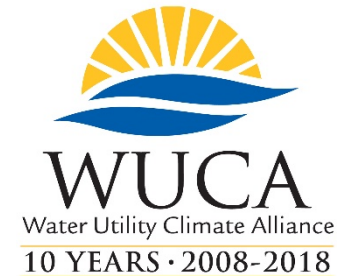**Building Resilience to a Changing Climate:**

A Technical Training in Water Sector Utility Decision Support

WUCA
Water Utility Climate Alliance
10 YEARS · 2008-2018

Training Participant Experience and Challenges

Brad Spangler, Meridian Institute

Participant Overview

- Participants cover a variety of backgrounds including:
  - Government (Local, State, Federal) (32%)
  - Drinking Water Utility (21%)
  - Combined Utility (18%)
  - Wastewater Utility (4%)
  - Academia (4%)
  - Consultants (4%)
  - NGOs (4%)
  - Professional Associations (4%)
  - Other (11%)

- *NOTE: Based on 28 responses out of 40 surveys distributed.*

Pre-Training Survey: Group Composition

- Primary Job Responsibilities:
  - 46% responsible for climate adaptation planning, climate mitigation, and sustainability
  - ~43% responsible for water resources, water demand, and long-term planning

- Other Significant Job responsibilities:
  - Wastewater/stormwater management
  - Research
  - Engineering / capital projects
  - Operations and maintenance
  - Environmental planning
  - Regulatory compliance
  - Public relations/communications

Pre-Training Survey: Science Use & Challenges

- Use of climate projections or climate change assessment information:
  - ~71% currently use some form of climate data
  - ~18% do not use climate data currently, but are interested in doing so in the future
  - No participants indicated their organization does not use climate information and will likely not in the future

- Challenges integrating climate information into work:
  - ~57% identified lack of training or understanding of climate data
  - Other key challenges (39% each):
    - Funding for climate adaptation evaluations and investments
    - Other utility priorities taking precedent

Pre-Training Survey: Science Use & Challenges

Other challenges integrating climate information into work:

- It is technically challenging
- We produce the science – we are not managers
- Have not yet established consistent policy direction or internal guidance on how to use climate change projections or how to determine which scenarios to consider
- Lack of confidence in projections
- Meeting regulations and compliance
- Culture of disbelief/denial

Pre-Training Survey: Learning Goals

- Climate Modeling:
  - How to identify the best information for use in utility planning (68%)
  - How to communicate about the complex uncertainty inherent in climate adaptation (43%)

- Uncertainty Planning Methods:
  - How to identify the best planning methods for use at my utility (46%)
  - A better understanding of robust decision-making approaches (46%)
  - A basic understanding of approaches to planning and decision making within a highly uncertain context (43%)

- Communicating Climate Science
  - Communications best practices for integrating climate science into utility planning operations (79%)

Small Group Discussion Format and Questions

- Small groups of 4-5 participants will cover:

  – Introductions (Name, Affiliation, Job Description)

  – Discussion Questions

    - What kind of drinking water, wastewater or stormwater utility climate adaptation planning issues are you currently working on?

    - What are the greatest challenges you are facing integrating climate information into utility planning and business processes?

    - What question do you most want to address during this training?

Small Group Discussion and Report Outs

- **Small Group Discussion (25 minutes)**
  - Get to know your group and cover discussion questions
  - Synthesize group responses to questions

- **Report Outs (25 minutes)**
  - Share who is in each group
  - Briefly describe key challenges and 1-3 questions your group would most like to address during the training