

**Biscayne Bay Regional Restoration Coordination Team (BBRRCT)  
February 22, 2012  
South Florida Water Management District  
Miami Field Station  
9001 NW 58<sup>th</sup> Street  
Miami, FL 33188**

**All presentations posted at**

**[http://www.sfrestore.org/rrct/bbay/documents/bbrrct\\_handouts\\_past\\_022212](http://www.sfrestore.org/rrct/bbay/documents/bbrrct_handouts_past_022212)**

**Attendees:**

Dick Frost  
Cara Capp  
Kahlil Kettering  
Jerilyn Ashworth  
Phil Everingham  
Nancy Diersing  
Sarah Bellmund  
Mark Oncavage  
Dan Kipnis  
Steve Manley for Pamela Sweeney  
Jeffrey Mullins  
Theresa Woody

**Guests**

Brad Wells/OceanGate  
Barry White/ Citizens Allied for Safe Energy  
Rachel Scott/FPL  
Bertha Goldenberg/Miami-Dade Water and Sewer Department  
Betsy Wheaton/City of Miami Beach  
Maggie Fernandez/Miami-Dade County Office of Sustainability

**Welcome and Introductions**

Meeting called to order by Chairman Dick Frost at 10:08. He welcomed everyone to the meeting, thanked them for their service, and asked everyone to introduce themselves.

**Report from the Coastal Society Conference**

Member of the sub-committee planning the panel for the Conference offered the following report from the February 10 meeting:

At the October 2010 meeting, the team discussed raising our profile in the community in the coming year including participating in The Coastal Society (TCS) conference in June 2012.

An abstract was submitted and accepted for a session on the BBRCT in the track “A Social Approach to Examining our Coasts”. A sub-committee met on Feb. 10 to plan next steps.

The TCS 23 will take place June 3-6 at the Hyatt Regency in Miami. The theme is *Our Coasts, Our Heritage: Ecosystem Services for the Common Good*. The panel discussion will be within the track: *A Social Approach to Examining Our Coasts*. The panel will be 1.5 hours long.

The following members participated in person or by phone:

Eric Swanson  
Joan Browder  
Dick Frost  
Phil Everingham  
Patrick Pitts  
Sarah Bellmund  
Theresa Woody (staff support)

The public private partnership aspect of the BBRCT should be emphasized.

5 panelists were identified to give 15 minute presentations on 6 suggested topics:

Theme: Value to People/Social Approach

Introduction/Background Dick Frost or Patrick Pitts

(Include the benefit of the team)

Background Joan Browder/Sarah Bellmund

Planning Jim Murley/Eric Swanson/Mark Woerner

Science Joan Browder/Sarah Bellmund

(Emphasis on science relevant to ecosystem services)

Economics Grace Johns

Management Pamela Sweeney/Mark Lewis/Susan Markley/Patrick Pitts (in order of preference)

#### Discussion of panel report

The members present agreed that these topics should be discussed. Several supported the idea that we should use this opportunity to build a road show that we can use as outreach and education to civic organizations.

Theresa stated that the team missed an opportunity to educate another audience because we did not have a poster about Biscayne Bay and the team. Jim Murley requested the team be allowed to exhibit a poster at the November 2011 SFWMD WRAC meeting held in Miami but we do not have a poster. The members present expressed the desire that we should also build a poster that we can use in different settings like WRAC. Cara Capp will work with Lisa Krinsky and Jerilyn Ashworth to coordinate the poster. We will seek to unveil the poster at the TCS conference.

## **Update on Miami-Dade Water and Sewer Department Issues**

Chairman Frost welcomed Bertha Goldenberg, Assistant Director of the Miami-Dade Water and Sewer Department (WASD). She provided an update on the work of the Department. Her power point is posted on the team's web page.

The briefing covered these topics:

Water Use Permit Amendments

Water Conservation

Biscayne Bay Coastal Wetland Rehydration Pilot Project

Reuse Projects

Reclaimed Water for FPL

### Water Use Permit Amendments

The permit was approved by the SFWMD Governing Board in November 2007. It was modified in November 2010. The permit is for 20 years and expires in 2030. There are 52 limiting conditions.

Several water supply sources were identified: Biscayne and Floridan Aquifer, Reclaimed Water and Aquifer Storage and Recovery (ASR). The permit required the implementation of conservation, alternative water supplies, reuse projects and a water loss reduction program.

The County now has 40 MGD lower consumption than anticipated in original permit. The original water use permit was amended to reallocate water for the Southwest wellfields, extend some deadlines, calls for supplementing withdrawals from the Biscayne aquifer with water from the Floridan aquifer at the new South Miami Heights water treatment plant and cancels the South District Water Reclamation Plan project. The County anticipates a new permit in the next 3 months.

### Water Conservation

A five year Plan was approved by the Board of County Commissioners in April 2006. This Plan was then expanded to cover the 20 year period of the Water Use Permit.

The Plan, called "Every Drop Counts" includes the implementation of Best Management Practices (BMPs), a water loss reduction program, legislative initiatives and public outreach. People get very interested when the word gets around how much money can be saved with water conservation BMPs. There is a waiting list for assistance with indoor and outdoor residential retrofits and evaluations and rebates. The County has BMPs aimed at the industrial, commercial and institutional sectors of the economy as well.

The County has been tracking MGDs saved through BMPs. By 2010, over 8.4 MGDs have been saved through implementation of this program. The largest savings have come from Homeowners Association irrigation evaluations.

### Biscayne Bay Coastal Wetlands Rehydration Pilot Project

The pilot was required by the Water Use Permit. Planning for the pilot project started in 2007. The pilot units ran from November 2010 to April 2011. The final report was submitted by the County to SFWMD, FDEP and Biscayne National Park in October 2011.

Several treatment processes were tested. All treatment processes could be viable options; Treatment Train C would likely achieve removals to potentially comply with proposed water quality targets for direct discharge. Reverse Osmosis would likely be necessary as a treatment element in any treatment train to reclaim wastewater for enhancing or restoring the coastal wetlands.

### Government Cut Pipeline

The Government Cut Pipeline project analysis has revealed that the pipeline location where they want to route the waste water to Miami Beach is in really bad shape.

### Reuse Projects

Reuse projects were mandated as part of the 20 cup. Recharge of the Floridan aquifer to meet the Ocean Outfall Legislation requires 117 MGD of reuse (60% of baseline flow) by 2025. The County has been evaluating the feasibility of at the plant on Virginia Key. High level disinfection treatment will be required. At the South Dade plant, the County will implement a high level of disinfection prior to deep well injection.

### Reclaimed Water to FPL

The County entered into a joint participation agreement with FPL in July 2010. The agreement is to deliver up to 90 MGD of highly treated (disinfected) water to Turkey Point. The current implementation dates are 2011 and 2023. The County will pay for pipeline construction materials and labor.

### Discussion of the Presentation and any action needed

Questions were raised about the County's ability to be a local sponsor for re-use projects. Background on CERP planning was provided. CERP planning ultimately resulted in less water for Florida Bay and Biscayne Bay. The Department of the Interior (DOI) objected and the re-use projects were added to CERP.

However, the County's analysis of the conditions of their system reveals lots of problems with the pipes such as the possibility of future breaks in both water and waste water lines. The issue is how to get the money to replace these lines, not on added new financial obligations like being a local sponsor for any CERP projects. The financial reality of the County's budget has resulted in a much delayed implementation schedule for the re-use pilot projects.

WASD contracted with USGS for a ground water model for the Bay that should be done soon. When this model is complete, the County can do more analysis of sea level rise and saltwater intrusion. No wells are affected by saltwater levels at this time. The County has

another contract with USGS that resulted in a new saltwater intrusion line. More data is available at [www.envirobase.usgs.gov](http://www.envirobase.usgs.gov)

The type of treatment required to recharge the Floridan is a much lower standard than the treatment required to treat water to recharge the Biscayne aquifer.

The water from the SDWTP is to be the reclaimed water that the County will provide to FPL. If 90 MDG is committed to Turkey Point, where will more water to the Bay come from? An unfunded plan would build a parallel pipeline that would deliver water to the Bay. EPOCs continue to be a concern as this requires a higher level of treatment than chlorination. A totally separate train for water to the Bay may be cheaper.

There is enough water to deliver 90 MGD to Turkey Point and deliver water to the Bay with all the appropriate treatment trains to provide water to both receiving uses. The County's analysis is that it is more cost-effective for the County to pay for the pipeline to deliver the water to Turkey Point and to charge FPL for the reuse water just like any other customer. FPL will also pay for the maintenance of the pipeline.

There will be another analysis of the cost of reuse now that the plan is to recharge the Floridan aquifer as opposed to the Biscayne aquifer. The calculation is available in the consumptive use permit is in the supporting document but this analysis was done in 2009. With the changing reuse requirements, the 2009 analysis will be re-visited.

All Counties are required to have water conservation; a recent LEC workshop sponsored by the SFWMD showed water consumption projections and found that what Miami-Dade thought it would be using by 2010 is what is projected to be used in 2030!

There is an issue with the amount of water the County uses for wellfield protection as the rock mining interests object to the amount of water currently used.

There is annual report available from SFWMD on the result of the monitoring associated with FPL Units 3 &4.

If we want to know more about the Biscayne Bay Coastal Pilot, Bertha can help us arrange that briefing.

Sarah Bellmund suggested that a more integrated briefing be provided on the groundwater modeling done by USGS and the impact of sea level rise as well as the status of the re-use project. Sarah and Theresa will list the topics to be covered to Bertha so she can help us make sure the right people from the County are at the meeting.

Dick summarized some of the prevailing concerns from the BBRRCT addressed by Bertha's presentation:

Re-use water available to the Bay  
Water going into and out of Turkey Point

Water into the boulder zone  
Rehydration of wetlands (water quality concerns)

### Lunch

The team broke for lunch at noon

### **City of Miami Beach Sustainability Plan Update**

Betsy Wheaton from the Environmental Resources Management Division provided an update on the City's Plan. She introduced Jordon Ross, intern out of RSMAS helping with the Dune Management Plan for the City. Her presentation is posted on the team's web page.

The City of Miami Beach Sustainability committee would welcome a presentation from the BBRCT. Their monthly meetings are held the third Tuesday of every month at 5:00 p.m. in City Hall.

Sustainability is defined as "meeting the needs of the present without compromising the ability of future generation to meet their own needs". The three pillars of sustainability are:

- Economic
- Environmental
- Social

The 2011 Sustainability Plan approved by the City Commission has 10 program areas. The plan fuses guiding principles, program areas, goals, indicators, targets and initiatives. The ten program areas are:

- Green Building and Housing
  - Green Building Ordinance
  - LEED Silver Certification (expedited permitting)
  - Green Building Sub-Committee (March 2012)
- Solid Waste Management
  - Community Recycling
  - Mandatory Recycling Ordinance
  - Hazardous Waste Drop-Off Days
  - Wasteful Weekends
  - Green Waste
  - Coca-Cola Recycling Partnership
- Water Conservation & Quality
  - Showerhead Exchange Program
  - Stormwater Master Plan
  - Marine Debris Removal
  - Green Parking Lots
- Energy Conservation
  - AMERESCO's Performance Contract (municipal buildings & cooling plant)
  - Energy Economic Zone Pilot Program
  - Electric Vehicle Charging Stations

- Florida Green Lodging Certification
  - LED Lighting in Parking Lots
- Alternative Transportation
  - Atlantic Greenway network
  - DECOBIKE
  - Hybrid/LEV Incentive Program
  - Electric Vehicle Charging Stations
  - Car-Sharing Program
  - Affordable Public Transit Options
- Natural Resource & Ecosystem Management
  - Dune Restoration & Enhancement
  - Beach Litter
  - Adopt-a-Beach Program
  - Sea Turtle Protection
  - Urban Reforestation Program
- Community Outreach & Participation
- Green Procurement
- Economic Development & Planning
- Air Quality & Climate Change

The Plan is available at <http://web.miamibeachfl.gov/green/default.aspx?id=63975>

Discussion of presentation and any action needed

Since Betsy last spoke to us (a year in a half ago), she is most proud of the progress made on alternative transportation.

Beyond recycling, the next big push is the Energy Economic Zone (EEZ) is next. The Sustainability Plan functions as the work plan for the City’s participation in the Energy Economic Zone Pilot Program, an economic development program created by the Florida Legislature in 2009 and administered by the Department of Community Affairs. The City of Miami Beach and Sarasota County are participating in this pilot. Creating a baseline and an implementation plan needs to be the big focus for this immediate future. Maggie Fernandez from the Miami-Dade County Office of Sustainability spoke of the County’s full support of the City’s EEZ Pilot.

The members present thanked Betsy for her presentation and will invite the City back next year for an update. Theresa was directed to seek a presentation from Miami-Dade County on their Sustainability Plan. Maggie Fernandez said she would take the request back to her supervisors.

Open discussion/Member forum

Dan Kipnis’ Op-Ed was in the Herald yesterday; the opposing side described him as a “lunatic”. He is being by the disposed by the USACE as a result of his statements. The judge ordered mediation between the Corps and Dan to stipulate how the dredge should be done and come to agreement to those terms. The trail will be August – September.

Sarah Bellmund stated that Biscayne National Park (BNP) still has questions about the radial wells planned for Turkey Point and is working with FPL to get answers.

Nancy Diersing reported that the Florida Keys National Marine Sanctuary is beginning a 3-5 year process to review the Marine Zone and associated regulations. There are currently 18 preservation areas in place, two ecological reserves in place and numerous marking and buoy areas as well as wildlife management areas and no-wake zones. The boundary area is quite large. The upcoming public hearing will be at FIU Main Campus and Nancy will keep us informed of the progress. The Sanctuary Advisory Council will form Working Groups to focus on identified issues. Public input is a big push. As the process unfolds, she could brief the team. Dick Frost pointed out that the two planning efforts (FKNMS and BNP) overlap time wise.

Phil Everingham reported that the Miami Boat Show successful. He attended the session on the State of the Ports (Port of Miami and Airport). The Port has a Master Plan for 2035. It is very ambitious with components like more yacht moorage and hotels, etc.

Jerilyn Ashworth reported that DEP is very busy. EPA and DEP are meeting this week in Atlanta on Water Quality Standards. She personally is working on the South Florida Canal study. She is currently working on the C-18 canal salinity envelope study. Just started on the C-17 and will work with the Southwest District to look at the total organic carbon in the Tamiami Canal. The study is to determine the health of canals.

Kahlil Kettering and Cara Capp have been working on the Urban Development Boundary (UDB) issue with the continuous push by some interests in Miami-Dade County to move the boundary westward into the Everglades.

Kahlil urged folks to come to the Central Everglades Planning Process (CEPP) meetings as more water for the Bay is a topic. Next weekend NPCA is sponsoring a cleanup/educational event in Florida City and Kahlil will send Theresa to flyer to circulate.

### **Adjourn**

Meeting adjourned at 3:00 p.m.