

Advanced Water Education Workshop
July 10-11th, 2013

Contact Information for the Workshop Organizers:

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Speakers (in order of their presentations):

Dr. Mike Crimmins,

Associate Specialist Arizona Cooperative Extension
University of Arizona

Dr. Crimmins is on the faculty of the Department of Soil, Water, and Environmental Science at the University of Arizona and is a Climate Science Extension Specialist for Arizona Cooperative Extension. In this position he provides climate science support to resource managers across Arizona by assessing information needs, synthesizing and transferring relevant research results and conducting applied research projects. His extension and research work supports resource management across multiple sectors including rangelands, forests/wildfire, and water resources as well as informing policy and decision makers. This work aims to support managers by increasing climate science literacy as well as developing strategies to adapt to a changing climate. He also serves as a drought monitoring expert on the Arizona Governor's Drought Task Force and has worked with counties across Arizona to implement drought preparedness and impact monitoring plans.

Dr. Jim Leenhouts,

Acting Director,
Arizona Water Science Center)
United States Geological Survey,

Jim's graduate work focused first on the development of techniques to use isotopic ratios of boron as a co-migrating tracer to track and identify sources of nitrate contamination in groundwater. Dissertation work examined soil-water/plant interactions with an objective to develop techniques for using plants as 'samplers' of geochemical signatures in soil and groundwater.

Jim joined the USGS Arizona Water Science Center as a hydrologist in 2000. Since 2007, Jim has served as the Center's Associate Director and Investigations Section Chief. Between 2000 and 2007, Jim worked first on three projects in the Upper San Pedro Basin. The first was to quantify the groundwater and surface-water requirements of the riparian vegetation and the second was to quantify stream-aquifer interactions as part of the groundwater model development. Following these projects, Jim led the "Section 321" project that evaluated the water budget and hydrogeology for the San Pedro basin and summarized findings in annual reports to congress. A key aspect of this work was interpreting the wide

variety of data collected and working with the Upper San Pedro Partnership to assess progress toward sustainable withdrawals of groundwater. Subsequently, Jim has worked in the Verde River basin to explain surface-water/groundwater interactions as represented by the USGS Northern Arizona Regional Groundwater Model. Currently, Jim is acting as Director of the Arizona Water Science Center.

Central Arizona Project

<http://www.cap-az.com/>

Central Arizona Project is designed to bring about 1.5 million acre-feet of Colorado River water per year to Pima, Pinal and Maricopa counties. CAP carries water from Lake Havasu near Parker to the southern boundary of the San Xavier Indian Reservation southwest of Tucson. It is a 336-mile long system of aqueducts, tunnels, pumping plants and pipelines and is the largest single resource of renewable water supplies in the state of Arizona.

Dr. David Sampson,

Research Scientist, Decision Center for a Desert City
Arizona State University

David wanted to share that he is a Systems Modeler; a person who can visualize functional relationships among processes in time and space, and then write computer code to mimic the system (any system). He puts his skills to use as the lead WaterSim developer for the Decision Center for a Desert City (DCDC). Officially he is a Research Associate and Senior Sustainability Scientist in the Global Institute of Sustainability (GIOS).

David holds an M.S. from NAU in Forest Science and a Ph.D. from Colorado State University in Forest Science-Systems modeling. His graduate work focused on forest ecosystem structure and process, leading him to start his career as a biogeochemical process modeler. He has held post-doctoral positions at North Carolina State University and at Virginia Polytechnic Institute and State University (VPI). And, he was, briefly, a visiting Professor at the University of Antwerp, in Antwerp Belgium.

Dr. Ray Quay,

Director of Stakeholder Relations, Decision Center for a Desert City
Arizona State University

Ray has been associated with the Decision Center for a Desert City project since 2004 as a stakeholder, advisor, and researcher. In his former position as an Assistant Director of the Water Services Department for the City of Phoenix, Ray was involved with DCDC in stakeholder outreach, water demand and heat island research, and in the application of climate change science and research to public adaptation policy and programs. Ray joined the DCDC project in 2010 as an academic professional. His involvement will now include expanding the capabilities and facilitating the use of WaterSIM as a research and public policy tool, expanding DCDC's stakeholder outreach with water managers and land use planners, facilitating the initiation and development of academic research that is applicable to current and future public policy issues, and participating directly in various DCDC supported research. Ray's research interests include advanced scenario planning, anticipatory governance, climate change impacts and adaptation, water demand analysis and models, regional growth, and visualization of sustainability and uncertainty.

Dr. Dave White,

Co-Director, Decision Center for a Desert City,
Arizona State University

Dave White is associate professor in the Arizona State University (ASU) School of Community Resources and Development and Director of the National Science Foundation's Decision Center for a Desert City (DCDC), which studies water-management decisions in the face of growing climatic uncertainty in central Arizona. Dr. White also holds appointments at ASU as Senior Sustainability Scientist with the Global Institute of Sustainability and affiliate faculty with the Consortium for Science, Policy, and Outcomes and the School of Public Affairs. Dr. White's research focuses on developing theory and methods for linking knowledge to action for sustainable resource management. With DCDC, he has developed and studied processes, outcomes, and institutional forms of boundary organizations for the co-production of knowledge and decisions; identified divergent perspectives between stakeholder groups at the science-policy nexus; and tested competing methods for gathering information on sensitive topics from decision makers. This work has contributed to the development and refinement of new tools and techniques for collaborative environmental decision making such as DCDC WaterSim. Dr. White is a recipient of the ASU President's Medal for Social Embeddedness. He received his Ph.D. in Forestry from Virginia Tech.