

# Workshop #10, Oct. 30-31, 2013 Miami, Florida



<http://FloridaWCA.org>

..... to increase the regional relevance and usability of climate science, data, models, and tools for water suppliers and resources managers

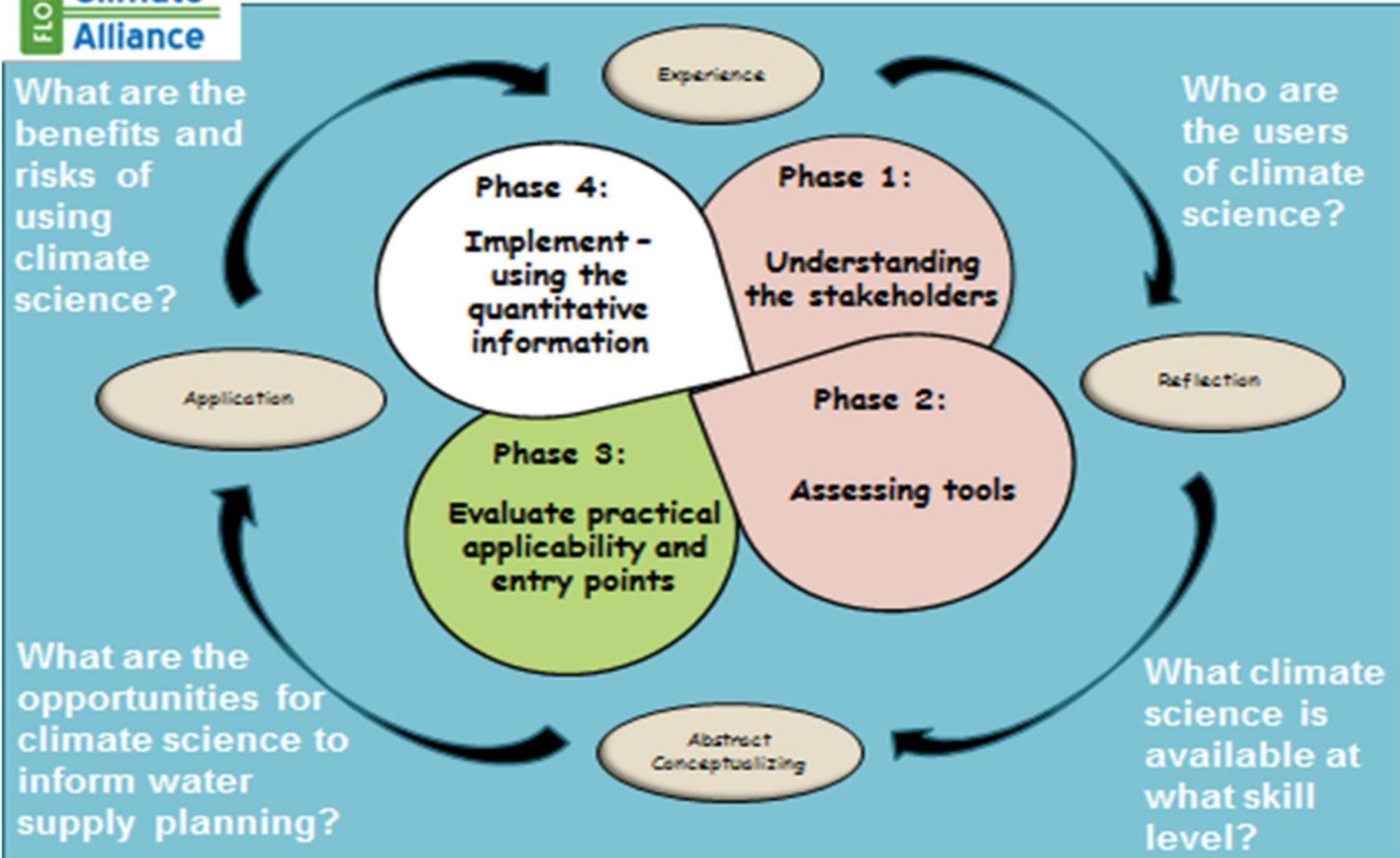


FloridaWCA is partially funded under a grant from the Sectoral Applications Research Program (SARP) of the National Oceanic and Atmospheric Administration (NOAA) Climate Program Office.



# Looking Back and Looking Forward?

## Working Group Conceptual Framework



# Community Building → Actionable Science



# Actionable Science-Utility relevant climate tools

Workshop **4** developed roadmaps to research”

- **SEASONAL SCALE PREDICTIONS**

Diagnose seasonal predictability and forecast skill in Florida

- **LONG TERM CLIMATE PROJECTIONS**

Evaluate the ability of downscaled reanalysis data on climate and hydrologic patterns in Florida

- **SEA LEVEL RISE**

Improve access to existing information



# Actionable Science-Utility relevant climate tools

Workshop

4

## SEA LEVEL CHANGE/RISE

### roadmap

- Improve access to existing information
- Catalog current projects and programs on SLC/R
- Explore how best to move from science to policy and action
- Recognize Information time frames for SCL decisions by water utilities

50 years --- Water treatment plant construction

20 years ---- Water supply planning

10 years ---- Comprehensive planning

3-6 years ---- Capital expenses

<3 years Operational

- Investigate the role of governance structures related to responses to SLR/C, especially with respect to expenses borne by a single utility.



## Emerging Issues...

- **Forecast Skill** : Can we trust the climate information?  
What's the risk of being wrong?
- **Communication**: Cautious about discussing climate science with policy & decision makers
- Beyond climate science → **Decision Science**  
Incorporate institutional planning & understand entry points
- Unique contexts → **Tailoring**

## Understanding the users and their contexts...

### ACTIVE LISTENING

Listen for planning requirements, timeframes, types of planning documents used... Consider the following questions:



1. When and why would “the anticipated users” be interested in climate science?
2. What are their key risks and vulnerabilities related to climate?
3. When/what are their key decision points?
4. When/where are opportunities for science to inform their process-decisions?
5. When/where are barriers for science to inform their process-decisions?

Jot down your thoughts in the matrix below from what you hear that will help us understand the users'.....

Interest in Climate Science?	Risks and Vulnerabilities?	Key decision points?	Opportunities for science to inform?	Barriers to being informed by science?

(turn over for more space)

# Understanding the climate information users and their contexts...

workshop

6

Things we have said in workshops before.....

- There is a lack of connection between planners and utilities – they come at things in different ways and measure things differently.
- A challenge on how to communicate information to the stakeholder – understanding risks and vulnerabilities... how can data contribute to the dialogue?
- Water Management Districts do not use forecast information rather, they use water levels. They would need information to be able to optimize water supply.
- How can we connect the climate information into the process of the particular organization?
- Timeframes matter.
- Can the information be tailored to the timing of operations?
- Another major question highlighted risks and uncertainty. How do you incorporate uncertainties in general?
- What are the risks of “NOT USING INFORMATION” compared to ‘USING WRONG INFORMATION’?

# How best to move from SLR/C science toward policy and action ?

workshop

4

Things we have said in workshops before when discussing SLR.....

- We tend to stumble when we need to affect policy.
- There is a disconnect between the technical world and the boardroom.
- We need to communicate better establish buy-in from the local governments and their representatives.
- Planners need to better understand the scientists to represent the information.
- The key for getting from science to policy is for us to gain a better understanding of what motivates decision makers, and then build on those motivations.
- Economic assessment is needed to understand SLC impacts on utilities.
- A major concern is the potential loss of tax base as SLC damages infrastructure and people move away.
- Identify critical infrastructure, vulnerable populations and properties.
- Communicate clearly that the worst case scenario is one with no action.
- Many local decision makers face conflicting interests – the opportunity to make money and increase the current tax base versus protecting people and properties from exposure to SLC.

## Objectives

- Explore partners' experiences with assessing sea level rise and efforts to address anticipated changes and impacts
- Understand how change factors influence what gets done about climate in the policy and regulatory arenas.
- Learn about the current science, tools/data/models, and issues related to sea level rise.
- FloridaWCA – Create an environment for sustaining the learning community, sharing information and networking.

Florida Water and Climate Alliance (FloridaWCA)  
WORKSHOP 10 –Agenda,  
Wednesday, October 30 – Thursday, October 31, 2013  
Miami Water and Sewer Department  
3071 Southwest 38th Avenue, Miami, FL 33136

**Overall Working Group Goal:** *Unfold the need for, and enhance the usability of, climate change and variability data and tools in the planning and operations of Florida's public water supply utilities.*

**Workshop Objectives**

1. Explore partners' experiences with assessing sea level rise and examples of modeling efforts to address anticipated changes and impacts (*User Perspective and Application*)
2. Understand perceptions, risk, and communication of Sea Level Rise issues, and the degree to which change factors influence what gets done about climate in the policy and regulatory arenas. (*Communication and Change*)
3. Learn about the current science, tools/data/models, and issues related to sea level rise. (*Science*)
4. FloridaWCA – Create an environment for sustaining the learning community, sharing information and networking. (*Group Building*)

**(Wednesday) October 30 - PM (12:00 PM – 4:30)**

LOCATION: Miami Water and Sewer Department, 3071 Southwest 38th Avenue, Miami, FL 33136

12:00 – Check in - *Please note that the meeting will not include lunch. I did not hear from many people regarding the option lunch ordering. Please make your own arrangements for lunch. We hope to get the meeting started promptly at 12:30.*

12:30 – 1:30 **Session 1:** FloridaWCA learning community

- Looking back and moving Forward- Lisette Staal
- Moving Science to Action – What does change management mean to us? Tracy Irani

1:30 – 2:30 **Session 2:** Practical applicability from the user perspective

- Presentation 1 – **Barbara Powell - Broward County** – “USGS modeling efforts (Variable Density and Storm water Inundation)”
- Presentation 2 – **Maurice Tobon - Palm Beach County** – “PBC Water Utilities and climate change, from infrastructure to involvement with local, national and international organizations”
- Presentation 3 – **Rhonda Haag - Monroe County** – “Modeling for Sea Level Rise in the Keys”
- Discussion

2:30 BREAK

2:30 – 3:30 **Session 3:** Case study MIAMI - Practical applicability from the user perspective

- Presentation 1 – **Bertha Goldenberg, Miami Dade Water and Sewer Department**, “Assessment of sea level rise and storm surge impacts”
- Presentation 2 - **Joseph Hughes, Ph.D. USGS**, “Urban Miami-Dade Surface/Groundwater Model Application for Sea Level Rise Evaluation”
- Discussion

3:30 – 4:30 **Session 4:** FloridaWCA learning community

- Moving science to action reflection- Discussion (Jessica Bolson)
- FloridaWCA Participant updates, new ideas, etc. (Lisette Staal)

Evening Gathering? TBD

**Florida Water and Climate Alliance (FloridaWCA)  
WORKSHOP 10 –DAY 2**

**(Thursday) October 31 - (9:00 AM – 11:00 AM)**

LOCATION: City of Miami Beach Public Works Department, 1700 Convention Center Drive, Miami Beach

9:00 – 11:00    **Session 5:** Miami - Field visit. – Evidence of sea level rise and mitigation projects they are implementing. Eric Carpenter, City of Miami Beach, Director, Public Works Department. **LOCATION: City of Miami Beach Public Works Department, 1700 Convention Center Drive, Miami Beach**

**(Thursday) October 31 - (11:30 AM – 4:00 PM)**

LOCATION: Miami Water and Sewer Department, 3071 Southwest 38th Avenue, Miami, FL 33136

11:30 – 1:00    **Lunch** (including time for FloridaWCA topics and participant updates) - *(optional lunch (Subway) arrangements on Wednesday afternoon)*

1:00 – 2:00 **Session 6:** Latest science, tools/data/models, and issues related to Sea Level Rise (Nicole Hammer-Hernandez , Keith Ingram)

- Presentation 1- **Jayantha Obeysekara, SFWMD** - "An update on sea level rise projections"
- Presentation 2- **Len Berry, Florida Atlantic University** – “A report on sea level rise adaptation based on implications for water management”

Discussion

2:00 – 2:15    **BREAK**

2:15 - 3:30    **Session 7:** Moving Science to Action - Organizational change and communication confronting perceptions and risk of Sea Level Rise issues facing Water resource managers, suppliers and public (Jessica Bolson, Tracy Irani)

3:30 – 4:00    **Session 8:** FloridaWCA Learning Community- what next? (Lisette Staal, All)  
Discussion: Next Steps, Reflection and Evaluation



# ACTIVE LISTENING -- Science to Action - Climate Science and Change in Organizations

*Please Circle one* that best represents your organizational affiliation: Utility      WMD      University      Government      Other

Organization	What can you tell about decision making in this organization?	What are the organization's -- Vulnerabilities to climate/sea level? Needs for climate information?	What are organizational barriers to putting climate science to action?
Broward County			
Palm Beach County Water Utilities			