

Steven Stewart

Statement of interest in WAS*IS workshop

My interest in climate and weather research began the second year of graduate school when I worked on a project to examine the social value of more accurate mapping information for USGS. The issues in that study were that soil erosion from episodic weather events combined with existing management practices (extensive over grazing) led to severe erosion and subsequent siltation in downstream reservoirs. That project lasted only a few months and I moved back to more traditional issues in environmental economics, but it led me to start thinking more broadly about the value of scientific information in general.

As an economist working broadly in the area of water resources, most of my current research considers water issues and typically examines cases where decisions are made under uncertainty with respect to natural systems or social responses to naturally occurring events. Some of my work has involved directly calculating human values for naturally occurring but uncertain (in a scientific sense) events such as floods, while other components have involved calculating values, where individuals may be uncertain about the benefits they may receive from a policy (such as a policy to combat global warming). These research questions led me back to the natural hazards literature several years ago and I've had an interest in weather and climate since then. I've attended the AMS and AGU meetings in an attempt to collaborate with other interested researchers and I've written a few climate or weather-themed proposals but I have not made a good connection with the natural hazards community. Participation in the WAS*IS workshop would help me to make connections with other researchers, understand social issues related to climate/weather research, and learn how I can make economic tools of use to the natural hazards community. I also hope that I would be an asset to the workshop; unlike many economists, I tend to think of economics more as a set of tools rather than an assumption of how the world *should* operate – this perspective seems to be more in-line with other social sciences.

Some of the topics I would hope to discuss are: 1) methods to evaluate social impacts for weather and climate events; 2) receive feedback on ways to introduce alternative economic approaches to evaluating economic impacts, such as non-market valuation; e.g. calculating the expected value of the economic impacts of a natural disaster (dollar losses and foregone economic activity) does not capture the change in well being that individuals will suffer when they must endure a natural catastrophe. The tools of non-market valuation can measure these changes in well being; 3) learning methods to communicate hazard risks to different types of stakeholders, from emergency response personnel down to the average citizen; 4) How do we encourage institutions to adapt to new weather/climate understanding? and 5) Dynamic simulation models are becoming increasingly important as a means of understanding complex systems and are useful for demonstrating the salient aspects of those systems to policy makers and stakeholders – how can they be used in a natural hazards setting?

What else should you know about me? Well, I'm easy-going, creative, energetic, and I have a strong desire to join the hazards community! I hope you'll consider me!