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# REQUEST FOR APPLICATIONS

## Postdoctoral Associate in Ecological Modeling Strategic Conservation Assessment of Gulf Coast Landscapes

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### 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 position will involve incorporating data into a decision support system to identify priority areas for voluntary land acquisition, easements, or other conservation incentives throughout the Gulf Coast Region. Using ecological models and multi-criteria decision analysis (MCDA), the Postdoctoral Associate will develop a web-based decision support tool that stakeholders can use to investigate conservation priorities. The Postdoctoral Associate will work in concert with a 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, GIS Analyst, Outreach and Extension Specialist, and other administrative and support staff as appropriate. This is a modeling and programming position with limited fieldwork but will require some travel to the coastal Gulf of Mexico Region for meetings.

The position will be funded for three years. Salary will be commensurate with experience, up to \$50,000 per year. The Postdoctoral Associate will be located at the Department of Agricultural and Biological Engineering at Mississippi State University in Starkville, Mississippi. The faculty advisor will be Dr. Anna Linhoss.

## **QUALIFICATIONS**

The Postdoctoral Associate must hold a Ph.D. in biological or environmental engineering, geography, geosciences, ecology, environmental science/management, or other related fields. The ideal candidate will have some combination of the following skills: spatially explicit ecological modeling, landscape conservation, MCDA, programming (especially Python), and web-based app development. Expertise with geographic information systems (GIS) and other related software applications and technologies is also required.

The Postdoctoral Associate must have excellent oral and written communication skills, be self-motivated, and able to work effectively both independently and as part of a cross-discipline team.

## **APPLICATION**

Applications must include: 1) cover letter, 2) Curriculum Vitae, 3) one-page statement of interest and expertise, 4) contact information for five references, 5) Ph.D. transcripts, and 6) TOEFL or IELTS scores if the candidate's native language is not English. Applications should be submitted through the MSU Human Resources website <http://www.msujobs.msstate.edu/>.

## **TIMELINE**

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

## **CONTACT**

Applicants may contact Anna Linhoss [[alinhoss@abe.msstate.edu](mailto:alinhoss@abe.msstate.edu)] with any questions prior to application submission.

## **EQUAL OPPORTUNITY**

MSU is an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, ethnicity, sex (including pregnancy and gender identity), national origin, disability status, age, sexual orientation, genetic information, protected veteran status, or any other characteristic protected by law. We always welcome nominations and applications from women, members of any minority group, and others who share our passion for building a diverse community that reflects the diversity in our student population.