# Cooperative Agreement for CESU-affiliated Partner with North Atlantic Coast Cooperative Ecosystem Studies Unit

#### **Funding Opportunity Description**

The US Geological Survey is offering a funding opportunity to a CESU partner for research in determining a suitable remote sensing methodology for detecting and characterizing land use change in the last several decades in the coastal tidal wetlands, producing maps and regional summaries for such changes for the conterminous United States (CONUS), and producing science papers for the research. The land use change that is important to detect and characterize includes developments such as roads, bridges, and other hardscaping events that have led to altering of tidal flows and salinity gradients in coastal tidal habitats.

**Research Objectives:** Determine a suitable remote sensing methodology for detecting and characterizing locations and types of land-use change that have altered tidal flows and salinity gradients in coastal tidal habitats, produce corresponding map products and journal papers for the research.

#### Award information

It is anticipated that one award will be made with one base year and two renewal years. The total estimated funding for this project is \$300,000. Funding in the amount of \$30,000 is estimated to be available for FY 2023. Additional funding will be based upon satisfactory progress and the availability of funding.

#### **Eligibility Information**

This financial assistance opportunity is being issued under a Cooperative Ecosystem Studies Unit (CESU) Program. CESU's are partnerships that provide research, technical assistance, and education. Eligible recipients must be a participating partner of North Atlantic Coast Cooperative Ecosystem Studies Unit (CESU) Program.

#### **Application and Submission Information**

Apply electronically through grants.gov. Questions are to be directed to Faith Graves: fgraves@usgs.gov

Content and Form of Application:

- 1. Recipient's Name
- 2. Principal Investigator (individual who will oversee the cooperative agreement) including address, phone number, fax number, and email address.
- 3. Technical contact (Staff member(s) who will administer the cooperative agreement) including address, phone number, fax number, and email address.
- 4. List laboratories, field equipment, and facilities available for project work.

5. Experience of staff to conduct the stated work objectives of the project.

## Proposal Text - Please include the following:

- a. <u>Introduction and Statement of Problem</u>. Give a brief introduction to the research problem. Provide a brief summary of findings or outcomes of any prior work that has been completed or is ongoing in this area
- b. <u>Objectives</u>. Clearly define goals of project. State how the proposal addresses USGS goals and its relevance and impact. Explain why the work is important.
- c. <u>Methods</u>. This section should include a fairly detailed discussion of the work plan and technical approach to both field and laboratory techniques.
- d. Planned Products and Dissemination of Research Results List product(s) (reports, analyses, digital data, etc.) that will be delivered at the end of the performance period. The USGS considers dissemination of research data and results to potential users of those results to be an integral and crucial aspect of projects funded by this program. Beyond the requirements for a final report, describe your plan for dissemination of project data and results that will result in the greatest possible benefit to customers as defined by your proposal. Applicants are strongly encouraged to disseminate research results to the scientific community and appropriate professional organizations; local, State, regional and Federal agencies; and the general public. The USGS encourages the Recipient to publish project reports in scientific and technical journals.
- e. <u>References Cited</u>. List all references to which you refer in text and references from your past work in the field that the research problem addresses. Be sure to identify references as journal articles, chapters in books, abstracts, maps, digital data, etc.

Budget Sheets - This information will provide more details than what is required under the SF 424A form. Please include the following:

- a. <u>Salaries and Wages</u>. List names, positions, and rate of compensation. include their total time, rate of compensation, job titles, and roles.
- b. <u>Fringe benefits/labor overhead</u>. Indicate the rates/amounts in conformance with normal accounting procedures. Explain what costs are covered in this category and the basis of the rate computations.
- c. <u>Field Expenses</u>. Briefly itemize the estimated travel costs (i.e., number of people, number of travel days, lodging and transportation costs, and other travel costs).
- d. <u>Lab Analyses</u>. Include geochemical analyses, radiocarbon age dating, etc. Briefly itemize cost of all analytical work (if applicable)
- e. <u>Supplies</u>. Enter the cost for all tangible property. Include the cost of office, laboratory, computing, and field supplies separately. Provide detail on any specific item, which represents a significant portion of the proposed amount.
- f. Equipment. Show the cost of all special-purpose equipment necessary for achieving the objectives of the project. "Special-purpose equipment" means scientific equipment having a useful life of more than 1 year and having an acquisition cost of \$5,000 or more per item. Each item should be itemized and include a full justification and a dealer or manufacturer quote, if available. General-purpose equipment must be purchased from the applicant's operating funds. Title to non-expendable personal property shall be vested solely with the Recipient. Under no circumstances shall property title be vested in a subtier recipient.

- g. <u>Services or consultants</u>. Identify the tasks or problems for which such services would be used. List the contemplated sub-recipients by name (including consultants), the estimated amount of time required, and the quoted rate per day or hour.
- h. <u>Travel</u>. State the purpose of the trip and itemize the estimated travel costs to show the number of trips required, the destinations, the number of people traveling, the per diem rates, the cost of transportation, and any miscellaneous expenses for each trip. Calculations of other special transportation costs (such as charges for use of applicant-owned vehicles or vehicle rental costs) should also be shown.
- i. <u>Publication costs</u>. Show the estimated cost of publishing the results of the research, including the final report. Include costs of drafting or graphics, reproduction, page or illustration charges, and a minimum number of reprints.
- j. <u>Other direct costs</u>. Itemize the different types of costs not included elsewhere; such as, shipping, computing, equipment-use charges, or other services.
- k. Total Direct Charges. Totals for items a j.
- Indirect Charges (Overhead). Indirect cost/general and administrative (G&A) cost. Show the proposed rate, cost base, and proposed amount for indirect costs based on the cost principles applicable to the Applicant's organization. If the Applicant has separate rates for recovery of labor overhead and G&A costs, each charge should be shown. **NOTE:**

#### **CESU NEGOTIATED IDC IS 17.5%**

- m. Amount proposed. Total items k and l.
- n. Provide copy of recipient's rate agreement

#### **USGS Data Management Plan Requirements**

Proposals submitted to USGS must include a supplementary document of no more than two pages labeled "Data Management Plan" (DMP). This supplementary document should describe how the proposal will conform to USGS policy on the dissemination and sharing of research results and associated data. A valid DMP may include only the statement that no detailed plan is needed (e.g. "No data are expected to be produced from this project"), as long as the statement is accompanied by a clear justification. This supplementary document may include:

- the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;
- the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
- policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
- provisions for re-use, re-distribution, and the production of derivatives; and
- plans for archiving data, samples, and other research products, and for preservation of free public access to them.

Additional guidance on data management plans is available from the USGS Data Management web site here: http://www.usgs.gov/datamanagement/plan/dmplans.php

Simultaneously submitted collaborative proposals and proposals that include subawards are a single unified project and should include only one supplemental combined DMP by the lead PI that also addresses all subaward data management needs, regardless of the number of non-lead collaborative proposals or subawards included.

# Prohibition on Issuing Financial Assistance Awards to Entities that Require Certain Internal Confidentiality Agreements

Section 743 of Division E, Title VII of the Consolidated and Further Continuing Resolution Appropriations Act of 2015 (Pub. L. 113-235) prohibits the use of funds appropriated or otherwise made available under that or any other Act for grants or cooperative agreements to an entity that requires employees or contractors of such entity seeking to report fraud, waste, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or contractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a federal department or agency authorized to receive such information.

Recipients must not require their employees or contractors seeking to report fraud, waste, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or contractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a federal department or agency authorized to receive such information.

Recipients must notify their employees or contractors that existing internal confidentiality agreements covered by this condition are no longer in effect.

# **Application review information**

Applications are considered based on the completeness of documentation, agreement with the objectives and scope of the collaborative research, meeting of the above-stated eligibility, and other category requirements. Specific evaluation factors are identified in the proposal narrative. Budget information is evaluated for reasonableness and appropriateness to applicant project goals.

Proposals are reviewed by the U.S. Geological Survey technical personnel. Individual proposals are evaluated and scored. The evaluations and scores will be submitted to the contracting officer for final award.

Proposals will be evaluated based on the following criteria:

#### Purpose, Objectives, and Relevance: (25 points)

- (a) How well does the proposed research clearly address detecting and characterizing changes in coastal-tidal wetland habitats?
- (b) How well are the objectives defined, measurable, and realistic for the project's anticipated timeframe?

#### **Technical Approach: (25 points)**

- (a) How well does the project summary provide a description of the relationship between partners, tasks, milestones, and goals. Are the milestones supported by a schedule that can be accomplished during the period of performance?
- (b) How well does the applicant demonstrate they can address detecting and characterizing appropriate categories of coastal wetland change using proven algorithms and models?

(c) How closely do the overall methodology follow established standards for various remote sensing platforms (e.g. Landsat, airborne data)?

#### **Budget Justification and Clarity: (25 points)**

- (a) How well does the proposal demonstrate the staff is sufficient to accomplish proposed goals?
- (b) How well does the proposal demonstrate the budget line items are appropriate and reasonable and commensurate with the level of effort needed to accomplish project objectives?

#### **Qualifications, Experience, Past Performance: (25 points)**

- (a) How well does the proposal demonstrate expertise in time-series remote sensing and imagery processing based on different platforms (if different platforms are needed)?
- (b) What is their depth of experience in such research as demonstrated by scientific publications and completed projects in the research area?
- (c) How well does the applicant demonstrate that they are capable of doing the proposed project?
- (d) How well does the applicant demonstrate they have applied these methods to other similar habitats and mapping problems?
- (e) How well does the applicants past and current assistance demonstrate they have completed project goals associated with approaches for conducting studies on coastal tidal wetlands in the conterminous U.S.?

#### **Award Administration Information**

Award recipients are responsible for managing the day-to-day operations of the grant/cooperative agreements and sub-award supported activities to assure compliance with applicable Federal requirements, and that performance goals are being achieved. Recipient monitoring must cover each program, function or activity.

#### **Progress Reports**

- a) The Recipient shall submit two copies of each Progress Report to the USGS Project Officer and one copy of the transmittal letter to the USGS Contracting Officer. Unless otherwise specified in this Agreement, annual progress reports should be submitted at least sixty (60) days prior to the end of the current budget period to allow adequate time for the designated office to review the report. In the case of multi-year Agreements, failure to submit timely reports may delay processing of funding increments. For Agreements with a total anticipated performance period of twelve months (12) months or less, only a Final Technical Report will be required. A progress report is not required in the final budget year, unless the Recipient requests an extension to the project period.
- b) The progress reports shall include the following information:
  - (i) A comparison of actual accomplishments to the objectives of the Agreement established for the budget period and overall progress in response to the performance metrics.
  - (ii) The reasons why established goals were not met, if appropriate.
  - (iii) Additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.
  - (iv) An outline of anticipated activities and adjustments to the program during the next budget period.

- c) Between the required reporting dates, events may occur which have significant impact upon the project or program. In such cases, the Recipient shall inform the USGS as soon as the following types of conditions become known:
  - (i) Problems, delays, or adverse conditions which will materially impair the ability to meet the objective of the Agreement. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.
  - (ii) Favorable developments which enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned.

#### Final Technical Report

- a) The Recipient shall submit two copies of the final technical report to the USGS Project Officer and one copy of the transmittal letter to the USGS Contracting Officer. The final performance report will be due 90 calendar days after the period of performance end date.
- b) The final technical report shall document and summarize the results of Recipient's work. The report shall include a quantitative description of activities and overall progress in response to the performance metrics which documents and summarizes the results of the entire Agreement. The final report shall include tables, graphs, diagrams, sketches, etc., as required to explain the results achieved under the Agreement. The report shall also include recommendations and conclusions based upon both the experience and the results obtained.

#### **Annual Financial Reports**

- a) The Recipient will submit an annual SF 425, Federal Financial Report, for each individual USGS award. The SF 425 is available at <a href="https://www.grants.gov/web/grants/forms/post-award-reporting-forms.html">https://www.grants.gov/web/grants/forms/post-award-reporting-forms.html</a> The SF 425 will be due in accordance with the following schedule. USGS acknowledges that this annual reporting schedule may not always correspond with a specific budget period.
- b) The SF 425 must be submitted electronically through Grant Solutions or, if GS is not available, by e-mail to SF425@usgs.gov with a cc to the Contracting Officer. Recipient must include the USGS award number in the subject line of all correspondence. If, after 90 days, Recipient has not submitted a report, the Recipient's account in ASAP will be placed in a manual review status until the report is submitted.

#### **Final Financial Report**

- a) The Recipient will liquidate all obligations incurred under the award and submit a final SF 425, Federal Financial Report in accordance with C.3.b. no later than 90 calendar days after the Agreement completion date.
- b) Recipient will promptly return any unexpended federal cash advances or will complete a final draw from ASAP to obtain any remaining amounts due. Once 120 days has passed since the Agreement completion date, USGS shall unilaterally deobligate federal funds as reflected in the Final SF 425.
- c) Subsequent revision to the final SF 425 will be considered only as follows:

- i. When the revision results in a balance due to the Government, the Recipient must submit a revised final SF 425, Federal Financial Report, and refund the excess payment whenever the overcharge is discovered, no matter how long the lapse of time since the original due date of the report.
- ii. When the revision represents additional reimbursable costs claimed by the Recipient, a revised final SF 425 may be submitted to the USGS Contracting Officer with an explanation. If approved, the USGS will either request and pay a final invoice or reestablish the ASAP subaccount to permit the Recipient to make a revised final draw. Any revised final report representing additional reimbursable amounts must be submitted no later than 1 year from the due date of the original report, i.e., 15 months following the Agreement completion date. USGS will not accept any revised SF 425 covering additional expenditures after that date and will return any late request for additional payment to the Recipient.

#### **Publications**

#### a) Acknowledgment of Support

Recipient is responsible for assuring that an acknowledgment of USGS support:

1. is made in any publication (including World Wide Web pages) of any material based on or developed under this Agreement, in the following terms:

This material is based upon work supported by the U.S. Geological Survey under Grant/Cooperative Agreement No. (*insert agreement number*).

2. is orally acknowledged during all news media interviews, including popular media such as radio, television and news magazines.

#### b) <u>Disclaimer</u>

Recipient is responsible for assuring that every publication of material (including World Wide Web pages) based on or developed under this Agreement, contains the following disclaimer:

The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Geological Survey. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Geological Survey.

#### c) Publication

Publication of the results of any project carried out under this assistance award is authorized in professional journals, trade magazines, or may be made by the USGS. Such manuscripts or publications submitted to journals or professional publications for publication shall be accompanied by the following notation:

This manuscript is submitted for publication with the understanding that the United States Government is authorized to reproduce and distribute reprints for Governmental purposes.

#### d) Copies for USGS

Recipient is responsible for assuring that the USGS Project Office is provided a digital version, preferably as a MS Word DOCx file, of every accepted manuscript upon acceptance for publication by the journal.

#### e) Department of the Interior Requirements

Two copies of each publication produced under a Grant or Cooperative Agreement shall be sent to the Natural Resources Library with a transmittal that identifies the sender and the publication. The address of the library is:

U.S. Department of the Interior Natural Resources Library Division of Information and Library Services Gifts and Exchange Section 18th and C Streets, NW Washington, DC 20240

#### **Payment**

Payments under financial assistance awards must be made using the Department of the Treasury Automated Standard Application for Payments (ASAP) system (<a href="www.asap.gov">www.asap.gov</a>).

- a) The Recipient agrees that it has established or will establish an account with ASAP. USGS will initiate enrollment in ASAP. If the Recipient does not currently have an ASAP account, they must designate an individual (name, title, address, phone and e-mail) who will serve as the Point of Contact (POC).
- b) With the award of each grant/cooperative agreement, a sub-account will be set up from which the Recipient can draw down funds. After Recipients complete enrollment in ASAP and link their banking information to the USGS ALC (14080001), it may take up to 10 days for sub-accounts to be activated and for funds to be authorized for drawdown in ASAP.
- c) Inquiries regarding payment should be directed to ASAP at 855-868-0151.
- d) Payments may be drawn in advance only as needed to meet immediate cash disbursement needs.

#### e) Geospatial Requirement:

All geospatial data collected for or produced through the use of the Department of the Interior financial assistance funds are required to meet all relevant standards established by the Federal Geospatial Data Committee (FGDC) as authorized by Geospatial Data Act of 2018, Pub. L. 115-254, Subtitle F – Geospatial Data, §§ 751-759C, codified at 43 U.S.C. §§ 2801–2811. Interior requires fully compliant metadata on all Geographic Information Systems files developed for financial assistance projects. If a funded financial assistance project involves acquiring or collecting geospatial data, the recipient is required to search GeoPlatform.gov to determine that no existing Federal, State, local or private data meet the Government's needs and are available at no cost before acquiring or collecting additional geospatial data.

#### Federal Awardee Performance and Integrity Information System FAPIIS Checks (PPIRS)

#### Funding Opportunity (2 CFR 200 Appendix I)

For awards expected to exceed SAT (\$150K), This is to inform applicants that, prior to award, agency is required to review and consider any information in FAPIIS about the applicant.

#### **Pre-Award Review of FAPIIS (2 CFR 200.205)**

Where Federal share is expected to exceed SAT (\$150,000) during Period of Performance, Information must demonstrate satisfactory record of executing programs under Federal grants, agreements, or procurements; and integrity and business ethics.

### **Agency Contacts**

#### **Contractual Point of Contact:**

Faith D. Graves CESU Contract Specialist U.S. Geological Survey Mail Stop 205G 12201 Sunrise Valley Drive Reston, VA 20192

Phone: (703) 648-7356 Fax: (703) 648-7901 Email: fgraves@usgs.gov