UC WATER Security and Sustainability Research Initiative
Invitation for UC Collaborators

The *UC WATER Security and Sustainability Research Initiative* is focused on strategic research to build the knowledge base for better water-resources management. Unprecedented climate change, population growth and changing landcover are greatly altering the water cycle, with unprecedented impacts on human uses of water and water pathways through the landscape. In January 2015 the University of California established the UC WATER Initiative to address these issues. UC WATER brings researchers together from multiple University of California campuses and disciplines to focus coordinated efforts on water-resources challenges extending from headwater mountain basins to valley groundwater systems to water use by agriculture and cities.

UC WATER was started by researchers from four campuses – Merced, Davis, Berkeley, Santa Cruz – and aims to engage additional colleagues from these and other campuses in the initiative. The UC WATER co-directors (Roger Bales and Josh Viers), and four campus directors (Martha Conklin, Merced; Graham Fogg, Davis; Mike Kiparsky, Berkeley; Andy Fisher, Santa Cruz) invite additional investigators and collaborators to join in the research and leverage UC WATER resources. Base funding for UC WATER is provided by the UC Office of the President under its Multicampus Research Programs and Initiatives (MRPI). Additional leveraged support comes from a variety of state, federal and local sources. It is envisioned that UC WATER will become part of a sustained partnership between UC and the water management community in the state.

Over the long term, five overlapping and integrated research activities will guide work during the initial phase of the UC WATER, each with multiple studies.

- Developing and applying novel methods for water accounting
- Incorporating climate change into water-resources management
- Incorporating landscape characteristics in watershed analyses of water supply and quality
- Demonstrating the power of enhanced water information for research and decision making
- Valuation of impacts of water information and technology on water decision making

These require disciplinary integration and cross-campus collaboration, including exchange of data, personnel, tools and methods; and will use UC WATER resources to leverage and augment funding. The hallmark of UC WATER will be research collaboration and partnerships with stakeholders facing critical knowledge gaps involving water management. This research can only be done under an umbrella that facilitates sharing of data, managing interdependencies and facilitating common research goals.

For the first year, UC WATER is focusing on activities that will provide near-term results, seed longer-term research, and build the sustainability of the initiative. These activities are

1. Water-resources information and accounting system
2. Groundwater institutions, resources and technology
3. Headwater management
4. Water-energy nexus

Further information on the near-term and longer-term research plans are posted on the UC WATER web pages at http://ucwater.org/research. Current UC WATER investigators and an invitation to join UC WATER are posted on our web pages at http://ucwater.org/people.

At this time UC WATER is also announcing a Challenge Grant Funding Opportunity invites investigators to apply for a one-year Challenge Grant to further the UC WATER research activities, enhance cooperation among campuses, and facilitate critical California water-resources research that can lead to external funding focused on the same. See http://ucwater.org/research.