

David L Nieland

Subject: PhD opportunity in modeling food-energy-water systems (FEWS)

We have an exciting PhD opportunity in integrated modeling of Food, Energy, and Water Systems here at Boise State University. In support of a large, state-wide grant funded by the National Science Foundation, a team of researchers have developed a suite of models using the Envision modeling framework that simulate the coupled human-natural system dynamics of southwest Idaho. This region includes the Boise metro area (population >650,000) and is undergoing the significant combined effects of climate change and land use change associated with rapid population growth. The student researcher will join an interdisciplinary team, applying these models to examine the implications of adopting water-conserving irrigation technologies on spatiotemporal patterns of (1) water use, (2) crop yield, (3) agricultural energy consumption, and (4) saturated areas serving as intermittent habitat for waterfowl under future scenarios of climate and land use change.

See details at the following link, which includes instructions for interested students: <http://leaf.boisestate.edu/doctoral-assistantship-modeling-fews/>

Potential degree tracks for the successful candidate include Boise State's PhD programs in Ecology, Evolution and Behavior (EEB; new) and Geosciences.

Thanks!
Lejo

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