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# WORKSHOP REPORT

## Workshop Ten

Wednesday, October 30 and Thursday, October 31, 2013

8:30 – 4:00pm

Prepared by

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UF Water Institute

[waterinstitute.ufl.edu](http://waterinstitute.ufl.edu)

Hosted by

Miami Dade Sewer and Water Department, Miami, Florida



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## Executive Summary

*The Florida Water and Climate Alliance (FloridaWCA) brings together interested stakeholders (public water supply utilities, local governments, water management districts and academic institutions) to increase the relevance and usability of climate change and variability data and tools to the specific needs of public water supply utilities and resource managers and planners. Initiated in 2010 by the UF Water Institute, in partnership with the Southeast Climate Consortium (SECC), Florida Climate Institute and the UF IFAS Center for Public Issues Education in partnership with six major public water supply utilities and three water management districts, the group continues to expand. Detailed information on the FloridaWCA is available the [FloridaWCA website](#).*

This is a report of the tenth workshop of the Florida and Water Climate Alliance ([all workshop reports are available on line](#)). It was the first workshop held in Miami, focused specifically on sea level rise and including a field trip. The specific objectives were to 1) Explore partners' experiences with assessing sea level rise and examples of modeling efforts to address anticipated changes and impacts (*User Perspective and Application*); 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*); Learn about the current science, tools/data/models, and issues related to sea level rise. (*Science*); and nurture an environment for sustaining the learning community, sharing information and networking. (*Group Building*). Twenty-six participants attended the workshop over the two day period. **(Appendix 1—participant list)**.

Specific outcomes included:

1. FloridaWCA participants discussed the need for clarification on the goals from The Florida Climate Institute (FCI) working groups (particularly on Water and Urban climate change) in order to best leverage these efforts for mutual benefit.
2. Tirusew Asefa (Tampa Bay Water) will explore potential connections for FloridaWCA at the Pacific Northwest National Laboratory <http://www.pnl.gov/> “to better understand how our stakeholder organizations view the usefulness of regional scale integrated modeling for decision support.”
3. The FloridaWCA presentations/panel in the UF Water Institute Symposium Water Supply Planning in a Non-Stationary World in the Symposium will be planned and highlighted on our website-FloridaWCA.org.
4. Suggested items of interest to be considered for the next FloridaWCA workshop include:
  - a) Adaptation action and application examples - field trip (reservoirs?)
  - b) Decision making and decision strategies
  - c) Recent Research updates
  - d) FloridaWCA Sustainability**

## Detailed Summary of Workshop 10:

### Florida Water and Climate Alliance (FloridaWCA), Workshop Ten Wednesday, October 30 and Thursday, October 31, 2013, 8:30 – 4:00pm

#### Background, Goals and Objectives:

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

Overall Goal of Workshops: The goal of each of the workshops is to create spaces for discussion, sharing and capturing knowledge from the multiple perspectives and contexts of tool providers, users, and ultimately policy makers that will contribute to increased relevance and usability of climate and sea level rise data and tools for water managers in Florida.

Specific Workshop Objectives: The specific objectives of this workshop were to:

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*)

The two day program included sessions focused on science, communication, group building and included a field trip. ([APPENDIX 2 – detailed 2-day agenda.](#))

#### Wednesday, October 30 – Day 1

##### Session 1: Introductions and FloridaWCA learning community

Wendy Graham, Director of the Water Institute, welcomed the group and recognized Miami Dade Water and Sewer Department (and in particular Bertha Goldenberg) for hosting this workshop. She then introduced [Doug Yoder](#), Deputy Director of [Miami-Dade's Water and Sewer Department](#), the largest utility in the state of Florida and one of the 10 largest utilities in the United States.. Doug, an early participant in the initial working group of the FloridaWCA, welcomed the group to Miami and provided a local context illustrating the challenges and importance of sea level rise to their operations and planning.

## 1.a Looking back and moving Forward

To kick off the workshop, Lisette Staal, Water Institute, made [a brief presentation](#) reflecting on the previous workshops and working group activities. A major focus of previous workshops, in addition to climate science and tools, was on understanding users, their contexts, and challenges of using climate information. Task groups had developed roadmaps focused on modeling efforts both long term and at a seasonal scale to improve forecasting, and sea level rise. This workshop would focus specifically on sea level rise and was planned drawing on participant's experiences and case studies to include a site visit (the first in our series of workshops).

One of the themes in the [Sea Level Rise technical group roadmap \(Workshop 6 report, Appendix 5, page 21\)](#) was to develop and implement a plan on how best to move from science to policy and action. The task group had identified the following needs:

- Economic assessment to understand SLC impacts on utilities.
- Understand potential loss of tax base as SLC damages infrastructure and people move away.
- Identify critical infrastructure, vulnerable populations and properties.
- Recognize and address conflicting interests (i.e., the opportunity to make money and increase the current tax base versus protecting people and properties from exposure to SLC/R).

In previous workshops, participants had already identified several issues impacting the actual implementation of what they know from science when planning for Sea Level Rise. They noted a disconnect between the “technical world and the boardroom” where there is a tendency to stumble when we need to affect policy. They suggested that planners need to better understand the scientists so that we can represent the information and communicate better to establish buy-in from the local governments and their representatives. Several topics were mentioned that require more attention in



order to better USE climate information. These included communication, regulations, costs (willingness to pay), political process, positions, confidence in the science, uncertainty of information and risk of using something new versus using the same old approach, and geographical - contextual differences which are quite pronounced between utilities.

## 1.b. Moving Science to Action – What does change management mean to us?

The second part of session 1 focused on the challenge of moving from science to policy and implementation. Climate science is a way to understand changes and processes to make more accurate predictions. How can this be made most useful to those needing to make decisions. One key is to look at organizations as systems, understand what motivates decision makers, and then build on those motivations to affect change. Tracy Irani's presentation [“Moving Science to Action – What does change management mean to us?”](#) focused on, change management theory to help participants see the importance of recognizing system vulnerabilities to climate and climate variability, exploring organizational barriers to putting climate science to action, and

understanding how decisions are typically made in various organizations, who is involved in making those decisions and perceptions on potential for climate information to help. She ended with a discussion prompting participants to think about – what can we take away and utilize? What is explanatory? And where do we go from here?

## **Session 2: Practical applicability from the user perspective**

The second session of the workshop included presentations from several user groups sharing s experiences and case studies, followed by discussion.



**Barbara Powell - Broward County**  
[“Broward/USGS modeling efforts: Climate change Planning ”](#)



**Maurice Tobon - Palm Beach County**  
[“PBC Water Utilities and climate change, from infrastructure to involvement with local, national and international organizations”](#)



**Rhonda Haag - Monroe County**  
[“Modeling for Sea Level Rise in the Keys”](#)



Participants noted key information on “listening guides” (see Appendix 3) to help focus, capture information focused on each of the organizations and encourage discussion following the presentations. Responses provided by participants helped to provide a basis for later sessions in the workshop.

### Session 3: Practical applicability from the user perspective- CASE STUDY MIAMI

**Bertha Goldenberg, Miami Dade Water and Sewer Department,**  
[“Assessment of sea level rise and storm surge impacts”](#)

**Joseph Hughes, Ph.D. USGS,**

“Urban Miami-Dade Surface/Groundwater Model Application for Sea Level Rise Evaluation”



### Session 4: FloridaWCA learning community- Moving science to action

The final session of the first day of this workshop provided time to reflect on the information shared throughout the day. What had we heard from several organizations about how they are currently addressing SLR. Participants were asked to reflect on what they heard, or had written on their listening sheets, throughout the day. Discussion focused on the conversation about climate change, variability and sea level impacts changed overtime at each of these organizations. There is a strong history of coming together about the issue of adapting to sea level rise, particularly in the Southeast with some excellent examples.



There is a need for better availability of materials, information (such as statewide salt water intrusion maps.....) and yet also still a question of investment in these and how to consider the effort needed for planning and the tools. Recommendations were made and people expressed interested in the need for technical peer review to make sure all assumptions and uncertainties are considered during planning and tool development. The situations in which each of the tools can be used, and ways to get this to a decision maker will require more than just tools and may involve a process.

Wednesday evening was spent in social gathering with good food, company and discussions.

**Thursday, October 31, 2015**

**Session 5: Miami - City of Miami Beach Public Works Department, Field visit. –**

Eric Carpenter, Director, Public Works Department City of Miami Beach spent the morning with the FloridaWCA participants sharing information on the City's evidence of sea level rise and mitigation projects they are implementing. Ironically, several participants were late in arriving due to flooded streets. Beginning with a presentation outlining the current situation, challenges and adaptation efforts, the group then toured the area.



**Lunch and FloridaWCA – updates**

**Session 6: Latest science, tools/data/models, and issues related to Sea Level Rise**

Presentations by Jayantha Obeysekera SFWMD and Len Berry, Florida Atlantic University brought information on current projections and efforts on sea level rise adaptation.

**Jayantha Obeysekera, SFWMD**

["An update on sea level rise projections"](#)



**Len Berry, Florida Atlantic University**

["A report on sea level rise adaptation based on implications for water management"](#)



## Session 7: Moving Science to Action - Organizational change and communication confronting perceptions and risk of Sea Level Rise

Reflecting on the new science, tools and current efforts presented throughout the workshop and seen during the field trip, Tracy Irani and Jessica Bolson facilitated a group discussion of issues facing Water resource managers, suppliers and public. There are challenges that remain for all that we need to continue to address..... better communication about climate change and variability and the science available to help address impacts, uncertainty in projections, extreme events, the changing landscape (, who will live here and how) and money?



Participants commented on issues shared throughout the two days that illustrated water resource planners and utilities are vulnerable to sea level rise, hurricanes and storm surge, tidal floods, saltwater intrusion, ecosystem impacts, demand uncertainties, demographics, drought, economic impacts and assets at risk. There are needs to deal with aging and poorly located infrastructure, population changes, land acquisitions, maintaining/ shoring up roads and bridges, and protecting assets at risk. Agencies are diverse in several ways including vulnerability to sea level rise, adaptation efforts being implemented, organizational culture and barriers to using climate science. In locations directly affected by issues of sea level rise and storm water inundation the need is more readily recognized and a strong interest in resilience planning and adaptation was clear. Participants noted that efforts being implemented and planned by Miami Dade and Broward are way ahead of the game in adapting to sea level issues largely due to its obvious impacts, technical staff, supportive leaders, sustained commitment, experience, and networks that are science driven.

They mentioned a shared need to impact current decision making by being better able to convince/persuade decision makers of the climate impacts and available tools. A resounding need noted was for ways to do that better. Several methods were mentioned including the role of visualizations and tools in supporting decisions, information exchanges (international), finding no-regrets investments, hurricane preparedness not called climate change, and resilience planning. Some of the techno-scientific tools being used or with strong potential that were mentioned included, Modeling, WEAP models, NOAA SLR viewer, Scenario planning, incorporating climate change and variability into emergency management planning, and participating in climate change adaptation and networks like the FloridaWCA and communicating to local boards, and translating technical ideas to policy makers.



## Session 8: FloridaWCA Learning Community- what next?

Discussion: Next Steps, Reflection and Evaluation

FloridaWCA is at an important juncture with the currently funded NOAA projects coming to closure in the next year. Lisette lead off a discussion by asking if our group has reached equilibrium, how do we see our role, and what is needed to ensure that we continue to provide participants with what they are interested in. There were several actions that were identified for follow-up and to bring the discussion of FloridaWCA sustainability back to the next workshop.

Actions included:

5. FloridaWCA potential links with Florida Climate Alliance water working group: The Florida Climate Alliance has established several working groups to move forward on a variety of issues. One of the groups is focused on WATER, and specifically on issues of urban climate change. Their interests are in connecting with stakeholder groups that can help inform their programs. FloridaWCA Participants discussed the need for clarification on the goals from FCI in order to best leverage these efforts for mutual benefit. Since the FCI working groups are beginning to meet, FloridaWCA agreed to have a group talk to explore potential role for FloridaWCA. **ACTION: FloridaWCA Group to connect with appropriate contacts in FCI (Jim Jones? Len Berry? Others?) to clarify interests and potential actions. FloridaWCA Group to follow-up include: Wendy Graham (lead), Alison Adams(TBW), Bertha Goldenberg (MDWS), and Kevin Morris (PRMWA).**
6. FloridaWCA outreach/ link to Pacific Northwest National Laboratory <http://www.pnl.gov/>: Tirusew Asefa (Tampa Bay Water) met with individuals at the Pacific Northwest National Laboratory that want “to better understand how our stakeholder organizations view the usefulness of regional scale integrated modeling for decision support.” Tirusew noted that they met with him by webinar and he has been working with them to share his experiences. He responded to a survey that will help them describe the experience of stakeholder engagement and how the insights gained can inform regional scale decision support tools in general. FloridaWCA participants agreed that it would be very useful to have them link with our group and suggested that perhaps for the next workshop, they could be invited to participate and make a presentation/discussion. **ACTION: Tirusew will lead this outreach effort, and will invite them to the next FloridaWCA workshop (or webinar). Others interested in exploring ways to leverage these efforts should connect with Tirusew ([Tasefa@tampabaywater.org](mailto:Tasefa@tampabaywater.org) or me ([Lstaal@ufl.edu](mailto:Lstaal@ufl.edu))).**
7. FloridaWCA at the [Water Institute Symposium](#) – February 11-12, 2014: Several FloridaWCA participants are scheduled for oral and poster presentations at the 4<sup>th</sup> Biennial Symposium focused on Sustainable Water Resources: Complex Challenges, Integrated Solutions. In particular, this Symposium will address Water Supply Planning in a Non-Stationary World. Mike Cullum is facilitating an interdisciplinary Panel addressing “Climate Prediction in Water Supply.” **ACTION: There is potential for a gathering of FloridaWCA sometime during the WI Symposium. A group agreed to explore and plan this opportunity. Wendylin Bartels (lead), Jessica**



**Bolson, Mike Cullum, and Nicole Hammer-Hernandez ( FCI)**

8. Next Florida Workshop – March potential in Tampa Bay or Peace River. **ACTION Lisette Staal with the Planning to schedule time, location and develop agenda for workshop. Planning Team = Lisette Staal (WI), Tirusew Asefa (TBW) and Kevin Morris (PRMWA).** If you are interested in volunteering for the planning team, please contact me ([lstaal@ufl.edu](mailto:lstaal@ufl.edu)) Some suggested items of interest to be considered for the next workshop:

1. Adaptation action and application examples - field trip (reservoirs?)
2. Decision making and decision strategies
  - a) understanding how decisions are made
  - b) help with strategies for decision makers- 'it is the science' (tool is scientifically sound, communicating alternative consequences.
  - c) examples of presentations/interactions with Decision makers) i.e., Graham presentation to Tampa Bay Water board.
  - d) Economics
  - e) Risk Management and Insurance Issues (have someone from insurance field come to workshop?) Please note the following links that Bertha Goldenberg shared after the workshop that might be of interest:  
<https://www.flseagrant.org/climatechange/coastalplanning/insurance-issues-coast/> <http://bit.ly/17xtjW1>.
3. Recent Research updates
4. FloridaWCA Sustainability
  - a) Website
  - b) Funding
  - c) Potential Linkages/ partnerships
    - o Pacific Northwest National Laboratory (presentation/discussion)
    - o FCI – FloridaWCA stakeholder perspectives - urban water management

Workshop Closure - Lisette Staal thanked the participants and Miami Dade Water and Sewer Department for hosting the workshop.

## APPENDIX 1: List of Participants – Workshop 10 – October 30-31, 2013

Last name	First name	Organization	email
Asefa	Tirusew	Tampa Bay Water	<a href="mailto:tasefa@tampabaywater.org">tasefa@tampabaywater.org</a>
Bartels	Wendylin	University of Florida/Florida Climate Institute/ Southeast Climate Consortium	<a href="mailto:wendylin@ufl.edu">wendylin@ufl.edu</a>
Berry	Leonard	Florida Atlantic University	<a href="mailto:berry@fau.edu">berry@fau.edu</a>
Bolson	Jessica	University of Miami	<a href="mailto:jbolson@rsmas.miami.edu">jbolson@rsmas.miami.edu</a>
Cullum	Mike	Saint Johns River Water Management District	<a href="mailto:mcullum@SJRWMD.COM">mcullum@SJRWMD.COM</a>
Flower	Kaitlyn	University of Florida - WIGF	<a href="mailto:kmarieflower@gmail.com">kmarieflower@gmail.com</a>
Goldenberg	Bertha	Miami-Dade Water and Sewer Department (WASD)	<a href="mailto:BMG@miamidade.gov">BMG@miamidade.gov</a>
Graham	Wendy	University of Florida Water Institute	<a href="mailto:wgraham@ufl.edu">wgraham@ufl.edu</a>
Haag	Rhonda	Monroe County	<a href="mailto:Haag-Rhonda@monroecounty-fl.gov">Haag-Rhonda@monroecounty-fl.gov</a>
Hernandez Hammer	Nicole	Florida Atlantic University	<a href="mailto:nicole.hammer@fau.edu">nicole.hammer@fau.edu</a>
Ingram	Keith	University of Florida/Florida Climate Institute/ Southeast Climate Consortium	<a href="mailto:ktingram@ufl.edu">ktingram@ufl.edu</a>
Irani	Tracy	University of Florida Center for Public Issues Education	<a href="mailto:irani@ufl.edu">irani@ufl.edu</a>
Morris	Kevin	Peace River Manasota Regional Water Supply Authority	<a href="mailto:KMorris@regionalwater.org">KMorris@regionalwater.org</a>
Obeysekera	Jayantha	South Florida Water Management District	<a href="mailto:jobey@sfwmd.gov">jobey@sfwmd.gov</a>
Pettit	Christopher	Palm Beach County Water Utilities Department	<a href="mailto:cpettit@pbcwater.com">cpettit@pbcwater.com</a>
Powell	Barbara	Broward County Environmental Protection and Growth Management Department, Natural Resources Planning and Management Division	<a href="mailto:BAPOWELL@broward.org">BAPOWELL@broward.org</a>
Slough	Deidra	University of Florida	<a href="mailto:sloughd@ufl.edu">sloughd@ufl.edu</a>
Staal	Lisette	University of Florida Water Institute	<a href="mailto:lstaal@ufl.edu">lstaal@ufl.edu</a>
Stefanova	Lydia	Florida State University/COAPS	<a href="mailto:lstefanova@coaps.fsu.edu">lstefanova@coaps.fsu.edu</a>
Teegarden Tobon	Robert Maurice	Orlando Utilities Commission Palm Beach	<a href="mailto:rteegarden@ouc.com">rteegarden@ouc.com</a> <a href="mailto:MTobon@pbcwater.com">MTobon@pbcwater.com</a>
Truer	Galen	University of Miami/Abess Center for Ecosystem Science and Policy	<a href="mailto:gtreuer@gmail.com">gtreuer@gmail.com</a>
Walsh	Virginia	Miami-Dade Water and Sewer Department	<a href="mailto:WALSHV@miamidade.gov">WALSHV@miamidade.gov</a>
Yoder	Douglas	Miami-Dade Water and Sewer Department ( <i>not available for Sept 22 meeting</i> )	<a href="mailto:yoderd@miamidade.gov">yoderd@miamidade.gov</a>
Carpenter	Eric	City of Miami Beach	<a href="mailto:ericcarpenter@miamibeachfl.gov">ericcarpenter@miamibeachfl.gov</a>
Holguin	Jorge	City of Fort Lauderdale	
	Todd	City of Fort Lauderdale	



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## APPENDIX 2: Workshop 10 -Agenda Florida Water and Climate Alliance (FloridaWCA)

**Wednesday, October 30 – Thursday, October 31, 2013**

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

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**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

5. Explore partners’ experiences with assessing sea level rise and examples of modeling efforts to address anticipated changes and impacts (*User Perspective and Application*)
6. 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*)
7. Learn about the current science, tools/data/models, and issues related to sea level rise. (*Science*)
8. 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

## APPENDIX 3 - Listening Guide

Page 1 of the listening guide.....



### 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			