

Idaho Scientists Help Transform Water Stewardship of Social-Ecological Systems on an International Scale



Photo looking north of Portneuf Valley and Pocatello, southeastern Idaho

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| <i>Award Title</i> | EPSCOR RII Track 1: Managing Idaho's Landscapes for Ecosystem Services |
| <i>NSF Award Number:</i> | OIA-1301792 |
| <i>Principal Investigator:</i> | Janet Nelson |
| <i>Lead Institution Name:</i> | University of Idaho |
| <i>Start Date:</i> | June 15, 2013 |
| <i>End Date:</i> | November 30, 2018 |
| <i>Highlight Submission Date:</i> | March 27, 2018 |

What is the outcome or accomplishment?

A transdisciplinary, international team of scientists (Water SES-Water scarcity and governance across Social-Ecological Systems) is comparing the social-ecological interactions causing and caused by water scarcity and governance across international place-based research sites (including US-Idaho) to propose sustainable water use and governance solutions.

What is the impact?

Generating the scientific and policy-relevant knowledge of social-ecological dynamics needed to achieve sustainable stewardship of social-ecological systems will be beneficial on local and global scales, including preserving human benefits from the natural environment (ecosystem services) in concert with urban expansion (local) and in the mitigation of poverty.

What explanation/background does the lay reader need to understand the significance of this outcome?

WaterSES is an endorsed project within the Program on Ecosystem Change and Society (PECS). PECS-WaterSES is an international, interdisciplinary group working to understand and compare the social-ecological dynamics causing and caused by water scarcity and governance across international research

sites in Spain, China, South Africa and the US (Oklahoma, Texas and Idaho). WaterSES sites have different climates, water needs and socioecological dynamics, but are all experiencing new regional, societal demands for limited water resources. The goal of this working group is to propose sustainable water use and governance solutions

The WaterSES project is led by Dr. Antonio J. Castro, Idaho State University, as part of Idaho's statewide NSF EPSCoR Track-1 Research Infrastructure Improvement (RII) award. It entails expertise of a team of researchers to link terrestrial and aquatic ecology to ecosystem services flows and tradeoffs and resilience thinking to inform adaptive governance towards sustainability, and strategic partnerships (from local to international) to achieve co-production of knowledge and innovative solutions.