E-mail

Research Performance Progress Reports (Interim and Final)	OMB Control Number: 0704-0527	Annually	E-mail
Financial Report	SF 425	Bi-annually	E-mail
Payment Report	SF 270	Monthly	E-mail
Closeout Report		Once	E-mail

Awardees will need to comply with the reporting requirements in 2 CFR 170: Reporting Subaward and Executive Compensation Information.

The terms and conditions of the award will provide the specifics on how to submit the reports and any required sections for those reports.

VIII. Federal Contacts

Questions should be directed to:

Kisha M. Craig
Grants Specialist
Kisha.M.Craig@usace.army.mil

Chelsea M. Whitten
Grants Officer
Chelsea.M.Whitten@usace.army.mil

Questions regarding Grants.gov should be directed to the toll-free number 1-800-518-4726 and email at support@grants.gov.

IX. Other Information

The Federal government is not obligated to make any Federal award as a result of the announcement. Only grants officers can bind the Federal government to the expenditure of fund.

Applicants are advised to monitor Grants.gov for potential amendments to this Notice of Funding Opportunity. You can also elect to be automatically notified by Grants.gov whenever there is a change to the opportunity.

Applications must not include any information that has been identified as classified national security information under authorities established in Executive Order 12958, Classified National Security Information.