REQUEST FOR STATEMENTS OF INTEREST SOUTH FLORIDA-CARIBBEAN OR GULF COAST CESU NETWORK W912HZ-17-SOI-0002 PROJECT TO BE INITIATED IN 2017

Project Title: Evaluation of Vegetation Response to Changes in Hydrologic Parameters within Cape Sable Seaside Sparrow Habitat, Everglades National Park, Florida.

Responses to this Request for Statements of Interest will be used to identify potential investigators for a project to be funded by the Engineering Research Development Center (ERDC) U.S. Army Corps of Engineers (USACE) to conduct vegetation assessments to evaluate vegetation response to changes in hydrologic parameters within Cape Sable seaside sparrow habitat in Everglades National Park, Florida. Approximately \$125,000 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 \$125,000 per year for a total of \$625,000 over five (5) years.

Background:

The endangered Cape Sable seaside sparrow occupies mixed marl prairie communities that include muhly grass (*Muhlenbergia filipes*) for nesting. These short-hydroperiod prairies contain a mosaic of moderately dense, clumped grasses, interspersed with open space that permit ground movements by the sparrows. Vegetation pattern in Cape Sable seaside sparrow habitat is a manifestation of several interacting environmental factors, including hydrology and fire. Both of these factors are intensively managed, the first through structural operations throughout the extensive south Florida canal system, and the second through the activities of crews at Everglades National Park and Big Cypress National Preserve carrying out prescribed fires and suppressing wildfires (or allowing them to burn). Sparrow populations may respond to changes in hydrology or fire regime directly, through their nesting success or failure within the spring breeding season, or indirectly, mediated through vegetation change in their habitat.

Public Benefit:

As restoration programs come online it will be necessary to detect and document changes in the vegetative communities before, during, and after restoration actions to ensure anticipated ecological benefits are realized. This project will study how restoration and water management activities translate into effects on vegetative communities important to the endangered Cape Sable seaside sparrow. The results of these surveys will serve as indicators of the overall health of these important natural resources. It is expected that improved habitat conditions will lead to improved water quality, water management and restoration of critical habitat. The overall goal of restoration of the greater Everglades ecosystem will provide public benefits to water supply, recreation, and wildlife viewing opportunities.

Brief Description of Anticipated Work:

The project should be designed to determine vegetation response to changes in hydrology associated with implementation of ERTP.

The objectives of the proposed research effort include:

- 1) Objective 1: To establish baseline vegetation data in areas identified by modeling as potential future suitable habitat and assess suitability of these areas as Cape Sable seaside sparrow habitat.
- 2) Objective 2: To determine trajectory of vegetation change in response to ongoing water management activities and restoration initiatives within current and future endangered Cape Sable seaside sparrow habitat.

Vendor Requirements:

Vendor must be a non-federal partner of the South Florida-Caribbean or Gulf Coast CESU Unit willing to accept the negotiated CESU indirect cost rate of 17.5%. Successful applicants are expected to have expert knowledge of the Everglades ecosystem and a record that demonstrates research experience with characterizing vegetation structure and composition and analysis of relative changes in vegetation-inferred hydroperiod within the greater Everglades. 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 obtain all necessary permits required to conduct the work, 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 vegetation response to changes in hydrology associated with implementation of ERTP.

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 and 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: <u>Deberay.R.Carmichael@usace.army.mil</u> (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 merits of the proposed research and development; 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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ERDC Contracting Office (ECO)
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Timeline for Review of Statements of Interest: Review of Statements of Interest will begin after the SOI has been posted on the CESU website for 10 working days.