

MINUTES

WATER ADVISORY BOARD AND TECHNICAL ADVISORY COMMITTEE

JOINT MEETING

JANUARY 11, 2019

WAB MEMBERS PRESENT: Commissioner Kevin Biederman, City of Hollywood
Councilmember Susan Starkey, Town of Davie
Vice Mayor Tom Good, Pembroke Pines
Vice Mayor Sandy Welch, City of Coconut Creek
Commissioner Steve Geller, Broward County Board of County Commissioners, Chair
Commissioner Tim Ryan, Broward County Board of County Commissioners
Steve Joseph, City of Hollywood, TAC Chair
Commissioner Doug Bell, CBWCD Board of Commissioners
Michele R. Clawson
Mark Peterson, Greater Fort Lauderdale Alliance
Commissioner Tim Lonergan, City of Oakland Park
Mayor Greg Ross, South Florida Regional Planning Council
Management District

WAB MEMBERS ABSENT: Mayor Wayne Messam, City of Miramar
Commissioner Ken Thurston, City of Lauderhill
Carlos Dias, South Florida Water Management District
Mayor Michele J. Gomez, Alternate, City of Tamarac
Commissioner Neil Kerch, Alternate, City of Sunrise
Commissioner Richard Blattner, Alternate, City of Hollywood
Mayor Frank Ortis, Alternate, City of Pembroke Pines
Commissioner Dan Daley, Alternate, City of Coral Springs
Mayor Dean Trantalis, Alternate, City of Fort Lauderdale
Commissioner Barry Moss, Alternate, City of Pompano Beach
Pete Kwiatkowski, Alternate, South Florida Water Management District
Jack McClusky, Alternate, SBDD Board of Commissioners

TAC MEMBERS PRESENT: Steve Joseph, Chair
Patrick Davis, Co-Chair
Talal Abi-Karam
Harold Aiken
Doug Bell
Albert Carbon
Ron Eyma
Sara Forelle
Kevin Hart
Barry Heimlich
Steve Holmes
John Crouse for Alan Garcia
Garrett McAllister for Kenneth Wenning

Also Present: Jay Ameno
Susan Bodman
Isabel Botero
Nancy Cavender, The Laws Group

Kevin Carter
Sangeeta Dhulashia
Cindy Griffin
Alicia Lanier
Juniper Marini
Lorraine Mayers
Jack McCluskey
Robert McColgan
Miguel Medini
Maria Reczko
James Sylvain
Keith Williams
Bingjie Zhao

A joint meeting of the Broward County Water Advisory Board and Technical Advisory Committee was held at Broward County Governmental Center, 115 South Andrews Avenue, Room 422, Fort Lauderdale, Florida on Friday, January 11, 2019 at 10:00 a.m.

(The WAB/TAC Meeting Minutes were summarized by Norma Ellison, Administrative Specialist EPCRD)

(Copies of the presentations, as well as the Sign-In Sheet, are filed with supplemental papers of the meeting.)

Roll Call – Water Advisory Board (WAB)

Roll call was taken by the Real Time Reporter. A quorum was established.

Roll Call – Technical Advisory Committee (TAC)

Roll call was taken by the Real Time Reporter.

The Chair reminded that since these meetings are now taped and available on Broward County public access, speakers should govern themselves accordingly.

The Chair announced that Commissioner Ryan has been appointed as the County's lead on the C-51 Canal and Reservoir.

PRESENTATIONS

Member Service and Recognition

Commissioner Steve Geller, Chair

In recognition of John Crouse, Director of Water Management Division, who is retiring; Vice Mayor Welch, City of Coconut Creek, read aloud a resolution proclaiming January 11, 2019 as John Crouse Day in the City of Coconut Creek expressing appreciation for his devoted service to the city and its residents for the past 23 years.

Chair Geller presented Mr. Crouse with a plaque of recognition acknowledging his 24 years of service to the residents of Broward County and his tenure as a dedicated member of the Technical Advisory Committee to the Water Advisory Board. Mr. Crouse complimented the board and committee and acknowledged certain staff he has worked with over the years. Pictures were taken care as well as a round of applause.

Lastly, in recognition of long-time employees, Chair Geller also read words from a plaque that had been presented to Steve Joseph, TAC Chair, on December 21st for his 25 years of dedicated service to the

residents of Broward County. Mr. Joseph conveyed his appreciation for his colleagues and encouraged success in future challenges. Commissioner Biederman congratulated him and mentioned he had worked with him in the past.

WAB Approval of Meeting Minutes from November 9, 2018

On Motion of Mayor Ross, seconded by Vice Mayor Welch and unanimously carried, the Board approved the Joint WAB/TAC Meeting Minutes from March 9, 2019.

Public Comments

None

Broward County Reclaimed Water Overview

Dr. Jennifer Jurado, Chief Resilience Officer and Director, Broward County EPCRD

At the request of Commissioner Ryan from the last board meeting, Dr. Jurado provided a review of the evolution and investments made in reclaimed water systems. She remarked on the significant advancements over the years with very concrete plans in place for the next coming decades. She acknowledged Carolina Maran's coordination efforts.

Dr. Jurado discussed how reclaimed water is used presently:

- Irrigation of golf courses, parks, residential properties, highway medians, other landscaped areas
- Toilet flushing, car washing, aesthetic purposes, etc.
- Agricultural uses and irrigation at nurseries
- Wetlands creation, restoration, enhancement
- Recharging ground water by using percolation ponds, absorption fields, direct injection
- Augmentation of surface waters that are used for drinking water supplies
- Industrial uses; i.e., plant wash down, processing water, cooling water purposes

Referring to maps in her hand-out, she displayed successful large- and small-scale projects that have been developed across the United States, in Florida, and here in Southeast Florida. She pointed out that some new development communities here in Southeast Florida have claimed success in achieving 100% reuse, as there were already very severe water limitations in place. Other agricultural and golf course areas have sizeable reuse systems in the 30-50% range. She remarked on the general 6% reuse number associated with Broward, Palm Beach, Miami and Monroe counties; due to the large volumes of wastewater and smaller tracts of land.

Dr. Jurado discussed Broward County's challenges and drivers with reclaimed water implementation:

- Broward County is built-out with a densely populated urban core with developed infrastructure
- Small parcel size limits reclaimed water demand and cost efficiency
- Coordination between 25 different water providers with additional agreements and 15 distinct wastewater providers with boundaries that don't directly align water with wastewater service
- Inconsistent demand with massive amounts of rainfall and seasonal population fluctuations
- Treatment costs and disposal options
- Increasing water demands
- Regional Water Availability Rule dictates all additional water supply development needs come from an alternative water supply or have a direct offset
- Ocean Outfall Rule requires transitioning the flows from the 2 outfalls that were closed to reclaimed water opportunities
- Constraints on our water supplies due to saltwater intrusion
- Drought management

Dr. Jurado discussed in some detail several investigations and pilot studies that Broward County and partner municipalities have funded:

- Wastewater Treatment Wetlands, Conceptual Feasibility Study 2002
- Reuse System Master Plan, City of Hollywood 2007
- Advanced Wastewater Treatment, Plantation Pilot Project 2008
- Sunrise Reuse Pilot Testing Program 2008
- Implementation of Selected Reclaimed Water Projects, City of Fort Lauderdale 2008
- Reuse Feasibility for Coral Springs Improvement District, 2010
- Advanced Wastewater Treatment for Aquifer Recharge and Indirect Potable Reuse Pilot Study Plan, 2011
- Reclaimed Water Feasibility Study, City of Deerfield Beach 2011
- Broward County Regional Reuse Master Plan, 2013

She commented that the Water Resources Task Force of 2008 produced 40 recommendations advanced by the Water Advisory Board and County Commission of which a quarter were related to reclaimed water.

She mentioned how the GIS Reclaimed Water Planning Tool and Project Evaluation Model have helped prioritize the best projects to be funded. She remarked on how Broward County's Land Use Plan and Comprehensive Plan have incorporated policies that will enhance, support, and prioritize reclaimed water systems.

Referring to a comprehensive map with color coding by decade, Dr. Jurado depicted where the investments have been made time-wise. She provided a summary of these reuse project expansions:

- Broward County WWS North Regional, Broward and Palm Beach Counties Cooperative Partnership to provide reclaimed water
- City of Coconut Creek, 3 IWRP projects for design of reuse lines for connections
- City of Pompano Beach, IWRP projects for constructing service lines for Lighthouse Point
- City of Miramar, engineering design services for wastewater reclamation facility
- City of Hollywood, partnering with Dania Beach extend distribution system
- City of Hollywood, 2nd ocean outfall in Broward County, contracting with another utility
- TY Park, reuse lines for increasing demands
- City of Sunrise, 3 rehabilitation projects
- Town of Davie, reclaimed water facility projected expansions to comply with ocean outfall Legislation
- City of Plantation, no additional projected reuse in 2040 per LEC Plan
- City of Margate, design for construction of new reclaimed water treatment facility
- Tindall Hammock, project expansion per LEC Plan

Dr. Jurado emphasized that IWRP grant funding provides significant support for the design and permitting of these projects. As a result of all these investments, she explained that capacity in Broward County has increased from 20 to 36 mgd and it is anticipated to have 64 mgd in total reuse flows by 2040. Presently Broward County is at 8% level of reuse but will increase to about 24% over the next 2 decades.

In conclusion, Dr. Jurado emphasized the importance of continuing the Water Resources Task Force's recommendations, enhancing community coordination, increasing IWRP funding, and developing partnerships with additional agencies.

Chair Geller thanked Dr. Jurado for her report.

A question and answer session ensued. In response to Chair Geller's inquiry if 24% increase in reuse by 2040 is sufficient, Dr. Jurado responded that it is probably not enough. She explained that as demands and restrictions on resources grow, continued investments need to be made in regional partnerships along with strategic planning decisions. She remarked on the success of collaborative processes to achieve specific objectives.

Commissioner Ryan raised his concern about making decisions based on cost-analysis alone that puts the County behind the curve regarding possible irreversible adverse effects; i.e., diminished water availability.

Commissioner Ryan then referred to the very strong increase in using reuse water by Pompano Beach inquiring how that was achieved. As Randy Brown, Utility Director for Pompano Beach was not available, Dr. Jurado responded that it was accomplished through a massive public outreach campaign along with providing the connection costs for residential users. He further inquired if an analysis has been developed to incentivize communities to engage in a more proactive approach. She responded that Pompano Beach decided to assume the additional sizable cost that is not offset financially to afford its residents the cost advantage. Commissioner Ryan agreed that would be true for both Dania Beach and Hallandale Beach.

Commissioner Ryan referred to the California model for reuse inquiring if Southeast Florida should be applying this same approach. Dr. Jurado responded that California adheres to very high regulatory and treatment levels that the community was able to practice early on. It provided a lot of early modeling that benefits other communities today. She added that the Reuse Commission has convened at the state level to follow what is happening from a regulatory standpoint there.

Vice Mayor Welch inquired how Pompano Beach got the funding to pay for the reuse connections for its users. Dr. Jurado responded that it was funded through rate adjustments that the city advanced. She explained that the city fronted the costs and waived the connection fees as an incentive for residents to sign up. Vice Mayor Welch encouraged this best management practice.

Steve Joseph stressed his disappointment with the County's inability to connect with the reuse at TY Park in Hollywood. He explained that the City of Hollywood invested a significant amount of money installing infrastructure 20 years ago at the park and nothing has happened. Dr. Jurado responded that she has been coordinating on this issue with Dan West, Director of Broward County Parks. Chair Geller requested that Dr. Jurado meet separately on this issue with Commissioner Ryan and himself.

Vice Mayor Good raised his concern about the prohibitive cost of developing the infrastructure for reuse. Most times it is a utility business decision to add the infrastructure and provide the reuse. He inquired if this board could assist in getting an increase in IWRP grant funding to help obtain more applications for reuse. Dr. Jurado responded that at the state level the monies have been greatly diminished over the years. She added that she has included budget requests for construction dollars, but funding has not been consistent and now is not available at all. She advised the better plan is to have the utilities provide their respective detailed lists of projects to put through the budget process along with the proposed levels of funding within the next 3-4 weeks.

Chair Geller requested Dr. Jurado meet with Marty Cassini, Broward County Intergovernmental Affairs Director and lead liaison in Tallahassee lobbying, to develop some talking points on this issue.

Councilwoman Starkey suggested that because new transportation projects have money earmarked for them, they should have interconnect capability installed for reuse irrigation purposes. Dr. Jurado agreed that there is not enough coordination between the water community and the transportation community. Chair Geller requested that Dr. Jurado meet separately with Commissioner Ryan and himself on this topic also.

In consideration of the time, Chair Geller deferred the last agenda item, 4th National Climate Assessment Highlights, to the next board meeting in March.

IWRP Year In Review

Dr. Carolina Maran, P.E., Water Resources Manager, Broward County EPCRD

Dr. Maran presented a report on the Integrated Water Resources Plan (IWRP), focusing on the water resource actions delivered in 2018 along with some goals.

She provided some background information, implemented in the 1990's and adopted by the County Commission in 2010. The plan's goal is to ensure more effective and efficient management of our water resources based on collaboration with municipal and water utility partners. She mentioned that the 2019 report is currently open for comments.

Dr. Maran outlined some of the highlights of the 2019 report:

- Adding a web-based tool that is very flexible, provides easier access, and capability to update
- Including climate change considerations
- New Objective: Evaluating future conditions and implementing adaptation strategies
- New Section: Using existing tools to guide decision making
- One Water Approach: Integrating stormwater management and flood protection efforts, including green infrastructure and modernized design standards
- Approval Process: Receiving comments from TAC and presenting recommendations for WAB endorsement in March

Dr. Maran outlined some of the main discussions at the Water Advisory Board during 2018:

- Broward County resiliency strategy
- Review of seawall standard
- Floridan aquifer, water supply, deep well injection
- Septic tank and sanitary sewer

Dr. Maran then outlined the goals of the Water Advisory Board for 2019:

- Finalize 2019 IWRP Report Update
- Formalize sea wall standards
- Adopt future conditions of 100-year flood elevation map
- Advance discussions on flood and stormwater green infrastructure
- 6th Broward Leaders Water and Climate Academy
- C-51 Reservoir implementation

Reiterating what Dr. Jurado discussed regarding IWRP Grants:

- 3 reuse feasibility projects for Sunrise, Hollywood and Miramar were completed under review
- 3 reuse construction projects for Coconut Creek, Pompano Beach and Sunrise are under implementation
- Goal is to reestablish capital program support for feasibility and reuse construction projects

Dr. Maran discussed various efforts of the Conservation Pays Program:

- \$100,000 was received from SFWMD Cooperative Funding Program
- 2,056 rebates were issued to residents
- Agreement signed to expand municipal activity
- Successful campaigns that increased social media activity
- Goals for 2019 include achieving 2,000 rebates, increase conservation devices distribution, engage 4,000 Broward residents in Play Conservation Pays Game, target promotions, etc.

Regarding the NatureScape Irrigation Service (NIS), she provided statistics on the number of outdoor water efficiency evaluations conducted achieving a 28% reduction in water usage saving 82.5 million gallons. Through this program, 112 smart irrigation controllers were installed in municipal properties. A pilot rebate program concept is being developed offering up to \$500 per resident to promote of these WaterSense controllers, and free irrigation evaluations are being offered. She mentioned other goals of the program for 2019 that include initiating municipal interlocal agreements for 2020 and hosting more technical trainings for municipal staff.

Regarding the NatureScape Broward Program, extensive programming, training, and outreach was delivered in 2018 with 232 certified yards certified, more cities certified and registered, and messaging was successfully installed in Home Depot. Goals for 2019 include achieving 200 certifications, include some stormwater management goals as part of certification process, targeting more cities, securing additional grant funds for community projects, partnering more for increased messaging, and expanding volunteer base. She mentioned the Broward Schools Environmental Partnership that hosted the 6th Annual P3 Eco-Challenge distributing \$35,000 in prizes to schools, students, and teachers. She provided statistics on teachers & staff trained, students programmed, water audits, irrigation systems evaluated, schoolyard habitats, water audits, etc. She announced that the 1st Broward Youth Climate Summit is scheduled for January 25th with keynote speakers and a demonstration project involving 100 students planting a bioswayle. Other events upcoming are the 17th Annual Water Matters Day scheduled for March 9th and 7th Annual P3 Eco-Challenge on May 8th.

In conclusion, Dr. Maran summarized the 2018 achievements in water resource assessment and modeling and the goals for 2019:

- Phase 2 of the USGS Inundation Model was initiated to be advanced this year
- Future Conditions 100-Year Flood Map was awarded to be finalized and adopted this year
- Rainfall and drainage workshops were held regarding the flood map
- Flood and Crowdsourcing tools were advanced
- NOAA Port Everglades station was installed
- Demands analysis for Deltares CIRCLE Project was completed
- Variability density models are to be finalized this year along with the water utility dashboard
- Continuing technical and academic collaboration
- NACO & NACIO Awards of Excellence were given for Future Conditions Groundwater Elevation Map and Gone with the Wind Storm NatureScape Brochure
- EPA gave WaterSense Partner of the Year award

Chair Geller thanked Dr. Maran for her report, acknowledged the many projects and their importance, and congratulated staff.

A question and answer session ensued. Michelle Clawson inquired if a formal organization or committee has been set up that works directly with the School Board and Broward County with allocated staff and funding to further these educational efforts. She emphasized the importance of these efforts as they represent our future. Dr. Maran responded that there is not a formal committee, but EPCRD has staff dedicated to find opportunities to enhance our environmental partnership with the Broward County School Board.

New Business and Open Discussion

In response to Chair Geller's request for comments, Dr. Jurado responded that on the new Governor's list of environmental priorities is funding for septic tank conversions or connections to sanitary sewer. She added that he has also established a statewide task force on algae issues.

In response to Chair Geller's request for update on the C-51 Canal, Dr. Jurado responded that coordination continues with Ernie Cox, representative for the property owner of the C-51 Canal and Reservoir. A contract amendment has been advanced that provides for more time for finalizing Phase 1's partners' permits, referencing June for installation date. She informed that an important meeting between senior representatives of SFWMD and Miami-Dade as a potential project partner, is scheduled for later in the month. She further remarked that she doesn't believe the transition of the SFWMD Governing Board would have any negative influence on the C-51 project because of the strong support from the existing board.

Chair Geller referred to the previous board meeting's minutes, encouraging the members to re-read the lengthy discussion on sea walls as it will be a major issue to go before the County Commission at some

point. He informed that he has scheduled a coordination meeting between the County and the City of Fort Lauderdale attorneys for later this month. In response to Chair Geller's request for update since the last meeting's sea wall discussion, Dr. Jurado has invited the municipalities for community-level presentations. She advised that these requests should happen prior to May, as recommendations for finalized language as part of the proposed land use amendment is set for May. Final recommendation will be advanced to the Planning Council at that time for action by August. She informed that a more industry-level meeting with the consultant, engineering and contractor community is scheduled for later in March. She also remarked on very strong coordination with the business community. She encouraged feedback to help better inform our recommendations.

Chair Geller reminded that at the November board meeting, a proposal is being advanced for a 5-ft. minimum standard; permitting 4 ft. through 2035. He warned how controversial this issue will be. Dr. Jurado informed that subsequent to the last board meeting, the State offered resiliency funding for key critical community coastal projects. The City of Hollywood has committed to partner with this cost-share funding from DEP.

Councilwoman Starkey suggested that a brochure be developed and distributed to the Board of Realtors to provide sea wall education on what and when all this occurs in the near future. Chair Geller requested Dr. Jurado coordinate with the County Attorney specifically on the obligation of realtors to disclose information on new requirements and latent defects to homeowners and potential home buyers.

Chair Geller then inquired if the County has an obligation to pass an ordinance requiring such disclosures. Commissioner Ryan explained there is a distinction between patent and latent defects, the property owner is obliged to disclose latent defects. He considered this subject be in the classification of a patent defect, and answered he was not sure what the obligation is if once adopted by the cities and County because it is public record. Chair Geller reiterated his request for Dr. Jurado to meet with the County Attorney on this question also.

Chair Geller expressed his preference for future meetings to continue to be held in the Commission Chambers.

Lake Okeechobee Water Levels: 12/18/18: 12.75'; month ago: 13.37'; 1 Yr. Ago: 15.73 ft-NGVD

Next Scheduled Joint WAB/TAC – March 8, 2019
Next Scheduled TAC Meeting – February 15, 2019

ADJOURNMENT

Without objection, Chair Geller adjourned this day's meeting at 11:59 am.

A copy of the audio recording of this meeting is available upon request at Document Control, Room 336U, Phone: (954) 357-7297.

