



Tri-State Meeting Idaho NSF EPSCoR Climate and Water Economics and Policy Subgroup

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Economics and Policy Team

- Dan Ames (Civil Engineering, ISU)
- Levan Elbakidze (Agricultural Economics, UI)
- Scott Lowe (Economics, BSU)
- Siân Mooney (Economics, BSU)*

*Group Lead

- Additional Hires
 - Economist (BSU) – Kelly Coburn (Start Fall 2009)
 - Regional Scientist/Water Policy position (UI)
- John Antle (Economist – External Mentor, Montana State University/Oregon State University)



Research questions

- Address linkages between land use change, population growth and climate driven changes in water supply and demand

- Integrate economic and bio-physical models
 - How will changes in the timing and variability of water affect land use, urban growth, and water management?
 - How will changes in water availability affect conjunctive use of water and the relative value of surface water and groundwater rights

Research Thrust Areas

Integration of economic models with biophysical models

- **Conjunctive Water Management**
 - How is water allocation for managed recharge affected by hydrologic and economic parameters
- **Regional Demand for Irrigation Water**
 - Forecast irrigation water demand in response to changes in climatic and economic parameters
- **Water supply security (probability of supply being met as a result of changes in weather and climate)**
 - Web based interface
 - Possible inter linkages with models of agricultural loss
- **Role of water infrastructure in mitigating adverse effects of climate change (agricultural productivity and composition)**
- **Climate Change drivers – impacts on water quality**
 - Part of broader project examining environmental risks to residents of Treasure Valley

Proposed by existing faculty (new faculty will add to/complement these themes)



Anticipated outcomes

- Improved integration of economics and policy with biophysical data
- Greater expertise in economics and policy related to water resources
- Formation of mixed discipline collaborations that can be leveraged for future related research
- Increased profile of ID research teams in addressing policy questions of national/international importance
- Additional graduate program opportunities