POST DOCTORAL RESEARCH ASSOCIATE
ECOHYDROLOGIC ASSESSMENT AND WATERSHED MODELING

RESPONSIBILITIES: This is a full time position. The candidate is expected to: (1) conduct watershed modeling to evaluate impacts of land use, land management, and climate variability and change on hydrology, water quality, and ecosystem services; (2) evaluate effects of bioenergy crop production on nutrients, sediment, and pesticides at field, subwatershed and basin scales; (3) perform optimization of land use and land management using single and multi-objective functions and the Soil and Water Assessment Tool (SWAT) model; (4) improve hydrologic/water quality, and crop growth processes in currently available models; (5) conduct workshops to provide training on model development and applications; and (6) write project reports to funding agencies. The candidate will interact regularly with various local and state agencies, stakeholders, and researchers from other departments/universities. The candidate will be a part of multiple federally funded research projects.

QUALIFICATIONS: The candidate must have a Ph.D. in agricultural, biological, civil engineering, Earth Science or a similar field and be proficient in the Soil and Water Assessment Tool (SWAT) model. The ability to conduct land use/land management optimization using genetic algorithm and other similar tools is strongly preferred. The candidate is expected to modify the SWAT model code to be able to improve representation of various biophysical processes in the model. Strong written and oral communication skills are required. The candidate should be able to work effectively in a large interdisciplinary research team and regularly communicate project results. A demonstrated background in use of other watershed/water quality models, GIS, and environmental data assessment is desired, as is experience in writing grant proposals for funding.

AVAILABLE: Immediately. In order to ensure consideration, application should be submitted before March 1, 2014. The search will continue until a suitable candidate is selected. The position is initially for two years, with continuation possible depending on funding availability.

OPPORTUNITIES OF THIS POSITION:
The candidate will have the experience of working with a dynamic, interdisciplinary group of researchers on a project with real-world ecological applications and will interact with numerous federal/state agencies and watershed groups. Purdue University provides many other opportunities in water research, and interaction is encouraged with the interdisciplinary Purdue Water Community. (http://www.purdue.edu/water), Center for the Environment (http://www.purdue.edu/discoverypark/environment) and Purdue Climate Change Research Center (http://www.purdue.edu/discoverypark/climate).

CONTACT: In order to ensure consideration, a curriculum vita, academic transcripts, and name and contact information of three referees should be sent to:

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