

**COOPERATIVE ECOSYSTEM STUDIES UNITS**  
**(Californian CESU, Great Basin CESU, Desert Southwest CESU and Colorado Plateau CESU)**  
**REQUEST FOR STATEMENT OF INTEREST & QUALIFICATIONS**

**Limnological and Riparian Resource Condition Assessment**  
**Lake Mead National Recreation Area**

***PROJECT TO BE INITIATED IN 2014***

**Grants.gov Funding Opportunity Announcement: P14AS00042**

**Reply to:**

**Reply Due:** April 11, 2014, 23:59 PDT

*Technical Contact:*

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CFDA #: 15.945, Cooperative Research and Training Programs – Resources of the National Park System (CESU)

**Overview**

The National Park Service (NPS) is requesting information on the interest and qualifications of potential partner(s) to assist with a project to complete a *Limnological and Riparian Resource Condition Assessment* (LRCA) for Lake Mead National Recreation Area (LAKE). Responses to this request will be used to identify potential collaborators for a project that will be funded by NPS. The NPS wishes to conduct this project in collaboration with a partner institution and Principal Investigator (PI), under the auspices of a CESU Cooperative Agreement in one of the following Cooperative Ecosystem Studies Units (CESUs): the Californian CESU (CA CESU), the Great Basin CESU (GB CESU), the Desert Southwest CESU (DS CESU), or the Colorado Plateau CESU (CP CESU). The anticipated budget for this project is \$66,300 and is subject to availability of funding. The final award amount will be dependent on an approved project budget(s) and NPS determination of available funds.

Based on interest and responses received, NPS will select a partner(s) to assist with developing a study plan and formal Task Agreement under the master CESU Cooperative Agreement. **Written Statements of Interest are due by April 11, 2014 at 23:59 PDT**, submitted to the technical and the administrative contacts listed above. The NPS intends to select a partner by April 23, 2014 and finalize a full study proposal by the end of May 14, 2014. All parties submitting statements of interest will be notified via email of the selection results by April 25, 2014. The project will be initiated in September 2014 and finished by January 2017.

**Eligibility Information**

This announcement is limited to partners of the Californian CESU (<http://ucanr.org/sites/CCESU/>), the Great Basin CESU (<http://environment.unr.edu/gbcesu/>), Desert Southwest CESU (<http://www.cals.arizona.edu/dscesu/>), and Colorado Plateau CESU (<http://www.cens.nau.edu/Orgs/CPCESU/>) (including university, state and non-governmental organizations). Due to the diverse expertise required to complete a LRCA, we encourage multiple partner engagement in these projects. This may occur through subawards to partner institutions from the primary awardee, or broad expertise from multiple PIs in a single institution.

## Background

In 2003 Congress instructed NPS to assess the condition of natural resources within NPS-managed lands. In response, NPS is conducting multi-scale ecological assessments to assist managers in developing actions to protect and restore natural resource conditions in parks. LAKE is currently involved in a project to assess the condition of the park's upland natural resources in a joint study with other parks in the Mojave Network Inventory and Monitoring Program. This project is a separate study to assess the condition of the park's limnological and riparian resources.

Lake Mead NRA is located along the Colorado River in the states of Nevada and Arizona, east of Las Vegas, Nevada and west of the Grand Canyon. The primary features of the Recreation Area are Lake Mead, formed by the Hoover Dam, and Lake Mohave, formed by the Davis Dam. Lakes Mead and Mohave provide significant benefits that made development of the southwestern United States possible. The lakes also provide important aquatic habitat for a variety of wildlife including endangered species, and a diversity of world-class water based recreational experiences for more than 6 million people annually. They supply critical storage of water supplies and hydropower for more than 25 million people in three Western states (California, Arizona, and Nevada), and irrigation of greater than 2.5 million acres of croplands.

While monitoring indicates that Lakes Mead and Mohave maintain overall good water quality, a number of concerns have arisen in the past few years, including noticeable algae blooms, bacteria counts above acceptable limits in high visitor use areas, and increased pathogens as well as nutrients from urbanized and agricultural tributaries leading to fish mortality. Warmer waters in Lake Mohave and Lake Mead due to climate change, or lowering lake levels over shallow bottom areas, may increase the possibility of issues related to human pathogens.

This project will characterize the setting and significance of focal limnological and riparian resources at LAKE, provide an interdisciplinary evaluation of current conditions and trends (where possible), and identify critical information gaps, primary threats, and high-priority resource management issues. The project will include:

- The development of a Study/Implementation Plan which identifies the specific objectives and scope of the project and provides an implementation schedule and budget.
- The completion of a written report that will be published in the NPS Natural Resource Research Publication Series that includes an executive summary, current condition status and identifiable trends for selected resource elements, critical knowledge or data gaps, and (in some cases) recommendations to park managers.
- The development and delivery of associated GIS data layers, map files, databases, and supporting metadata.

## Assessment Objectives

The resource assessment will use existing information sources to evaluate the condition of park limnological and riparian resources, identify stressors or threats to these park resources, and identify information gaps. Existing information is multidisciplinary and from a variety of sources including NPS, other federal, state and local agencies, published and unpublished documents, and available tabular and spatial databases. Important, but not exclusive, sources of information will be the Mojave Network Inventory and Monitoring Program (<http://science.nature.nps.gov/im/units/mojn>), the U.S. Geological Survey, the Bureau of Reclamation, the Southern Nevada Water Authority, and the 2012 Lake Mead Science Symposium. The assessment should include geospatial analyses and reporting (GIS) where relevant to maximize usefulness of the assessment findings in park planning and natural resource management activities.

A Statement of Work describing the project in detail, including lists of the focal resources to be addressed, is included as an attachment. In addition, current examples of Natural Resource Condition Assessment documents and project guidelines can be viewed and downloaded at: <http://www.nature.nps.gov/water/nrca/reports.cfm>.

## Materials Requested for Statement of Interest/Qualifications

Please prepare a not-to-exceed 4 page summary of how you would envision such a collaborative project and include the following information:

1. Name, Organization, and Contact Information
2. Brief 'Statement of Qualifications' including
  - a) Biographical sketch(s) for key personnel including a description of the major discipline of expertise for each person. (Curriculum vitae can be submitted as an attachment not included in the above-stated 4-page limit.)
  - b) Relevant past projects
  - c) Brief description of the proposed approach to this project.

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

**Please submit electronic Statements of Interest and supporting material to both [bryan\\_moore@nps.gov](mailto:bryan_moore@nps.gov) and [william\\_nash@nps.gov](mailto:william_nash@nps.gov) by April 11, 2014 at 23:59 PDT.** Submissions after this deadline will not be considered.

**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 of Interest will be evaluated based on the investigator's specific experience and capabilities in: a) studying the ecological systems, species, and physical/chemical processes occurring in the park's lakes and riparian areas (previous experience in the parks will be considered but is not necessary); b) strength of the proposed interdisciplinary team; c) ability to locate, manage, and interpret data from diverse databases and sources; d) team GIS capabilities; and e) demonstrated project management. The NPS intends to select a partner by April 23, 2014 and finalize a full study proposal by May 14, 2014. All parties submitting statements of interest will be notified via email of the selection results by April 25, 2014.