



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT
P.O. BOX 17300
FORT WORTH, TX 76102-0300

04 September 2026

**REQUEST FOR STATEMENT OF INTEREST
W9126G262SOI9557**

Applicants must be a member in one of the following Cooperative Ecosystem Studies Units Regions: Gulf Coast, Piedmont-South Atlantic Coast, and South Florida-Caribbean CESU Regions

Project Title: Aquatic Fauna and Primary Production in the Florida Everglades

A cooperative agreement is being offered ONLY to members of the Cooperative Ecosystem Studies Units (CESU) Program Region(s) identified above. Award will be made upon mutual agreement and acceptance of the terms and conditions contained in the request for proposal and the recipient's CESU Joint and Cooperative Agreement (also known as the CESU Master Agreement).

NOTE: The established CESU indirect rate is **17.5%**. For any Cooperative Agreement entered into in response to this RSOI, a maximum 17.5% indirect cost rate will be paid on work covered by such agreement or any modifications thereto. Unless the agreement specifies otherwise, the basis of direct costs against which the agreement's indirect cost rate is applied must be either the same base identified in the recipient's federally negotiated indirect cost rate agreement or, if the recipient does not have a federally negotiated indirect cost rate agreement, the Modified Total Direct Cost (MTDC) base.

Responses to this Request for Statements of Interest will be used to identify potential organizations for this project.

This RSOI seeks merit-based competitive procedures to encourage participation in USACE (DoD) programs by a broad base of the most highly qualified performers and will be evaluated on Technical Merits of the proposed research and development (R&D) and the potential relationship of the proposed R&D to USACE (DoD) missions.

Approximately **\$630,000** is expected to be available to support the Mandatory Tasks, **\$66,800** is expected to be available to support Task 6, and **\$300,000** is expected to be available to support Task 8 during the **Base period total of \$996,800**. Additional funding may be available to the successful recipient for optional tasks and/or follow-on work in subsequent years.

Period of Performance: The Base period of the agreement will extend 12 months from date of award. There may be up to four 12-month follow-on periods based on availability of funding.

Description of Anticipated Work: See attached Statement of Objectives

NOTE: At this time, we are only requesting that you demonstrate available qualifications and capability for performing similar or same type of work by submitting a Statement of Interest. A full proposal and budget are NOT requested at this time.

Preparation of your Statement of Interest: Provide the following (Maximum length: 2 or 3 pages, single-spaced, 12 pt. font):

1. Name, Organization, CAGE Code, Unique Entity ID, CESU Region, and Contact Information (Email)
2. Statement of Technical Ability & Qualifications (including):
 - a. Biographical sketch of the Principal Investigator (PI), to include a PhD in a field relevant to the support (e.g., wetland ecology, freshwater fish ecology, freshwater vegetation community ecology etc.) and have expert knowledge and direct research experience with the Everglades ecosystem and aquatic fauna and trophic dynamics within the Everglades. Candidates should have prior experience sampling aquatic fauna and periphyton within seasonal wetlands within the southeastern United States, summarizing and examining variation in response variables relative to hydrologic and environmental factors, and interpreting the status of aquatic fauna production and the periphyton community within the context of environmental variation and water management.
 - b. Candidates should also demonstrate knowledge utilizing the Generalized Random-Tessellation Stratified approach (GRTS) to produce statistically robust measures of aquatic fauna and periphyton parameter estimates.
 - c. Candidates must have the means to obtain or already possess applicable research permits to conduct sampling within Everglades National Park (National Park Service Research Permit), the Water Conservation Areas (Florida Fish and Wildlife Conservation Commission Research Permit), and A.R.M. Loxahatchee National Wildlife Refuge (Research and/or Special Use Permit).
 - d. Relevant past projects and clients with brief descriptions of these projects.
 - e. Biographical sketches of personnel available to support this project, meeting qualifications in the SOO, and their areas of expertise relevant to this project's requirements.
 - f. Innovative techniques and description of other capabilities to successfully complete the project: (e.g. equipment, laboratory facilities, greenhouse facilities, field facilities, subject matter experts, etc.)
3. Summary of the potential relationship of the proposed research and development to the USACE (DoD) missions.

Submission of Your Statement of Interest

- Statements of Interest (SOI) are due by **10:00 AM, Central Time, 05 October 2026** via email to the parties listed below.
- Direct questions no later than **10:00 AM, Central Time, 14 September 2026** via email to the parties listed below.

Nicholas Aprea
Grants Specialist
USACE, Fort Worth District
Email: nicholas.a.aprea@usace.army.mil

and

Kathy Mitchell
Project Manager
USACE, Fort Worth District
Email: kathy.s.mitchell@usace.army.mil

Review of Statements Received:

All statements of interest received from a member of the CESU Region(s) identified above will be evaluated by a board comprised of one or more people at the receiving installation or activity to determine the which statements have the highest rated technical merit, highest capability to successfully meet the program objectives as outlined in the Statement of Objectives, and closest alignment between the proposed research and the USACE mission.

Overall Evaluation Ratings.

Good/Excellent: The SOI demonstrates a thorough understanding of the project's goals and objectives, and has demonstrated the ability, qualifications, resources to exceed performance and capability standards and includes at least one strength. Strength is an aspect of a proposal that, when judged against the overall evaluation criterion, enhances the merit of the proposal or increases the probability of successful performance of the Assistance Award.

Acceptable: The SOI demonstrates a satisfactory understanding of the project's goals and objectives, and has demonstrated the ability, qualifications, and resources to meet performance and capability standards. The SOI meets the overall evaluation criterion.

Unacceptable: The SOI does *not* demonstrate an understanding of the project's goals and objectives, and has *not* demonstrated the ability, qualifications, and resources that meet the performance and capability standards. The SOI includes at least one weakness. Weakness is an aspect that increases the risk of unsuccessful performance.

Respondent SOIs receiving the highest ratings, Good/Excellent being the highest, and Acceptable the lowest, will be requested to submit a full proposal for further evaluation.

Timeline for Review of Statements of Interest: RSOIs are required to be posted on www.Grants.gov for 30 days prior to the Government making a decision and requesting full proposals.

TO BE ELIGIBLE FOR AWARD, THE RECIPIENT AND ANY PROPOSED SUBRECIPIENTS AND CONTRACT VENDORS MUST HAVE AN ACTIVE NIST SP 800-171 DOD ASSESSEMENT (PERFORMED WITHIN THE LAST 3 YEARS). Additional details are provided as a separate attachment to this document.

IMPORTANT: This award is anticipated to be made in FY 27.

Thank you for your interest in our Cooperative Agreements Program.

CHERYL R. VENDEMIA
Grants Officer

Attachment: Statement of Objectives

STATEMENT OF OBJECTIVES
AQUATIC FAUNA AND PRIMARY PRODUCTION IN THE FLORIDA EVERGLADES
for
Article III, (D) of the following Cooperative Ecosystems Studies Units (CESU):
Gulf Coast, Piedmont–South Atlantic Coast, and South Florida-Caribbean
June 2026

1.0 PURPOSE

The Water Resources Development Act (WRDA) of 2000 authorized the Comprehensive Everglades Restoration Plan (CERP) as a framework for modifications and operational changes to the Central and Southern Florida Project to restore the South Florida ecosystem. Provisions within WRDA 2000 provide for specific authorization for an adaptive assessment and monitoring program. The Monitoring and Assessment Plan (MAP) (RECOVER 2004, 2006, 2009) has been developed as the primary tool to assess the systemwide performance of the CERP by the REStoration, COordination and VERification (RECOVER) program. The MAP presents the monitoring and supporting research needed to measure responses of Everglades ecology and hydrologic patterns to CERP implementation. The proposed research for this Cooperative Agreement will collect new data to fulfill the long-term restoration efforts in the Florida Everglades and support regulations dictated by the CERP.

The 2009 CERP MAP contains a set of trophic hypotheses that form the basis of results-oriented monitoring programs to measure the natural responses of aquatic fauna and periphyton to Everglades restoration (RECOVER 2009). A key premise of the trophic hypotheses is that restored hydrology (e.g., water depth, duration, flow, and distribution) in an oligotrophic system will increase trophic support for higher vertebrates (e.g., wading birds and alligators) through increased aquatic fauna production in the wet season and subsequent vulnerability to capture in the dry season (RECOVER 2009). Long-term monitoring of aquatic fauna production leading up to, and into, the dry season, when wading birds breed, provides a measure of production that can inform the effort to promote desired trophic responses associated with ecosystem restoration. Long-term monitoring of periphyton provides a measure of oligotrophic status and primary production, both of which influence trophic ecology of the Everglades. Increased understanding and tracking of aquatic fauna production and periphyton response to CERP implementation will improve the efficacy of the MAP and increase the likelihood of achieving CERP goals and objectives.

2.0 **AUTHORITY**

- 2.1 In agreement with the above stated purpose, the recipient agrees to provide the necessary personnel, equipment, and materials required to implement, in part, the United States Army Corps of Engineers (USACE)-Jacksonville District objectives pursuant to the authority 10 U.S.C. § 4001 - Research and Development.
- 2.2 In accordance with section 6305 – Using cooperative agreements of the Federal Grant and Cooperative Agreements Act of 1977 (31 U.S.C. § 6301 et seq.), all CESU projects must carry out a public purpose of support or stimulation, instead of acquiring goods or services for the exclusive direct benefit of the United States Government. Examples of carrying out a public purpose may include, but are not limited to, the following:
- Project results are made available to a wide audience (including nonfederal entities)
 - Project results/outputs add to the scientific literature/knowledge base, with applicability and utility beyond the scope of the project footprint/study area
 - Academic and other nonfederal partner institutions (and their personnel) gain professional experience, increase knowledge, and develop skills and abilities
 - Students benefit from direct interaction with federal scientists, program and technical staff, and field unit managers
- 2.3 In accordance with section 6305 – Using cooperative agreements of the Federal Grant and Cooperative Agreements Act of 1977 (31 U.S.C. § 6301 et seq.), substantial involvement is expected between the Department of Defense and the recipient when carrying out the activity contemplated by the cooperative agreement. The DoD agrees to participate at a national level in support of the CESU program as accepted in the Master MOU for the establishment and continuation of the CESU program Article II 1-4 and Article VI 1-7.
- 2.4 The USACE will participate in study site selections, design, and work plan development. USACE will participate in field data collection efforts as appropriate, will review quarterly status reports, and will provide input to data interpretation for final reports, as well as review quarterly, annual and final reports. USACE will incorporate the data and analysis into a system-wide database that assesses and evaluates ecosystem restoration efforts in central and southern Florida. Scientific and technical information generated from the cooperative agreement will be utilized to evaluate project/restoration performance and system responses to be used in the development of

assessment reports describing and interpreting those responses.

3.0 DESCRIPTION OF OBJECTIVES

The purpose of this cooperative agreement (CA) is to monitor attributes of aquatic fauna production and periphyton in response to CERP implementation. Specifically, the objectives of this support include:

1. Establish pre-CERP (landscape-scale) reference conditions and variability in periphyton and aquatic fauna populations.
2. Determine the status and trends of periphyton and aquatic fauna populations over short-, medium-, and long-term temporal and spatial scales.
3. Detect unexpected responses of the ecosystem (periphyton oligotrophic nutrient status and aquatic fauna production) to changes in stressors resulting from CERP activities, climate change, and sea level rise.
4. Support scientific investigations and tool development designed to increase ecosystem understanding, cause and effect, and interpret unanticipated results in primary producers and wet season aquatic fauna.
5. Prepare summary reports of data, analysis, and conclusions related to study objectives for each funded period of performance and final synoptic report at the conclusion of this study. These reports will be disseminated by USACE for public education and potential academic use.

3.1 PROJECT TASKS

Task	Base Year	Follow-on Year 1	Follow-on Year 2	Follow-on Year 3	Follow-on Year 4
Task 1 – Project Initiation Meeting Project Plan & Permits	*	*	*	*	*
Task 2 – Aquatic Fauna Sampling	*	*	*	*	*
Task 3 – Primary Production Sampling	*	*	*	*	*
Task 4 – Data Analyses & Reporting	*	*	*	*	*
Task 5 – Participation in RECOVER Regional Team Support	*	*	*	*	*
Task 6 – RECOVER Interim Goals & Interim Targets (IGIT) Modeling	**				
Task 7 – Expansion of Spatial & Temporal Scope of Surveys	***	***	***	***	***

Task 8 – Monitoring Active Marsh Improvement within the Blue Shanty Flow Way	***	***	***	***	***
Task 9 – Periphyton& Aquatic Fauna Assessment	***	***	***	***	***
Task 10 – Performance Measure Updates	***	***	***	***	***
Task 11 – Monitoring Plan Evaluation	***	***	***	***	***
*Mandatory - Task to be funded each year **Mandatory Task Base Year Only. ***Optional Task - may be funded at once during each Period of Performance (PoP) while the agreement is active.					

3.1.1 Task 1 – Project Initiation Meeting, Project Plan, and Permits (**Mandatory**):

The Recipient and USACE will jointly conduct a Project Initiation Meeting (virtually or in person) within fifteen (15) business days of cooperative agreement (CA) award and any subsequent Follow-on Period (FOP) awards. The Recipient and USACE will coordinate the project tasks as outlined. The Recipient will provide an overview of the project, introduce the project team, and define the project chain of command. The USACE will communicate to the Recipient any methodological requirements to be used when executing and reporting tasks as outlined. These methodologies are briefly described in this CA in the activities above. The MAP Assessment Strategy (RECOVER 2006) provides guidance in assessment methodologies.

Within fifteen (15) business days following the Project Initiation Meeting, the Recipient will provide Project Initiation Meeting minutes and an electronic copy of the Draft Project Plan. The Recipient and the RECOVER Technical Point of Contact (TPOC) will collaboratively develop a Final Project Plan within (30) business days. The Final Project Plan will be updated, as necessary, at the beginning of each new FOP.

The Recipient will also begin preparations to execute field sampling following award execution. This includes acquiring and assembling any specialty equipment needed and working with USACE staff to become familiar with sampling protocols and equipment.

Submittal of a CA for a project that will take place on Department of Interior (DOI) lands is acknowledgement that the PI has reviewed and understands the permit requirements for all applicable federal and state agencies and tribal lands, including the National Park Service (NPS), the U.S. Fish and Wildlife Service, the

State of Florida. Permits anticipated for completing this work are described in Section 5.0. Any required permits obtained in support of the project will be delivered to the USACE RECOVER TPOC.

3.1.2 Task 2 – Aquatic Fauna Sampling (**Mandatory**):

The PI will sample aquatic fauna within primary sampling units (PSUs, 800 m² areas) grouped within Landscape Sampling Units (LSUs) following the guidelines from Philippi (2003, 2005) and based on a spatially balanced recursive tessellation design (Stevens and Olsen 2004). Sampling must be conducted using 1x1m² throw traps for data consistency with prior sampling years. Aquatic fauna must be sampled from LSUs in the Water Conservation Areas and Everglades National Park in the months leading up to the wading bird breeding season (September – February). Optional Task 7 may be used to expand the spatial and temporal scope described in this Task. Species-specific counts and weight (g/m²) of all sampled aquatic fauna must be recorded and summarized in deliverables.

3.1.3 Task 3 – Primary Production Sampling (**Mandatory**):

The PI will sample periphyton within primary sampling units (PSUs, 800 m² areas) grouped within Landscape Sampling Units (LSUs), choosing three random coordinates within Primary Sampling Units (PSUs) for sampling using CERP Quality Assurance Systems Requirements protocols (CERP 2007). 120- 190 sites must be visited during mid-wet season (July to September) with a subset of those sites (50- 60) revisited twice during the dry season (December to April). Optional Task 7 may be used to expand the spatial and temporal scope described in this Task. Triplicate samples should include periphyton cover (%), biovolume (ml/m²), dry mass, chlorophyll α mass ($\mu\text{g}/\text{m}^2$). In addition, the following must be collected at each sampling site to understand site characteristics related to periphyton: water depth; pH and conductivity; plant cover estimate as proportion of m² quadrat covered by plants and stem density; and soil depth.

3.1.4 Task 4 – Data Analyses and Reporting (**Mandatory**)

Data collected in the Base Year and any subsequent FOP for executed Tasks must be analyzed and described in an Annual Report in the Base Year and first three FOPs and in a Final Report for FOP4. A draft Annual and Final Report will be submitted to the TPOC and comments received will be addressed and submitted as the final Report. The reports should describe all activities conducted related to each task executed and discuss insights from analyses conducted.

Analyses of samples collected should include the following:

- Periphyton - Analyses to be conducted should include measured attributes of periphyton, including biomass, chlorophyll α concentration ($\mu\text{g/g}$ of dry weight), periphyton total phosphorus ($\mu\text{g/g}$ dry weight), and mineral content (% or converse, organic content). Additionally, compositional analyses to enumerate soft algae (relative biovolume of species), diatom assemblage (relative abundance of taxa), and non-calcareous diatoms (sum of all non-endemic taxa (see Gaiser et al. 2006) are to be included. Analyses will relate variation in samples collected to relevant hydrologic and other abiotic factors occurring in time and space at local, regional, and system scales.
- Aquatic Fauna – Analyses to be conducted should include measured attributes of aquatic fauna, including mean biomass (g/m^2) wet weight for crayfish (*Procambarus fallax* and *P. alleni*), marsh fishes (all species summed), and grass shrimp (*Palaemonetes paludosus*). Analyses will relate variation in samples of species composition and biomass to hydrologic conditions and other abiotic and biotic conditions occurring in time and space at local, regional, and system scales.

3.1.5 Task 5 – Participation in RECOVER Regional Team Support **(Mandatory)**:

The PI is required to participate in up to six (6) 2-hour virtual RECOVER meetings and up to two (2) 6-hour in-person workshops each year, hosted in southern Florida, to provide updates on or engage in discussions regarding the project or project-related RECOVER efforts.

The PI will attend, and participate, in up to four (4) virtual and/or in-person Greater Everglades Regional Team meetings during the course of each Period of Performance.

The PI will provide a presentation to the Regional Team or other science meetings as directed by the TPOC during the period of performance for the CA. Presentations are typically requested annually following the submission of the Annual Report, but USACE reserves the right to request presentations at any point during the Base Year and/or Follow-on Periods. The presentation will be delivered either in-person at 701 San Marco Blvd. Jacksonville, Florida 32207, the South Florida Water Management District Headquarters in West Palm Beach, Florida, or via a teleconference platform (i.e., Zoom, Webex, Microsoft Teams, etc.). The presentation shall include a Microsoft PowerPoint presentation that summarizes all work that has been done, including data analysis and

interpretations that highlight all spatial and statistical relationships found. Finally, the PI shall list recommendations for further data analysis and/or collection.

3.1.6 Task 6 – RECOVER Interim Goals and Interim Targets (IGIT) Modeling
(Mandatory Task, Base Year only)

RECOVER is producing a report to document the anticipated responses of ecological indicators to increments of CERP implementation in the first (Base) year of this CA. For both aquatic fauna (A) and periphyton (B), the PI will produce model outputs for three hydrologic simulations representing the existing conditions baseline (ECB) and two additional scenarios representing different increments of CERP implementation. The deliverable associated with this task will include all data and code used to generate model outputs as well as a summary of outputs including figures displaying ECB-scenario contrasts for metrics of interest. Hydrologic simulations will be provided by the USACE TPOC for use as inputs for models. Coordination with the USACE TPOC will occur throughout this task to determine desired summary and figure components.

- A. Aquatic Fauna IGIT Modeling – Fish densities, and other attributes of aquatic fauna populations, if available, will be modeled to simulate the response of aquatic fauna to increments of CERP implementation.
- B. Periphyton IGIT Modeling – Periphyton attributes including, but not limited to, biomass, total phosphorus content (TP), and relative abundance of calcareous diatoms will be modeled to simulate the response of periphyton to increments of CERP implementation.

3.1.7 Task 7 – Expansion of Spatial and Temporal Scope of Surveys **(Optional)**:

The spatial coverage of aquatic fauna and periphyton sampling conducted under Task 2 and Task 3 may be expanded with this Optional Task to areas not mentioned above (e.g., Big Cypress National Preserve). The temporal scale of sampling may also be expanded within and/or beyond the existing index window. The support of this task would be directed by USACE in collaboration with the PI to determine the appropriate expansion to achieve the desired spatial and temporal sampling design. The results of any expansion in effort will be incorporated into the Annual Report. Initiation of this task is subject to the availability of funding and must be submitted as part of the annual project work plan.

3.1.8 Task 8 – Monitoring Active Marsh Improvement within the Blue Shanty Flow Way
(Optional)

The PI will conduct monitoring of aquatic fauna and primary production to assess

the ecological effects of active marsh improvement, an adaptive management restoration strategy. The PI shall monitor 24 existing sites across 3 different flow paths in Water Conservation Area (WCA) 3B (see map of monitoring locations below). Half of these sites are in existing sloughs. The remaining monitoring sites occur in areas of degraded habitat due to sawgrass encroachment that have the potential for slough redevelopment within the Blue Shanty Flow Way. Sampling will use the same sampling methods described in Tasks 2 and 3.

The first year of monitoring (Base Period) shall include: (1) two surveys at each selected monitoring location for existing degraded sloughs; (2) one survey at each monitoring location in sawgrass-encroached habitat (potential sloughs) and (3) collection of three samples per monitoring location (all sites). Subsequent yearly monitoring (Option Years 1 – 4, pending funding) shall include: (1) two surveys per year at each monitoring location (all sites) and (2) collection of three samples per monitoring location (all sites).

The PI shall perform analyses of collected periphyton and aquatic fauna field data, including periphyton, fish, and macroinvertebrates. Periphyton analyses shall be completed for a minimum of 36 samples per year during the length of this study. Additional analyses associated with periphyton shall include analysis of the applied herbicide, applied herbicide derivatives, and metabarcoding. Fish and macroinvertebrate analyses shall include reports of species abundance and comparisons of density and composition. The PI shall include their data and analyses as a separate section within the reporting requirements established under Task 4 and Section 10 (Deliverables).

3.1.9 Task 9 – Periphyton and Aquatic Fauna Assessment (**Optional**):

The PI will provide up to ten (10) days of work with the Regional Coordinator(s) to assist in the development of the RECOVER System Status Report (SSR), as applicable. Most information provided will be drawn from the Annual Reports submitted in support of Task 4. The PI will contribute to the RECOVER SSR with an assessment of aquatic fauna and primary production in the context of CERP implementation and other factors that influence aquatic fauna and periphyton in the Everglades. The RECOVER SSR will provide an assessment of whether the goals and purposes of CERP are being achieved by comparing monitoring results to established Interim Goals (incremental restoration benchmarks established for the ecological indicator), when applicable. The USACE RECOVER TPOC will provide clear and concise recommendations to guide development of the SSR assessment.

3.1.10 Task 10 – Performance Measure Updates (**Optional**):

Information generated from mandatory Tasks 2-4 above, as well as data from prior monitoring efforts, may be used to update a RECOVER Performance Measure to refine methods to simulate landscape aquatic fauna and periphyton responses to CERP implementation, and/or update methods used to interpret real-world responses of aquatic fauna and periphyton to hydrologic variation associated with CERP implementation.

3.1.11 Task 11 – Monitoring Plan Evaluation (**Optional**):

RECOVER will update the MAP within the duration of this 5-year CA. Support of this task will entail the recipient provide a statistical review of long-term monitoring methodology to determine if the existing monitoring are robust relative to RECOVER's objectives and align with RECOVER's need to assess whether the goals and objectives of CERP are being met. This review will examine the study and sampling design, the observed variation in the metric(s) of interest, and determine what existing sampling methods yield in terms of a measure with a credible interval. The recipient will collaborate with RECOVER to interrogate existing sampling methods relative to RECOVER objectives with data collected from the design. This task will culminate in a stand-alone report that details interrogations conducted and recommend practical remedies for any misalignment between the realized sampling design and CERP MAP objectives.

CONSIDERATION

The PI is not required to perform services on federal holidays and Election Day:

New Year's Day	Labor Day
Martin Luther King Jr.'s Birthday	Columbus Day
Washington's Birthday	Veteran's Day
Memorial Day	Thanksgiving Day
Juneteenth National Independence Day	Christmas Day
Independence Day	Election Day

4.0 **QUALIFICATIONS/REQUIREMENTS**

Biographical sketches are required for each of the personnel supporting this project. The NFE will coordinate with USACE before any key personnel changes or hiring.

Successful applicants should possess a PhD in a field relevant to the support (e.g., wetland ecology, freshwater fish ecology, freshwater vegetation community

ecology etc.) and have expert knowledge and direct research experience with the Everglades ecosystem and aquatic fauna and trophic dynamics within the Everglades. Candidates should have prior experience sampling aquatic fauna and periphyton within seasonal wetlands within the southeastern United States, summarizing and examining variation in response variables relative to hydrologic and environmental factors, and interpreting the status of aquatic fauna production and the periphyton community within the context of environmental variation and water management. Candidates should also demonstrate knowledge utilizing the Generalized Random-Tessellation Stratified approach (GRTS) to produce statistically robust measures of aquatic fauna and periphyton parameter estimates.

The PI must have the means to obtain or already possess applicable research permits to conduct sampling within Everglades National Park (National Park Service Research Permit), the Water Conservation Areas (Florida Fish and Wildlife Conservation Commission Research Permit), and A.R.M. Loxahatchee National Wildlife Refuge (Research and/or Special Use Permit).

5.0 RESERVED

6.0 FOLLOW-ON PERIODS

In addition to the Base Year, four (4), twelve (12) month Follow-on Periods (FOP) are anticipated subject to availability of funds.

7.0 PERIOD OF PERFORMANCE

- 7.1 All tasks (mandatory and optional) will be for a period of 12 months that will begin from date of each task award. Due to the project's regional sensitive flora and fauna that are influenced by seasonal cycles that must align with the monitoring and assessment plans for successfully executing the Comprehensive Everglades Restoration Plan (CERP) it is likely that the Follow-On Year POP dates may need to be adjusted. In the event such adjustments become necessary the overall POP for each of the follow-on year efforts will remain 12 months.

8.0 COORDINATION

Kathy Mitchell
Project Manager
Regional Planning and Environmental Center
U.S. Army Corps of Engineers
kathy.s.mitchell@usace.army.mil

Michael Collis

Chief, Ecosystem Restoration Projects Section
Jacksonville District
U.S. Army Corps of Engineers
701 San Marco Blvd.
Jacksonville, FL 32207
michael.j.collis@usace.army.mil

Tasso Cocoves, MS

Biologist – RECOVER Technical Point of Contact
Planning and Policy Division
Jacksonville District
U.S. Army Corps of Engineers
701 San Marco Blvd.
Jacksonville, FL 32207
Tasso.C.Cocoves@usace.army.mil

9.0 RESERVED

10.0 DELIVERABLES

Detailed descriptions of any required deliverables required (reports, plans, etc.) and formats. Provide delivery schedules. At a minimum these deliverables should include:

10.1 Project Initiation Meeting Summary

10.1.1 One (1) electronic copy (email attachment in MS Word format) of the summary from the Project Initiation Meeting will be submitted within thirty (30) business days following award of the CA.

10.2 Project Plans and permits (see Task 1)

10.2.1 One (1) electronic copy (email attachment in MS Word format) of a Draft Project Plan will be submitted thirty (30) business days following award of the CA.

10.2.2 One (1) electronic copy (email attachment in MS Word format) of the Final Project Plan will be submitted within forty-five (45) days business days following award of the CA.

- 10.2.3 All permits required to support awarded Tasks in the Final Project Plan will be included with the Final Work Plan in an appendix. This may include permits to conduct research in Everglades National Park (National Park Service Research Permit), the Water Conservation Areas (Florida Fish and Wildlife Conservation Commission Research Permit), and A.R.M. Loxahatchee National Wildlife Refuge (Special Use and/or Research Permit).
- 10.3 Four (4) Quarterly Status Reports (QSR) or Progress Reports (PR) will be submitted for every three-month period, or quarter, following the award of the cooperative agreement and any subsequent Follow-on Periods. These QSRs will summarize progress made on all executed Tasks, provide an update on the budget status of each Task, point out any problems or challenges that may have arisen during the previous three months.

Quarters:

Q1: Oct-Dec

Q2: Jan-Mar

Q3: Apr-Jun

Q4: Jul-Sep

- 10.3.1 Electronic copy (email attachment in Microsoft [MS] Word format) of the QSR every quarter from award of CA and subsequent Follow-on Periods.
- 10.4 Annual Reports (AR) will be submitted twelve months after the award of the CA and any subsequent Follow-on Periods. Each AR will summarize activities and results from all executed Tasks, including executed Optional Tasks, within each Period. The ARs will summarize annual estimates of aquatic fauna and periphyton metrics, analyze spatial and temporal trends in the metrics, and examine the consistency of observations with CERP hypotheses from the MAP. The Draft Annual Report will be reviewed by the USACE RECOVER Technical POC and the RECOVER Greater Everglades Regional Coordinators within fifteen (15) days upon submission. Comments will be provided for the PI to address in the Final Annual Report. A data file (Microsoft Excel Spreadsheet or CSV file) of all quality assured data will accompany each Annual Report.
- 10.4.1 Electronic copy (email attachment in MS Word format) of a Draft Annual Report will be submitted in September of each year.
- 10.4.2 Electronic copy (email attachment in MS Word format) of a Final Annual Report will be submitted in September of each year.
- 10.4.3 Electronic copy of all data collected, and quality assured submitted as a

Microsoft Excel or CSV file.

- 10.5 Task 8 Deliverable: Active Marsh Improvement Analyses – Upon the execution of Task 8, the PI will conduct analyses examining the ecological effect of Active Marsh Improvement treatments and the hypothesized response of the aquatic fauna and periphyton communities. The pre- and post- treatment condition of aquatic fauna and periphyton will be contrasted and analyzed. Conclusions from the analysis will be summarized, and their results reported and discussed, within the annual and Final deliverables in a stand-alone section.

10.5.1 Electronic copy of all data collected, and quality assured submitted as a Microsoft Excel or CSV file.

- 10.6 Task 9 Deliverable: PI Contribution to the System Status Report (SSR) – Upon the execution of Task 9 (Optional), results of the work performed under this CA will be used to develop the cumulative annual findings outlined in the System Status Report (SSR). The SSR provides an assessment of whether the goals and purposes of CERP are being achieved by comparing monitoring results to established interim goals (incremental restoration benchmarks established for the ecological indicator), when applicable. The PI of this CA will collaborate with the Greater Everglades Regional Coordinator(s) in developing the SSR and their participation will be included as a Task (Task 6) in this work breakdown structure.

10.6.1 Electronic copy of all quality assured data associated with Task 9 submitted as a Microsoft Excel or CSV file.

- 10.7 Task 10 Deliverable: Performance Measure Documentation Sheet – Upon the execution of Task 10 (Optional) the PI will submit an electronic copy of a draft RECOVER Performance Measure Documentation Sheet to the RECOVER TPOC for technical review by RECOVER. The PI will address comments and submit a draft final RECOVER Performance Measure Documentation Sheet for RECOVER approval. The RECOVER TPOC will provide a documentation sheet template for use by the PI. An electronic copy (email attachment in MS Word format) of RECOVER Performance Measure Documentation Sheet will be submitted at the completion of this Optional Task of the CA.

- 10.8 Task 11 Deliverable: Upon the completion of Task 11, the PI will submit a separate report to (1) summarize methods and results of a statistical review of monitoring methodology and (2) discuss monitoring methodology alignment with RECOVER's need to assess whether the goals and objectives of CERP are being met. The PI will also submit all datasets and statistical code developed to conduct analyses used to examine the monitoring methodology. An electronic

copy of the report (email attachment in MS Word format) and supporting files used for the statistical review will be submitted at the completion of the Optional Task of the CA.

10.8.1 Electronic copy of all quality assured data and code scripts associated with Task 11 submitted as a Microsoft Excel or CSV file and accompanying script file, respectively.

10.9 Draft Final Project Report – For the last awarded Period, a Final Project Report will be submitted in place of an Annual Report. An Electronic copy of the Draft Final Project Report will be submitted no later than one month before end of the last awarded Period for the CA. At a minimum, the Final Project Report will summarize activities and results from all executed Task, including all executed Optional Tasks, for the duration of the entire CA. The PI will conduct and present the results of analyses of spatial and temporal trends in the metrics that by aggregating data collected across all Periods of the CA and examine the consistency of observations with CERP hypotheses from the MAP. The USACE TPOC and RECOVER members will review and provide comments, if any, within fifteen (15) calendar days after receipt of the Draft Final Project Report.

10.10 Final Project Report. One (1) PDF copy of the final report, addressing USACE TPOC review and comments on the draft, if any, will be submitted no later than fifteen (15) days after receipt of the USACE TPOC comments. Additionally, one (1) copy of the final report will be submitted in a MSWord file(s), on digital media. All data collected to support executed Tasks and collated to conduct analyses will be quality assured and submitted with the Final Project Report as a Microsoft Excel file or a Comma Separated Value (CSV) file.

10.10.1 Electronic copy of all data collected or collated in support of executed Tasks, quality assured, submitted as a Microsoft Excel or CSV file.

11.0 POST AWARD AND INVOICE PROCESS

11.1 Payment Requests and Progress Reports (Invoice Package):

Submit Payment Request and additional required documents to:
swf-cesu-invoice@usace.army.mil.

Carbon Copy the assigned USACE Project Manager as well as your organization's point of contacts (POCs) for the additional required documents and for delinquent accounts.

11.2 Frequency:

Quarterly plus 30-day grace period (except for the final invoice package noted below). If the coverage dates are not quarterly or preapproved by the PM (or the first/last submittal), the invoice package will be rejected.

Invoice pkgs due No Later Than (NLT):

Quarters:

Q1: Oct-Dec	Q1: 31 Jan
Q2: Jan-Mar	Q2: 30 Apr
Q3: Apr-Jun	Q3: 30 Jul
Q4: Jul-Sep	Q4: 31 Oct

- 11.3 Payment Requests must be submitted on form SF270 Request for Advance or Reimbursement with the accompanying Standard Form-Performance Progress Report (SF-PPR), otherwise the SF270 will be rejected.

11.4 SF270 Request for Advance or Reimbursement

- 11.4.1 Block 9, Recipient Organization. For successful set up of Electronic Transfer of Funds (EFT), the Recipient's name and address will reflect the exact name and physical address that appears in the System for Award Management (SAM), <https://sam.gov/>.

- 11.4.2 Blocks 11, (a), (b), & (c) are for the description of funds. Preferred description is: CLIN/POP Type, POP start and end dates, amount awarded (see example below); at minimum include the CLIN. If the description or the minimum CLIN information is missing, the SF270 and SF-PPR will be rejected.

Example:

CLIN 0001 / Base
22SEP23 – 21SEP24
\$100,000.00

Funding must be separated as specified on the Award document. Sub-CLINs that specify "for funding only" (e.g., numbered 000101, 000102, etc.) may be rolled into the primary CLIN (e.g., 0001) unless otherwise instructed. All others required PM approval.

The SF270 may have multiple pages.

An SF270 in Excel format may be requested at: swf-cesu-invoice@usace.army.mil, however, must be submitted in pdf format otherwise will be rejected.

11.5 SF-PPR Standard Form-Performance Progress Report: The Recipient will tailor the SF-PPR to include, at minimum, the following information:

- Separate details by CLIN as applicable
- Achievements (must detail work during quarter associated with the invoice)
- Percent Completion
- Project Status
- Problems encountered and impact of activities and personnel on schedule.
- Anticipated work in next reporting period.

If the SF-PPR is incomplete, the SF-PPR and SF270 will be rejected.

A tailored SF-PPR form may be requested at: swf-cesu-invoice@usace.army.mil

11.6 The **Final** invoice package is due no later than 90 days from final (funded/exercised) POP end date and must include the following documents:

If any of the required information below is missing, the final invoice package will be rejected:

- Final SF270
- SF-PPR
- Final SF425
- DD882
- SF428 plus attachment B (C&S if applicable)
- SF298
- Final Report

Forms may be requested from the district office at swf-cesu-invoice@usace.army.mil or found at <https://www.grants.gov/forms>.

12.0 This cooperative agreement may be administered through a CESU only upon mutual agreement and official authorization by both parties of the acceptance of the application of the CESU Network Indirect Cost Rate (17.5%).

Any resulting cooperative agreement will be subject to, and recipient will comply with 2 CFR 200.313 "Equipment", 200.314 "Supplies", and 200.315 "Intangible

structural and compositional change. *Limnology and Oceanography* 51: 617-630.

Monitoring and Assessment Plan (Part 2), Assessment Strategy for the Monitoring and Assessment Plan (MAP), December 2006.

Stevens, D. L., & Olsen, A. R. (2004). Spatially Balanced Sampling of Natural Resources. *Journal of the American Statistical Association*, 99(465), 262–278.
<http://www.jstor.org/stable/27590371>

END OF STATEMENT OF OBJECTIVES