Research Associate – Geospatial Analyst
Strategic Conservation Assessment of Gulf Coast Landscapes

PROJECT DESCRIPTION

The Gulf of Mexico coast is an ecologically, socially, and economically valuable region of the U.S., with deeply-rooted human history, thriving seafood and coastal recreation industries, and some of the most ecologically important coastal landscapes in the nation. However, susceptibility of coastal resources in this region to both natural and manmade disturbance has increased over time, and was particularly affected by the Deepwater Horizon disaster in 2010. The Gulf Coast Ecosystem Restoration Council (Restore Council) was founded in 2012 to manage a portion of the funds available through the Gulf Restoration Trust Fund as established by the RESTORE Act to recover Gulf Coast ecosystems and economies following the Deepwater Horizon oil spill. The Strategic Conservation Assessment of Gulf Coast Landscapes project was included in the Council's first Funded Priorities List and aims to develop a suite of conservation planning tools that provide science-based decision support for Restore Council members in prioritizing voluntary land conservation strategies, opportunities, and projects in the Gulf Coast Region.

The Strategic Conservation Assessment has three main objectives: 1) collation of shared multi-scale priorities and objectives across the broader conservation community from existing conservation planning efforts; 2) use of multi-criteria decision analysis (MCDA) to translate these priorities into a conservation planning tool that supports Restore Council land conservation decisions and incorporates partner and stakeholder-based valuations on ecological, social, and economic criteria into a flexible decision support framework; and, 3) development and distribution of a spatial prioritization layer incorporating conservation planning tool valuations and future threats of sea-level rise and urbanization in a geospatial environment to aid the Restore Council and Gulf coast stakeholders in identifying high priority lands for voluntary conservation efforts. The Strategic Conservation Assessment will provide the Restore Council with a process and product-based mechanism to support future decisions.

SUMMARY OF POSITION

The Research Associate will work closely with an interdisciplinary team of scientists, including personnel from the U.S. Fish and Wildlife Service (USFWS) Gulf Restoration Team and Mississippi State University (MSU) faculty, as well as the Assessment Coordinator, ecological modeler, outreach coordinator, graduate student, and other administrative and support staff as appropriate. The successful candidate for this position will work directly with this team to support visualization of geospatial elements of project inputs and deliverables. This will include compilation, generation, and analysis of geospatial data layers associated with shared stakeholder priorities, multi-criteria decision analysis outcomes, and optimized geospatial decision support applications to aid in identifying priority areas for coastal restoration efforts in the Gulf Coast Region. The candidate will work with the Ecological Modeler to incorporate geospatial decision support models into a dynamic and interactive web-mapping application, beta-test the application with target user groups, and provide technical support and web application refinement for SCA project outreach efforts in support of the project Outreach Coordinator. This position will require some travel to the coastal Gulf of Mexico Region for project team and stakeholder meetings.

The position will be funded through April 2020. Salary will be commensurate with experience, up to $47,000 per year. The Research Associate will be located in the Department of Wildlife, Fisheries, and Aquaculture at Mississippi State University in Starkville, Mississippi.

QUALIFICATIONS

Minimum Qualifications. At the Research Associate II level, the applicant must hold a B.S. in geography, geosciences, ecology, environmental science/management, coastal or marine ecology, wildlife and fisheries science, or other related fields and minimum of 3 years of relevant experience and the equivalent of a master's degree; or a M.S. degree and minimum of 1 year of relevant experience and demonstrated competency. At the Research Associate III level, the applicant must hold a B.S. in geography, geosciences, ecology, environmental science/management, coastal or marine ecology, wildlife and fisheries science, or other related fields and minimum of 6 years of relevant experience and the equivalent of a master's degree; a M.S. degree and minimum of 3 years of relevant experience; or a doctoral degree with a minimum of 2 years of relevant experience and demonstrate competency. Strong background and expertise with geographic information systems (GIS) and other related software applications and technologies is required. The Research Associate must have excellent oral and written communication skills, be self-motivated, and able to work effectively both independently and as part of an interdisciplinary team.

Preferred Qualifications. A M.S. or Ph.D. in geography, geosciences, ecology, environmental science/management, coastal or marine ecology, wildlife and fisheries science, or other related fields is highly desirable. The preferred candidate will also have experience developing web-enabled geospatial data applications, particularly those that enable on-the-fly data processing in a web-user interface. Additional expertise in other GIS software applications (e.g., ERDAS Imagine, ENVI, GRASS, QGIS, etc.) and experience with html and other programming applications (e.g., Python, R, SQL, etc.) is considered a valuable asset for this position. The ideal candidate will possess a combination of the skills above in addition to experience working in Gulf Coast landscape conservation or large-scale data applications, and have experience with spatially explicit ecological modeling, multi-criteria decision analysis, and interacting with stakeholders.

APPLICATION

Applications must include: 1) cover letter, 2) resume or Curriculum Vitae, 3) one-page statement of interest and expertise, 4) contact information for five references, 5) academic transcripts, and 6) TOEFL or IELTS scores if the candidate's native language is not English. Applicants must complete an application through the MSU HRM website (http://explore.msujobs.msstate.edu/cw/en-us/job/495589/research-associate), but should also email a copy of the cover letter and resume/CV directly to kristine.evans@msstate.edu.

TIMELINE
Application review will begin June 7, 2017 and will continue until the position is filled.

ANTICIPATED START DATE
August 15, 2017

TRAVEL
Some travel to the coastal Gulf of Mexico Region for project team and stakeholder meetings will be required, 1-2 overnight trips every 2-3 months.

CONTACT

Applicants may contact Kristine Evans [kristine.evans@msstate.edu] with any questions prior to application submission.