

Title: Effects of Climate Uncertainty on the Development and Evaluation of Adaptation Strategies

The Sacramento-San Joaquin Basins Study was performed to address the effects of 21st century uncertainties in climate and socioeconomic conditions on the management of urban, agricultural and water related resources in the Central Valley and Central Coast regions of California. A system risk and reliability assessment was performed. To address the identified risks, portfolios of a diverse water management actions including demand management, supply augmentation, reuse, desalination, watershed management, storage and conveyance, and adaptive system operations were developed and evaluated to determine their effectiveness in addressing potential risks in seven major water resource management categories. This work explores the effects of climate uncertainty on the effectiveness and tradeoffs between the portfolios and demonstrates how this information may be used in developing and evaluating multi-objective adaptation strategies.

Presenter: Michael Tansey, United States Bureau of Reclamation

Michael Tansey is the Regional Climate Change Coordinator working in the Division of Planning at the Bureau of Reclamation Mid Pacific Regional Office in Sacramento where he has worked as a hydrologist, water resource modeler, planner and research scientist since 2000. His professional experience includes more than 30 years working for government, consulting and academic institutions. He received a BS in Agriculture from Montana State University, MS in Hydrology from New Mexico Tech and PhD in Hydrologic Science from UC Davis. His personal interests include sailing, soccer, photography, and traveling to exotic lands.