POSITION DESCRIPTION

POSITION NAME: Hydrologist/Stormwater Engineer

LOCATION: Belle W. Baruch Institute of Coastal Ecology & Forest Science
The Institute is located near Georgetown, SC, approximately 40 miles north of Charleston, SC, near Pawleys Island and Litchfield Beach.

ACADEMIC DEPARTMENT: Agricultural & Biological Engineering
Clemson University, Clemson, SC

POSITION DESCRIPTION:

Position is a 12-month, tenure-track faculty appointment with Clemson University as a member of a team of water resources expertise at the Baruch Institute. A PhD is required in engineering with strong training and background in hydrology, natural resources, geosciences, bioscience, hydraulics, soil physics, and related disciplines. The individual will study hydrological dynamics via modern process studies and/or modeling approaches in order to describe and predict effects of stormwater runoff from a coastal ecosystem beginning pre-development, during development and continuing through post-development. An emerging research program of national prominence involving hydrologic modeling of watersheds to determine runoff, storage, detention, and discharge with emphasis on developing areas is expected.

The successful applicant will address quantity characteristics of small watershed hydrologic and hydraulic design to convey and/or contain the flows resulting from extreme events and function as a stormwater hydrologist with interests in watershed hydrology at the local and regional scale. Research may include consideration of surface dynamics, surface water – groundwater interactions, and/or land surface – atmosphere interactions, and water quality implications. Emphasis will be placed on improving currently used technologies as well as developing innovative methods such as low impact development (LID) methods. Since design of stormwater structures requires considerable knowledge of federal, state and local requirements, this individual will be expected to have experience with relevant regulations including NPDES requirements, coastal zone limits, Corps of Engineers regulations, and the S.C. Stormwater and Sediment Control Act. The person in this position should understand the uniqueness of South Carolina coastal areas, their sensitivity, wetland issues, coastal hazards, terrestrial and aquatic ecological systems, and possess a working knowledge of the ecology of southeastern coastal areas.

This candidate will be expected to:

• meet scholarly standards by developing a high-quality research program that meets the standards of periodic peer review, including regularly publishing research results in peer-reviewed literature,
• develop a strong extramural funded research program,
• expect affiliation and cooperation with the South Carolina Water Resources Center of the Strom Thurmond Institute on the Clemson University campus,
• collaborate with on-campus, Extension, and stakeholder teams in order to develop outreach programs to disseminate new knowledge as quickly as possible, and
• direct and advise graduate students with an eventual opportunity to teach at the graduate level.

RANK: Assistant Professor preferred. A senior appointment at the Associate Professor level may be considered depending on qualifications.

COLLABORATIVE EXPECTATIONS/OPPORTUNITIES:
• Sea Grant
• Forestry & Natural Resources; Agriculture: Soils, Plant Science, Horticulture
• South Carolina Water Resources Center of the Strom Thurmond Institute
• Biological Sciences
• Environmental Engineering and Science; Geology; Civil Engineering
• USDA-ARS, USDA-NRCS, NOAA, EPA
• SC DHEC, SC DNR; Local/County Municipalities
• Construction/Development Industries

APPOINTMENT: 75% Research and 25% Extension/Outreach

*Clemson University is committed to affirmative action, equal opportunity, and the diversity of its workforce. "Clemson University does not discriminate against any person or group on the basis of age, color, disability, gender, national origin, race, religion, sexual orientation, or veteran's status." An offer of employment is contingent upon establishment of identity and verification of employment eligibility as required by the Immigration Reform and Control Act of 1986.*