United States Department of the Interior
NATIONAL PARK SERVICE
Northeast Region

June 19, 2017

REQUEST FOR STATEMENTS OF INTEREST and QUALIFICATIONS

Project Title: ASSESSMENT OF NATURAL RESOURCE CONDITION FOR FLIGHT 93 NATIONAL MEMORIAL (Shanksville, PA)

Replies Requested by: June 9, 2017

Responses to this Request for Statements of Interest will be used to identify potential investigators for a project to be funded by the National Park Service which seeks to compile and assess existing information documenting the state of knowledge and known condition of natural resources within Flight 93 National Memorial (FLNI). Approximately $50,000 is expected to be available to support this project. This Request for Statements of Interest and Qualifications has been distributed to partners of the North Atlantic Coast, Chesapeake Watershed, and Great Lakes- Northern Forest Cooperative Ecosystem Studies Units (CESU).

National Park Service's (NPS) Financial Assistance Policy Office is requiring a process change for awarding financial assistance under cooperative and task agreements in the CESU Network. Consistent with this Policy, the Northeast Region of NPS now requires non-federal CESU partners to have individual $0 Master Cooperative Agreements in place before Task Agreements can be created using the existing process. This project will be funded as a Task Agreement under these new Master Cooperative Agreements. Each non-federal partner will need to respond to the CESU Notice of Funding Opportunity (NOFO) that is currently posted at: https://www.grants.gov/web/grants/search-grants.html?keywords=p17as00037, which contains complete details of the process and what is required. Please contact your Office of Sponsored Projects and ask them to respond to the CESU NOFO as soon as possible, if they have not done so already. If you are selected for this project, it is essential that a new Master Cooperative Agreement is in place for the Task Agreement to be processed this fiscal year.

Background: Congress, in its FY 2003 Appropriations Act, instructed and funded the National Park Service (NPS) to assess environmental conditions in watersheds where National Park units are located. Threats from nutrient enrichment, exotic species, water/air pollution, climate change, and development pressure are management concerns for many Parks. The NPS Natural Resource Condition Assessment Program seeks to understand and evaluate the existing condition of park natural resources. Information gained under this program will form the basis for development of actions to restore and provide enhanced protection of park resources if warranted. Visit the following site for additional details on the Natural Resource Condition Assessment Program: http://www.nature.nps.gov/water/nrca/index.cfm

The study proposed here will use existing information sources to assess the condition of natural resources at Flight 93 National Memorial (FLNI) which is situated in rural southwestern Pennsylvania in the area commonly known as the Laurel Highlands. FLNI consists of 2,200 acres located on a plateau between the Allegheny Mountains and the Laurel Mountains. The natural habitats at FLNI include several springs, a small headwater tributary, wetlands, retention ponds, a grove of mature hemlocks and deciduous hardwoods, and re-established grasses. Wildlife that thrive in the area include deer, fox, black bear, wild turkey, water fowl, lynx, raptor, snakes, amphibians, and an abundance of bird species.

Park managers are challenged to address the issues of water quality degradation and acid mine drainage, introduction of exotic species, air pollution, habitat fragmentation, and the impacts of previous land disturbance. These may all have dramatic impacts on ecosystem function, integrity, and habitat quantity and quality. Results of these assessments will be integrated into individual park and servicewide databases and provide the parks with an integrated, overall evaluation of current resource conditions for upland, riparian, wetland, and aquatic areas as they exist within park boundaries. The assessments will also identify environmental threats or stressors to park natural resources and offer recommendations on information gaps.

Assessment Objectives

The natural resource assessment will use existing information sources to evaluate (e.g. within watersheds, ecosystem types, park management zones, etc.) the condition of park natural resources, identify stressors or threats to park natural resources, and identify information gaps. The assessment should emphasize, but not be limited to, geospatial analyses and reporting (GIS layers) to maximize usefulness of the assessment findings in park planning and natural resource management activities.

Existing information will be multidisciplinary (e.g., biological-ecological, water chemistry, hydrology, etc.), from a variety of sources, including the NPS, other federal agencies, state and local agencies, and others, and in a number of formats, including published literature and technical reports, databases, and GIS shapefiles. The NPS Inventory and Monitoring Program (http://science.nature.nps.gov/im/index.cfm) has identified core sets of indicators for long-term monitoring of park conditions and responses to stressors which can be a good starting point for developing individual park condition assessments.

EXISTING CONDITION
- Current condition of park natural resources (terrestrial and aquatic), is to be based on an integration and evaluation of existing data, relying on various information sources and formats.
- Condition of ecosystem types (forests, wetlands, riverine, meadow etc.), management zones, watersheds, or other appropriate designations should be based

on a diversity of factors or indicators such as presence/absence of non-native species, presence of rare habitats, water quality, or incidence of forest pests.

- Resource condition can be based on comparisons to reference data sets, comparisons to regional conditions, comparisons to established standards (e.g., water quality standards), evaluation of temporal trends in parameters, multi-parameter indices/metrics, or other approaches.
- Findings should be presented in a geo-spatial framework, where possible (e.g., linear distance of park streams classified as outstanding or impaired, a shapefile showing condition comparisons among park watersheds or management zones).

STRESSORS-THREATS
- Identify and quantify existing and emerging regional and local threats to park resources, such as sound impacts, encroaching urban/suburban land use, and upstream watershed development.
- Present findings in a geo-spatial framework, if appropriate (e.g., area of park forest habitat stressed by insect pests, exotic plants, etc.)

DATA GAPS
- Identify further studies and data needs that would assist in better describing condition and evaluating impacts from threats.

Brief Description of Anticipated Work:

1. Collaborate with NPS personnel and other appropriate agencies to identify sources of information and natural resource management and protection concerns.

2. Compile available data sources pertaining to the natural resources identified by park staff as being of critical management significance within the park and available information on threats or stressors to park natural resources.

3. Synthesize existing information to assess the current condition of park natural resources, where possible. When appropriate, present the synthesis within a geospatial or GIS-based framework, identifying the extent and condition of the target resources (e.g. wetland habitats, waterways, grassland areas, and forest communities). Identify the extent and/or presence-absence of park natural resources influenced by threats or stressors. [NOTE: The NPS will provide access to relevant GIS data layers within the park GIS data management system; however, it is expected that the investigator(s) will seek additional GIS data sources from other federal, state, and local agencies and organizations that may be relevant].

4. Provide recommendations for future studies that address additional information needs necessary to better define the condition of park natural resources and understand the relationship of stressors/threats to park condition.

5. Prepare a written report of findings that:

- Describes the parameters/metrics used to define natural resource condition. Examples of parameters/metrics used in previous assessments include: presence of invasive species; water quality (e.g. dissolved oxygen, pH, and conductivity levels); land use dynamics; avian IBIs, and wetland buffer indices.
- Describes the quality of the data currently available as it relates to deriving at the condition assessment for a given park resource and subsequent investigator confidence (qualitative) in the assessed condition of a given resource using those data.
- Describes and synthesizes available information on threats or stressors to natural resources.
- Provides recommendations for future studies or improved long term monitoring activities that address additional information needs necessary to better define the condition of park natural resources and to understand the relationship of stressors/threats to park condition.
- Presents all data included in the assessment, including GIS data layers with accompanying metadata.

Examples of completed Natural Resource Condition Assessment documents can be viewed and downloaded at: http://www.nature.nps.gov/water/nrca/reports.cfm.

Materials Requested for Statement of Interest/Qualifications:

Please provide the following via e-mail attachment to: christine_arnott@nps.gov (Maximum length: 5 pages, single-spaced 12 pt. font).

1. Name, Organization and Contact Information

2. Brief Statement of Qualifications (including):
    a. Biographical Sketch(s) for key personnel (faculty, staff), including a description of discipline(s) of expertise. Curriculum vitas can be submitted as an attachment and not included in the above-stated 5-page limit.
    b. Relevant past projects and clients with brief descriptions of these projects,
    c. Brief description of the proposed approach(es) for conducting an interdisciplinary, spatially-based assessment of park natural resource conditions, encompassing terrestrial and aquatic resources.
    d. Any brief description of capabilities to successfully complete the project you may wish to add (e.g. GIS capability, computers, equipment, access to information sources, previous research experiences at the park or region, etc.).

Note: A proposed budget is NOT requested at this time.

Review Criteria:
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 interdisciplinary expertise and capabilities in studying and synthesizing information related to upland and aquatic ecosystems, landscape dynamics, various terrestrial/aquatic biota (20 points), extracting data from multiple databases (10 points), interpreting data through quantitative analyses (10 points), and demonstrated skills in GIS (5 points).Previous experiences studying at the park or within the region will also be considered (5 points). Because of the broad scope of this project, an interdisciplinary approach is necessary.

Please submit Statements of Interest and Qualifications, via email, to:
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Questions are welcome via email or phone.

Timeline for Review of Statements of Interest: Review of Statements of Interest will begin **June 9, 2017**.
Please note that we expect to make decisions quickly and once selected an expanded proposal and budget will be requested and will need to be submitted by June 28th.