Doctoral Research Fellowship -- Utah State University

Evaluating Ecosystem Services in Coupled Human Natural Systems

Utah State University invites applications for a PhD-level graduate research fellowship to quantify and value ecosystem services in coupled human natural western water systems. This fellowship opportunity will start in Fall 2013 and is part of a multi-year, NSF-funded iUTAH project aimed at understanding water resources sustainability in Utah’s urbanizing Wasatch Front (see www.iutahepscor.org). The successful applicant will:

1. Conceptually model ecosystems and ecosystem services in human and natural water systems of Cache Valley, UT,
2. Quantify and value supporting (e.g., nutrient cycling), provisioning (e.g., water supply), regulating (e.g., water purification, flood regulation), and cultural (e.g., aesthetic, recreation) hydrologic ecosystem services,
3. Develop a systems model to represent current supply and demand of ecosystem services as well as potential future impacts from land use change, population growth, changing urban form, and hydroclimatic changes, and
4. Work collaboratively with other iUTAH researchers to ensure that developed ecosystem service model components are aligned both holistically and in time and space with other project work.

Candidates should have (or expect to complete by July 2013) a masters degree in watershed sciences, ecology, hydrology, physical geography, civil and/or environmental engineering, economics, or a related discipline. The home department for this student will be in Watershed Sciences, although this student will be expected to work in an interdisciplinary, multi-institution team of faculty and students. We guarantee full doctoral research fellowship support plus a tuition award for two years on this project for a qualified student. There will be opportunities to pursue supplemental funding from internal and external sources in future years. Prospective students should contact Dr. Sarah Null (sarah.null@usu.edu), Dr. David Rosenberg (david.rosenberg@usu.edu), or Dr. Charles Sims (charles.sims@usu.edu) for more information. Please include a current curriculum vitae, GRE scores, and statement of research interests with your inquiry. Application deadline is March 15, 2013.

Why Northern Utah? The Wasatch Front of Northern Utah offers a stunning landscape for work and play. The nearby Wasatch/Cache National Forest provides year-round outdoor recreation. We have low housing and living costs and are a short trip from scenic National Parks including Zion, Bryce Canyon, Canyonlands, Arches, Capitol Reef, Grand Teton, Great Basin, and Yellowstone.