VACANCY: Climate Change Adaptation Graduate Student Assistantship

Are you interested in how society is preparing for and adapting to the impacts of climate change? Do you want to work at the interface of climate science producers and science users? If so, you may be interested in joining our project! Our study seeks to help resource managers make decisions based on future projections of climate change risks. We are working with practitioners managing water and air quality to find out their needs and working with scientists to find out how projections of climate-driven extreme events can be provided in useful ways for practitioners.

Project: Integrating Information from Climate Scientists and Resource Managers

To date, extreme events have been defined by scientists through a top-down approach, relying on observations for current extremes and climate model projections based on future scenarios for their expected changes. These abstract definitions of extreme events are based on a corresponding characterization of what is “normal” and perhaps the choice of a threshold (e.g., a percentile of a historical distribution for a given climate variable) beyond which would represent an extreme event. However, there are not necessarily direct connections between these abstract definitions and what is extreme in terms of impacts that challenge resource management.

The work will include bottom-up identification and assessments of extreme events and their impacts based on surveys and interviews of regional and local air and water quality agencies in California, coupled with top-down assessments of extreme events from downscaled climate model projections and analysis of past climate data. The analysis will focus on several key risks for air and water quality managers. This project seeks to identify what are the key types of information about the risks of projected extreme events that decision makers need from climate scientists. The first (more immediate) goal is to learn how managers define extreme events, how they have responded to them in the past, and what information and form would make the information from climate science useful and usable. This information will be collected via survey. We will then conduct several in-depth case studies across California to work with resource managers and scientists to co-create relevant climate indicators. The second longer term goal of the study is to develop a decision support tool to help figure out how to align practitioners’ expectations with the information climate change science can provide - and how to articulate the needs.

Position

We are hiring a graduate student for a two and a half year period to assist with the study and, ideally, carve out part of it as their dissertation or thesis project. During the school year, the appointment is for 50% time, covering full tuition (for a California resident). During summers 2015-2017, the appointment is for 100% time. During Summer 2015, the GSA will help analyze and interpret survey results and design case studies. Beginning in Fall 2015, we will begin case studies around California. The research project is hosted by the Policy Institute for Energy, Environment and the Economy and financed by the US Environmental Protection Agency. The work will include opportunity for publication of academic articles and presentations to diverse audiences.
Eligibility requirements

- Graduate student enrolled at UC Davis
- Skilled or knowledgeable in qualitative and quantitative social science methodologies
- Knowledge of natural science
- Interest and ability to conduct interdisciplinary research
- Excellent communication skills – both written and oral

Criteria for selection

- Analytical ability (as demonstrated in reports, papers, or other presented or written works)
- Communication skills
- Experience and knowledge related to the project topics
- References

How to Apply

- Application materials include (1) resume or CV; (2) cover letter; and (3) one page essay describing your interests in the project, stage in education, connection of the project to your thesis or dissertation work (if any), and experience in social science research. Any letters of recommendation, please send separately from the recommender.
- Submit application materials to Julia Ekstrom jekstrom@ucdavis.edu by May 1. Include the subject line of the email “CCA GSA APPLICATION”. Earlier the better.