

Water Utility Climate Alliance

Presentation at “Public Water Supply Utilities
Climate Impacts Working Group”

WORKSHOP TWO

Thursday, January 20, 2010

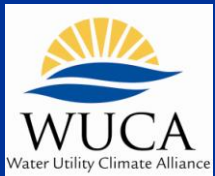
Alison Adams, Source Rotation and
Environmental Protection Manager,
Tampa Bay Water

Water Utility Climate Alliance

- Seattle Public Utilities
- Portland Water Bureau
- San Francisco Public Utilities Commission
- Metropolitan Water District of Southern California
- San Diego County Water Authority
- Denver Water
- Southern Nevada Water Authority
- Central Arizona Project
- New York City Department of Environmental Protection
- Tampa Bay Water

WUCA is a consortium of water providers serving ten of the country's large metropolitan regions, working together "to improve research into the impacts of climate change on water utilities, develop strategies for adapting to climate change, and implement tactics to reduce greenhouse gas emissions."

We deliver water to 43 million Americans.



Water Utility Climate Alliance Objectives

I) Inward Looking

- Develop awareness of climate change impacts on temperature, precipitation, climate variability, drought, snowpack, sea level, water quality, groundwater, etc
- Identify system vulnerabilities to these factors
- Integrate climate change risk assessment into strategic and capital planning
- Inform ratepayers of our findings - and potential costs to them



Water Utility Climate Alliance Objectives

2) Outward Looking

- Assess the state of climate science
- Determine best approaches to utility decision making
- Influence climate change policy, esp. at federal level
- Influence climate change investments, esp. at federal level
- Seek early, functional, evolving, and impactful conversations about all of the above with climate scientists and agency leaders

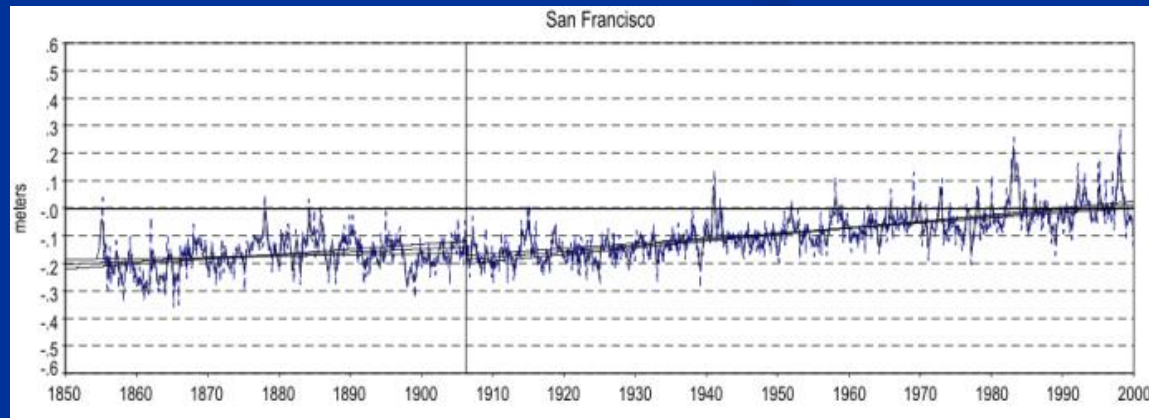


A core objective...

“Actionable Science”

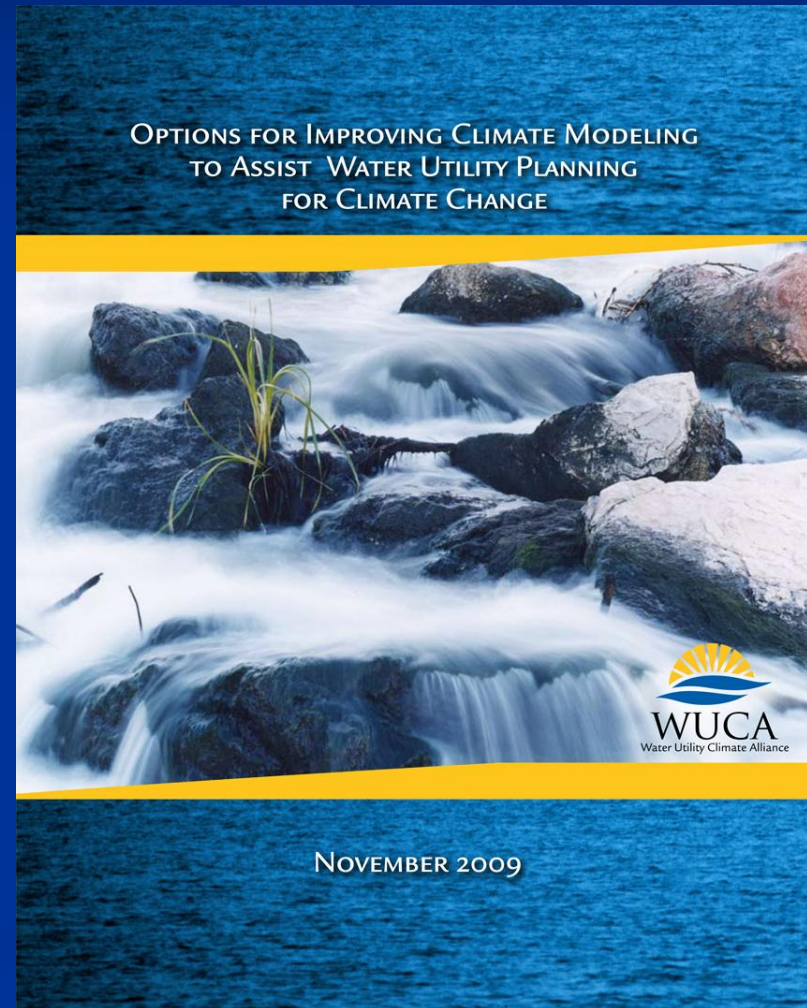
A Working Definition:

Data, analysis, and forecasts that are sufficiently predictive, accepted and understandable to support decision-making, including capital investment decision-making.



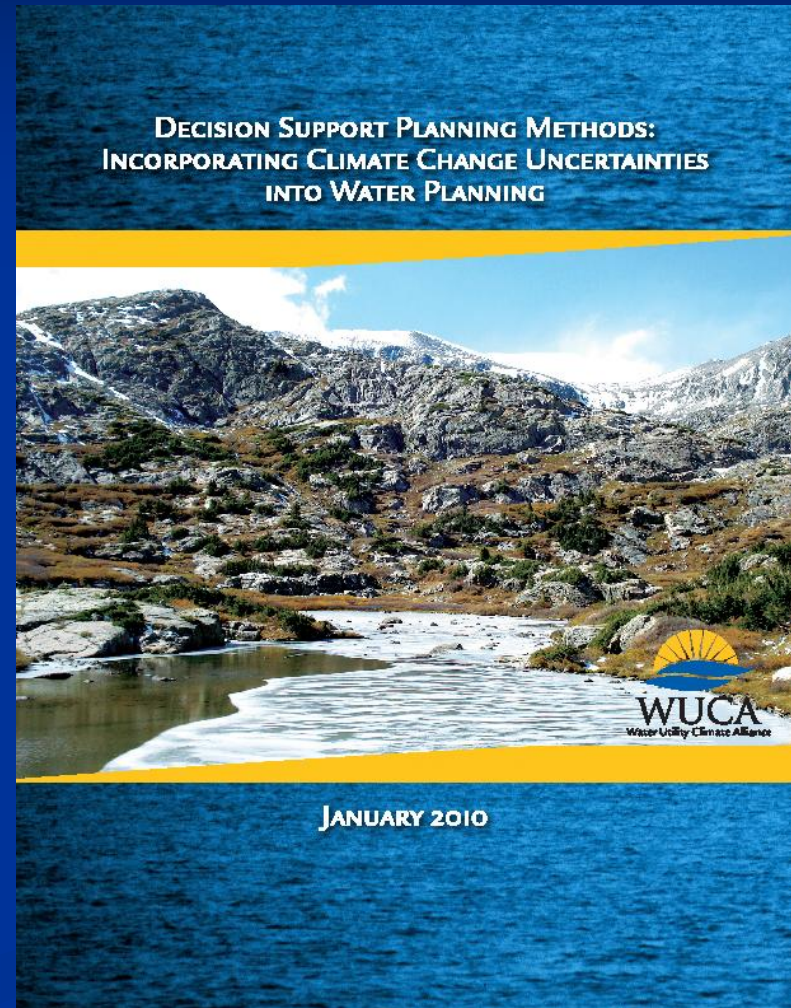
Water Utility Climate Alliance

- White Paper #1:
- “Options for Improving Climate Modeling to Assist Water Utility Planning for Climate Change”
- *Released December 2009*
- *www.wucaonline.org*



Water Utility Climate Alliance

- White Paper #2:
- “Decision Support Planning Methods: Incorporating Climate Change Uncertainties into Water Planning”
- *Released January 2010*
- *www.wucaonline.org*



Piloting Utility Modeling Applications (PUMA)

Five Utilities

San Francisco PUC

Seattle Public Utilities

Tampa Bay Water

Portland Water Bureau

New York City DEP

Four RISAs

Cal-Neva (Scripps – Cayan, Dettinger)

NE (Columbia, et al – Palmer, Horton)

SE (Univ of Fla, et al – Graham)

NW (Oregon State, et al – Mote)

Modeling Advisory Committee

Phil Duffy (Climate Central); Ed Maurer (Santa Clara); Tom Johnson (EPA); Levi Brekke (BoR); Linda Mearns (NCAR); John Abatzoglou (U. Idaho); Mike Dettinger (Scripps); Claudia Tebaldi (Climate Central)

Project Mgr, WUCA: David Behar

Project Mgr, RISAs: Phil Mote

PUMA Project Objectives

- Identify state-of-the-art climate modeling tools and techniques for use in pilot assessments
- Articulate the uncertainties and the implications of those uncertainties for planning
- Acquire climate projection data in a form and scale that can be used by downstream utility tools
- Build national RISA collaboration via relationships across the four pilot regions
- Inform national dialogue regarding how current climate science meets or doesn't meet assessment needs of users
- Develop climate services best practices



**Piloting Utility Modeling Applications
(PUMA)
Workshop 1 December 2010**

