Mobile Bay National Estuary Program
118 North Royal Street, Suite 601
Mobile, AL 36602
Phone: 251-431-6409
Fax: 251-431-6450
Contact: Christian Miller, Watershed Management Coordinator
Email: cmiller@mobilebaynep.com

April 15, 2019

REQUEST FOR STATEMENT OF QUALIFICATIONS TO DEVELOP A STANDARD HABITAT CLASSIFICATION SCHEME AND A HABITAT CHANGE ANALYSIS FROM HABITAT MAPPING PRODUCTS CONDUCTED IN 2001/2002 AND 2015/2016

The Mobile Bay National Estuary Program is seeking to procure qualified engineers, land surveyors, geoscience, or other similar professionals through a competitive, qualification-based selection process to develop a standardized classification scheme for identifying priority habitats identified in the Comprehensive Conservation and Management Plan 2013-2018 and conducting a trend analysis of changes of distribution and extent of the priority habitats. A Request for Qualifications (RFQ) process will be used to select a Contractor who can successfully perform this service on an agreed upon schedule.

Interested firms should respond with a letter of interest, statements of qualification, firm brochures, and photographs of previous projects, experience and other relevant information.

Submit one hard copy and one electronic copy of the responses to the address below, as follows:

Ms. Roberta Swann, Director
Mobile Bay National Estuary Program
118 N. Royal St., Suite 601
Mobile, AL 36602
rswann@mobilebaynep.com

Proposals should be received no later than 4:00 p.m. CDT, on Tuesday, May 7, 2019.

Summary of Offering

The MBNEP has secured funding from the Alabama Department of Conservation and Natural Resources, State Lands Division, Coastal Section to implement the provisions of the Coastal Zone Management Act of 1972, as amended, to conduct a habitat mapping update to include a change analysis for Mobile and Baldwin counties. The mission of the MBNEP is to promote wise stewardship of the water quality characteristics and living resource base of the Mobile Bay estuarine system. A major focus of MBNEP's Comprehensive Conservation and Management Plan (CCMP) is to improve the effectiveness of landscape-scale resource management and habitat restoration and conservation strategies

In 2009, the online geospatial Mississippi Alabama Habitats Tool and The Prioritization Guide for Coastal Habitat Protection in Mobile and Baldwin Counties, Alabama (the "Guide") were developed as part of a collaborative project of the MBNEP, TNC, and the Coastal Services Center (CSC) and Office of Habitat Conservation (OHC) of the National Oceanic and Atmospheric Administration (NOAA).

The primary goal of this effort was to provide new information and mapping tools to support conservation planning and implementation of the habitat management goals of the CCMP and its partners. The development of a Habitat Mapper was achieved by bringing federal, state and local entities together to update and improve the 2006 Atlas through a scientifically-based methodology of using geospatial datasets to identify priority habitat "patches" irrespective of property boundaries. Part of this project was identifying focal habitat types across Mobile and Baldwin counties.

The focal habitat types include 10 distinct ecological systems:
- freshwater wetlands
- riparian buffers
- longleaf pine
- pine savannah
- maritime forest
- intertidal marshes and flats
- beaches and dunes
- submerged aquatic vegetation
- oyster reefs
- rivers and streams

For this request, the habitat of interest include each of the above except for oyster reefs and submerged aquatic vegetation.

In 2015, the MBNEP, with funding from the National Fish and Wildlife Foundation Gulf Environmental Benefit Fund, produced Habitat Maps of Mobile and Baldwin counties at one-meter resolution. Due to the higher resolution of the imagery and a new methodology for classifying habitats, the habitat map product produced several inconsistencies and as a result these maps were not able to be used to conduct a full analysis of habitat change.

Because of the different applications of Cowardin and Anderson habitat classification codes (Anderson et al., 1976; Cowardin et al., 1979) by different contractors classifying habitats in 2001/2002 and 2015/2016, initial analyses showed some very large and unexpected changes across the 10 common habitats given the groupings. The differing methodologies used for classifying habitat data, even though both contractors used the same Cowardin and Anderson codes, made it very difficult to analyze any changes in habitat types over the time period from 2001 to 2016. For example, the classification PF04C – Palustrine Forested Needle-Leaved Evergreen Seasonally Flooded – was grouped into pine savanna in 2001 and into freshwater wetlands in 2016. Both are correct, but they are not comparable, as this makes it seem that large expanses of pine savanna were lost when, in fact, they were just classified differently, leading to errors in the change analyses.

As the MBNEP coordinates the creation of a habitat restoration plan for coastal Alabama and continues to undertake comprehensive watershed planning across Alabama's two coastal counties, it has become apparent that a habitat change analysis is critical component for project prioritization and restoration investments related to actions recommended in WMPs being developed for all tidally-influenced watersheds draining into Alabama's estuarine waters.

Objectives

- Develop a standardized classification scheme for use in identifying the distribution and extent of the suite of focal habitat types defined in this RFQ

- Apply the standardized scheme to the 2015/2016 Radiance produced upland and wetland habitat maps (http://www.mobilebaynep.com/images/uploads/library/QSI_IMAGE_Aquisition_Report.pdf).

- Validate the Radiance produced maps with field surveys and by utilizing the currently available soil surveys for both Baldwin and Mobile counties.

- Produce a trend analysis of habitat loss or gains from previous studies.

Project Approach

- **Study Area.** The geographic focus of this wetland/upland habitat mapping project is the MBNEP study area (1,892,190 acres), which includes both Baldwin (1,074,510 acres) and Mobile counties (826,680 acres).

- **Imagery.** Imagery was acquired in 2016 by Quantum Spatial, Inc. and processed by Radiance Technologies using object-oriented classification with automated segmentation algorithms as a mapping methodology. While the imagery meets expectations, habitat data development, field surveys, wetlands/uplands classification, and trend analysis remain to be completed. In 2017, the U.S. Army Corps of Engineers (USACE) Engineer Research and Development Center performed independent mapping primarily of wetlands habitats in the middle and upper Bay area, and these data form bases for the Mobile Harbor General Reevaluation Report and the Alabama Coastal Comprehensive Plan. Though officially "preliminary," the USACE Mobile District has expressed a willingness to share these complementary data with the MBNEP to use in this effort.

- **Habitat Data Development.** Required format: ESRI polygon feature class. The Contractor will specify the software package and the method used to process the data. The Contractor should describe the entire classification process including procedures for assessing accuracy.

- **Field Surveys.** The Contractor must give a detailed plan for conducting field surveys for this project. The plan shall include field methods, equipment, and personnel involved in the surveys. Field surveys shall include physical verification for accuracy, as well as a soil core sample to identify soil types at each field survey location. Contractor should include methodologies for ensuring field verification accuracy in their Statement.

- **Wetlands/Uplands Classification**. The contractor should utilize Cowardin (1979) and Anderson (1976) classification methodologies. See description of Past Efforts below. The contractor will provide MBNEP a detailed description on how the wetlands and uplands will be assessed and classified.

Deliverables.

The deliverables to the MBNEP for this project include:
- A comprehensive report detailing classification scheme methodology and results.
- Trend analysis of the focal habitat types listed in this RFQ.
- ESRI geodatabase of focal habitat polygons.
- Maps.
- Presentation poster of results.
- All raw material used by the Contractor, including completed metadata to the Dauphin Island Sea Lab Data Archive

Statement Contents

The Statement of Qualifications (Statement) should be not more than **ten 8.5" X 11" single-sided pages, Times New Roman 11-point font (inclusive of the cover letter, conceptual approach, experience and background, and project team/level of participation)**, and should be divided by section, with Table of Contents (**cover pages and table of contents do not count against the 10-page limit**). All Statements (an original and hard copy) shall be received by mail or hand-delivered to the **Mobile Bay National Estuary Program (Attn: Roberta Swann), 118 North Royal Street Suite 601, Mobile, AL 36602**. An electronic copy in PDF format should be delivered on CD or jump drive or emailed to **bdickey@mobilebaynep.com**.

Statements submitted in response to this RFQ shall include a complete response to the requirements in the order presented below. Statements should provide a straight-forward delineation of the **Respondent's** capability to satisfy the intent and requirements of this RFQ and should not contain redundancies or conflicting statements. An officer authorized to make a binding commitment for the **Respondent** making the Statement shall sign the Cover Letter. Contents of the submitted Statements must include the following to be deemed responsive for evaluation:

A. Cover Letter
The Statement must include a cover letter accompanying the Statement and acknowledging receipt of all issued amendments to the RFQ. The letter should be addressed to: **Roberta Swann, Director, Mobile Bay National Estuary Program, 118 North Royal St. Suite 601, Mobile, AL 36602**.

- The letter should indicate a primary contact for the **Respondent** and that person's name, title, address, phone number, and email address.

- The letter should introduce the **Respondent's** project team. The Project Team is defined as the lead plus members who are critical for consideration by the evaluation team and should include relevant professional certifications (e.g., Professional Engineer, Certified Wetland Scientist, etc.) for each.

- The letter should include a general statement of approach distinguishing why the **Respondent** is the most suitable choice for this planning effort.

- The letter should include the statement that the Project Team is willing to complete the Project in a timely manner.

- The letter must include a statement that the firm is not in arrears in the payment of any obligation due and owing to the State of Alabama, including tax payments and employee benefits, and that it shall not become so during the term of the agreement if selected; a statement that the proposing **Respondent** will negotiate in good faith with the MBNEP, and a statement that the firm grants to the MBNEP a non-exclusive right to use, or cause others to use, the contents of its Statement, or any part thereof, for any purpose.

B. Conceptual Approach and Methodology

Respondents are requested to demonstrate their understanding of this process by submitting a conceptual approach and methodology for project implementation. This narrative should articulate the **Respondent's** methods and approach of

- Using multispectral image classification software to classify imagery to characterize habitat class polygons according to prescribed hierarchical classification schemes,
- Applying standard field surveys and methods to ensure accuracy of classification scheme.
- Grouping habitat coverage classes appropriately under the previously seven listed priority habitat types.
- Comparing mapping products to polygon data from previous mapping efforts to conduct a trend analysis and provide a change detection map highlighting habitat losses or gains.

C. Experience and Background

Given the unique nature of the Project and its importance to the resource management community and stakeholders, it is essential to fully understand the experience and capabilities of all key members of the Project Team. **Respondent** should include the following information about the Project Team:

- Describe your team's experience in projects relevant to habitat characterization, mapping, and trend analyses.
- Demonstrate the ability and experience of key individuals on the Respondent's proposed Project Team to complete projects of the scale and complexity envisioned in this RFQ on budget and on schedule.
- Provide up to three examples of projects involving characterization of habitats from aerial imagery, comparison with earlier mapping products, and development of a trends analyses.
- Provide the names and phone numbers of references for at least two completed projects for which the Project Team acted as Consultant and may be considered comparable to the project envisioned in this RFQ. For each reference, indicate the contact person's role in the completed project and the period of their involvement.
- **Respondents** should identify with specificity any other relevant organizational, consulting, or other available resources that will be committed to the Project.

D. Project Team/Level of Participation

MBNEP must understand the roles of key Project Team members, their availability to complete specific Project tasks in a timely manner, and the overall organization and decision-making process of the Project Team.

- Identify key Project Team members with responsibility for leading main Project tasks, including the percentage of time each is expected to commit through the duration of the Project.
- Include an organizational chart of the Project Team showing lines of communication, clearly-defined roles, availability, and decision-making hierarchy.

Contractor Selection Procedure

A. Project Selection Criteria

All proposals accepted by the MBNEP will be reviewed to determine whether they are responsive to the requisites of this RFQ. Statements that are determined by the MBNEP to be non-responsive will not be further considered. The MBNEP will evaluate statements based on the project selection criteria below.

a. Specialized expertise, capabilities, and technical competence, as demonstrated by the proposed approach and methodology to meet project requirements.

b. Resources available to perform the work, including any specialized services within the specified time limits for the project.

c. Record of past performance, quality of work, ability to meet schedules, cost control, and contract administration.

d. Availability to and familiarity with the project locale.

e. Proposed project management techniques.

f. Ability and proven history in handling special project contracts.

B. Evaluation Criteria

Statements will be evaluated based on the following criteria:

Demonstrated Quantity and Quality of Successful Relevant Experience	(50 points)
Demonstrated Level of Organizational Capability	(25 points)
Quality of Program Approach	(25 points)

C. Basis for Contract Award

A contract will be awarded to the respondent whose proposal is determined to be the most advantageous to the MBNEP, taking into consideration the factors or criteria which are set forth in this RFQ. Greater consideration will be given to statements that propose a match or in-kind services with their proposal. Contract award will be subject to the timely completion of contract negotiations between the MBNEP and the selected proposer.

MBNEP reserves the right to reject all proposals, negotiate further with any entity submitting proposals, or seek additional proposals. Selection is estimated to occur on or before May 30, 2019.

Non-Discrimination. The Mobile Bay National Estuary Program does not discriminate on the basis of race, color, religion, age, gender, pregnancy, national origin, genetic information, veteran status, or disability in its hiring or employment practices nor in admission to, access to, or operations of its programs, services, or activities.

Open Trade. By submitting a proposal, the Submitter represents that he/she and the business entity he/she represents is not currently engaged in the boycott of a person or entity based in or doing business with a jurisdiction with whom the State of Alabama can enjoy open trade, as defined in Act 2016-312.

Non-Commitment of Funds. Any contract related to this proposed project is subject to the availability of funds and/or the needs of the Mobile Bay National Estuary Program and therefore the MBNEP, at its discretion, may or may not issue a final contract as a result of this RFQ. Further, even in the event an

initial selection is made by the MBNEP, no selection is final until full execution of a written agreement detailing an agreed upon scope of work. If the MBNEP deems, at is sole discretion, that a satisfactory agreement cannot be reached in accordance with an initial selection; the MBNEP reserves the right to proceed with efforts to make another selection based upon proposals submitted pursuant to this RFQ.

Open Records Act. All responses received will be subject to the Alabama Open Records Act, Ala. Code § 36-12-40, (1975), as amended, and may be subject to public disclosure upon request.