REQUEST FOR STATEMENTS OF INTEREST
SOUTH FLORIDA-CARIBBEAN CESU
NUMBER W912HZ-17-SOI-0003
PROJECT TO BE INITIATED IN FISCAL YEAR 2017

Project Title: Evaluating Benthic Community Response to Planned Dredging Activities at Port Everglades Florida.

Responses to this Request for Statements of Interest will be used to identify potential investigators for projects to be funded by the Engineering Research Development Center (ERDC) U.S. Army Corps of Engineers (USACE) to evaluate benthic community response to planned dredging activities at Port Everglades, Florida and potentially other USACE dredge projects within the State of Florida. Approximately $100,000 is expected to be available to support this project for one (1) year. Additional funding may be available for follow on work in subsequent fiscal years up to four (4) years at least $100,000 per year not to exceed $500,000 over five (5) years.

Background:

The current nature of USACE dredging projects in environmentally sensitive areas pose an increasingly difficult challenge to estimate, evaluate and operate beneath new levels of scrutiny and pressures from regulatory agencies, the public and news media. The USACE efforts are typically reactive in nature requiring significant resources to identify and modify the necessary processes to ensure proper compliance is achieved. Public concern is perpetuated by lack of specific data, or confidence in the data acquired, to successfully confirm or deny any accusation or refute other's acquired data. During the recently completed Miami Harbor Deepening Project (Phase III), there was much concern and erroneous information regarding how the dredge operations affected the coral reefs and other benthic environment near the navigation channel. Despite millions of dollars spent to monitor the health of nearby reefs, many of the reports were inconclusive and the full extent of the project affects are still not yet fully known. One reason for this is the traditional methods used to monitor reef areas missed some elements. Changes occurred on the sea bottom due to storms, natural ocean currents and dredge operations, which were not seen during Miami Harbor operations. The USACE is currently exploring modifications to traditional dredging practices, monitoring and processes to minimize or avoid impacts to the aquatic environment. USACE will utilize Adaptive Management and greatly increase our transparency through effective communication and outreach along with project data verification and publishing of real-time conditions so USACE, project sponsors and partnering agencies can make quicker and more informed operational decisions to protect the aquatic environment. This is called the Transparency Initiative. As the USACE represents and serves the people, we believe that transparency is a critical requirement in meeting our Environmental Operating Principles and our public service mandate to the people of Florida and the United States.

Brief Description of Anticipated Work:

This work should be designed to provide USACE with expert support for dredging projects. The objectives of the proposed work include:

Objective 1: Establish baseline data in areas identified by modeling as potentially affected by USACE dredging activities.

Objective 2: Design, implement and maintain a real-time monitoring protocol to evaluate effects of dredging activities on benthic resources within Port Everglades.

Objective 3: Design, implement and maintain a real-time data transfer system to transmit data from ocean bottom cameras, sedimentation stations, and other data gathering devices to a publicly accessible and intuitive format whereby all stakeholders may receive/access to that data

Objective 4: Develop predictive tools to assist in management of dredging operations designed to minimizing adverse effects of dredging on benthic communities.

Objective 5: Develop an Adaptive Management plans for specific dredging projects, which includes risk based performance metrics and triggers for ensuring compliance with regulatory agencies while maximizing dredging efficiency.

Public Benefit:

Cargo and cruise operations at the Port generate substantial economic benefits for Broward County and the South Florida region. More than 29,000 jobs are directly or indirectly attributable to Port operations. Port Everglades is situated on the Southeast coast of Florida, which contains a unique marine environment consisting of coral reef and hardbottom areas not present anywhere else in the continental United States. Many reports and recent studies document the decline of this exclusive resource due to multiple factors including, but not limited to, rising water temperatures, ocean acidification, disease, and sedimentation (natural and by dredging activities). The reef complex provides storm protection, hardbottom habitat for invertebrates and fish species, and recreational uses that result in economic benefits to South Florida. South Florida also has a large tourist economy providing recreational opportunities for national and international guests.

Vendor Requirements:

Vendor must be a non-federal partner of the South Florida-Caribbean CESU Unit willing to accept the negotiated CESU indirect cost rate of 17.5%. Successful applicants should have expert knowledge of the environmental effects from dredging and a record that demonstrates research, experience with collecting, analyzing aquatic based datasets, specifically underwater camera and devices, within, and surrounding an active shipping operation. The candidates will be required to prepare a Statement of Work and Work Plan regarding the expert dredging experience, ocean capable hardware and maintenance, real-time software capabilities including website/other transmission alternatives, data acquisition and quality review to be conducted. The candidates will also be required to submit four (4) quarterly status reports and one (1) annual report each year of the contract to provide updates on monitoring, data collection and analyses, and assessments regarding the impacts of each individual dredging project.

Government Participation:

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. USACE will assist in the dissemination of study results through local scientific presentations and website postings. 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 project will be utilized to evaluate water management operations and system responses and to produce assessment reports describing and interpreting the responses.

Materials Requested for Statement of Interest/Qualifications:

Please provide the following via e-mail attachment to: Deberay.R.Carmichael@usace.army.mil (Maximum length: 2 pages single-spaced 12 pt. font).

1. Name, Organization and Contact Information

2. Brief Statement of Qualifications (including):
    a. Biographical Sketch,
    b. Relevant past projects and clients with brief descriptions of these projects,
    c. Staff, faculty or students available to work on this project and their areas of expertise,
    d. 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.

Review of Statements Received: Based on a review of the Statements of Interest received, an investigator or investigators will be invited 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. Additionally, the evaluation method and selection criteria for research and development awards must be: (1) The Technical and personal merits for complying with and accomplishing the proposed work plan; and (2) Potential relationship of the proposed research and development to the Department of Defense missions.

Please send responses or direct questions to:
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U.S. Army Engineer Research and Development Center (ERDC)
ERDC Contracting Office (ECO)
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Deberay.R.Carmichael@usace.army.mil

Timeline for Review of Statements of Interest: Review of Statements of Interest will begin after the Request for Statements of Interest has been posted on the CESU website for 10 working days.