



Understanding the Utility Perspective

Common Utility Questions and Needs regarding Climate Information

Interviews with representatives from several key Florida Utilities during the conceptualization of the FloridaWCA revealed the following common Utility questions and needs regarding climate information. *

1. What we can DO to make climate science and tools more relevant and useable to public water supply utilities for planning both the supply of and demand for water?
2. How can we address the significant challenges presented by the uncertainty of the information, the credibility, complexity, and scales of existing data and models?
3. How can scientists help us understand, monitor and model climate variability/change and sea level rise at the local to regional scale, and assess the relevant uncertainties in this information, so it can be used to improve operations/forecasting/planning?
4. How can we better define “What are we trying to adapt to in Florida (what levels of sea level rise, what types of changes in precipitation and temperature)? Over what time? Over what space?
5. How can climate/sea level rise information, data and models help us to understand, predict and adapt to potential impacts of climate change and variability, including.
 - a. impacts on demand?
 - b. impacts of source water availability?
 - c. impacts on water quality?
 - d. impacts on infrastructure capacity?
6. How can we better recognize, understand and address key climate drivers related to changes in precipitation, temperature and evapotranspiration patterns and extreme events?
 - Impacts on fresh water demand: peak daily, weekly, monthly and seasonally
 - Relative effects of changes in temperature, precipitation, population, price, conservation programs as a predictor/forecaster for demand
 - Impact of sea level rise on demand (i.e. through population migration and/or higher water tables)
 - Impacts on reclaimed water demand

*Based on [Synthesis of Preliminary Phone Meetings to Discuss Potential Formation of a “Florida Public Water Utilities Climate Impacts Working Group” September, 2010](#)



- Impacts on surface water availability and quality (salinity, nutrients)
- Impacts on groundwater availability and quality (salinity)
- Impacts on appropriate timing for capturing and storing water

7. How can we better recognize, understand and address key climate drivers related to Sea level rise?

- Saltwater intrusion into well fields and surface water intake locations.
- Impacts of salt water intrusion on the potential use of reclaimed water for aquifer recharge.
- Impacts of salt water intrusion on the potential use of reclaimed water to restore coastal wetlands
- Impacts of sea level rise stormwater management and flood control
- Impacts of sea level rise on siting new infrastructure
- Impacts of sea level rise on population projections (potential sea-level rise related migration)
- Impacts on capacity of wastewater facilities (infiltration and inflow into wastewater system during high rainfall periods)
- Impacts on population projections (climate/disaster related migration due to increased incidence of extreme events)

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