



WATER for the SEASONS

"A Program for Sustaining Water Resources in a Changing Climate"

POST-DOCTORAL RESEARCH POSITION

Agent-based Modeling for Collaborative Modeling Project on Climate Resilience on the Truckee/Carson River System

The *Water for the Seasons* project is a National Science Foundation / USDA funded project that is using collaborative systems modeling efforts to better understand how to increase resilience of snow fed upland arid river systems in the western United States to climate variability. The project focuses on integrating climate models, groundwater and surface water models, and models of human decision making in response to changing hydro-climatic conditions. Candidates for this position should have experience integrating behavioral models in natural/engineered systems using agent-based modeling and have worked in interdisciplinary research settings. The post-doctoral position is jointly shared with the Academy for the Environment at the University of Nevada Reno and United States Geological Survey (USGS). The position has an initial appointment of one year, with the option of renewal for a total of three years, subject to satisfactory performance. Salary and benefits are highly competitive. Additional information on the Water for the Seasons project can be found at: environment.unr.edu/academy/waterfortheseasons/index.html.

Training and Experience: Applicants should have a Ph.D. in a relevant discipline with expertise using agent-based models to simulate human decision making in natural resource systems. While the specific disciplinary training is open, it is expected that the applicants will come with a Ph.D. degree in public policy, political science, hydrology, economics, environmental psychology, sociology, natural resource management, civil and environmental engineering, or computer science. The candidate should have experience with agent-based model applications of human behavioral response to environmental change. The ideal candidate will demonstrate familiarity with models of bounded rationality and integrating ABMs with models of natural/engineered systems. The ability also to work with empirical and survey data is desirable. Research will be conducted on a number of themes related to system-level models of resilience including, but not limited to; (i) behavior of agricultural producers under conditions of water scarcity, (ii) response by water managers and water rights holders to changing climate/hydrological conditions, and (iii) organization learning and institutional change.

Application Process: Applications should be submitted as a single PDF document including: (i) 1 page cover letter, (ii) 1-page research statement explaining your interest in the project and experience with ABMs and integrative modeling, (iii) curriculum vitae, (iv) contact information for three references, (v) up to two examples of peer-reviewed publications illustrating the use of ABMs. For additional information please contact Derek Kauneckis, (kaunecki@ohio.edu), Richard Niswonger, (rniswon@usgs.gov), or Maureen McCarthy (mimccarthy@unr.edu). Completed application should be sent to Maureen McCarthy at: waterfortheseasons@gmail.com. Please include "Application for Post-doctoral position WFTS" in the subject line of the email. The positions will begin in August 2015. For full consideration applications should be received by May 30th, however applications will be considered until the position is filled.