

MINUTES
TECHNICAL ADVISORY COMMITTEE
TO THE WATER ADVISORY BOARD
February 15, 2019

MEMBERS PRESENT

Talal Abi-Karam, Harold Aiken, Mike Bailey, Doug Bell, Shana Coombs for Randy Brown, Albert Carbon, Adolpho Gonzales for Mike Crowley, Patrick Davis, Ron Eyma, Sara Forelle, Susan Boddman for Alan Garcia, Kevin Hart, Barry Heimlich, Steve Holmes, Jennifer Jurado, Pete Kwiatkowski, Jose Lopez, Lisa Milenkovich, Renuka Mohammed, Pat O'Quinn, Stephanie Pearson, Tim Welch, Kenneth Wenning

OTHERS PRESENT

Jay Ameno, J. Martin Cala, Mark Collins, Francois Domond, Sangeeta Dhulashia, Norma Ellison, Rafael Frias, Alex Ghany, Glen Harrelson, George Krawczyk, Lorraine Mayers, W. Montero, Emran Rohanon, Binjie Zhao, Mike Zygnerski

(A sign-in sheet reflecting those present is filed with the supplemental papers of the meeting.)

CALL TO ORDER

A meeting of the Technical Advisory Committee to the Water Advisory Board was held on February 15, 2019; commencing at 9:40 am in the Hearing Room of the Broward County Government Center West in Plantation, FL. A quorum was present.

STATEMENT OF MEETING OBJECTIVE

Patrick Davis, Co-Chair, conducted the meeting. He recapped that since both Steve Joseph, Utility Director representative, and Dave Markward, At-Large representative, retired; there are now 2 vacancies open on the committee that need to be voted on at this meeting. He further informed that it is time to select a new Chair and Co-Chair for the committee. He then inquired if anyone in the audience had a comment card; there were none. He next announced that John Crouse is retiring soon, inviting comments from the audience and offering refreshments as well. Various members expressed their privilege in working alongside John over the years.

APPROVAL OF MINUTES

The minutes from the December 21, 2018 meeting were motioned and approved.

TAC MEMBERSHIP VOTE

The Co-Chair relayed there were 5 resumes submitted for the open Utility/Director/City Engineer/Public Works Department Director category, as follows:

- Mark Collins, Public Works Director, City of Margate
- Allen Fathi, P.E., Utilities Manager, City of Deerfield Beach
- Brad Kaine, Public Services Director, City of Dania Beach

TAC MEMBERSHIP VOTE (continued)

- George Krawczyk, P.E., CFM., Public Works/Utilities Director, City of North Lauderdale
- Luis Lopez (received late this am, not distributed)

The Co-Chair relayed there were 3 resumes submitted for the open At-Large category, as follows:

- Brandi Iglesias Creed, P.E., D.WRE, Director Engineering & Construction Dept, South Florida Regional Transportation Authority (SFRTA) (received late 02/14/19)
- Sangeeta Dhulashia, P.E., P.M.P., Area Manager, Stantec Corporation
- Rafael Frias, P.E., Client Director, Black & Veatch Corporation

The Co-Chair invited the candidates for the Utility/Director/City Engineer/Public Works Department Director position to speak on their own behalf as to their respective backgrounds and qualifications. Three were present and spoke; Mark Collins, Brad Kaine, and George Krawczyk. Two were not present; Allen Fathi and Luis Lopez. Dr. Jurado summarized Mr. Lopez's resume as there was insufficient time for it to be shared. The Co-Chair invited the candidates for the At-Large position to speak. Sangeeta Dhulashia and Rafael Frias spoke on their own behalf. Brandi Creed was not present.

Ballots were distributed to the members. The Co-Chair requested the members to cast their ballots.

While the members were casting their ballots, the Co-Chair reiterated it was time to replace the Chair and Co-Chair, himself. He requested nominations for Chair first. Pat O'Quinn made a Motion nominating Patrick Davis for Chair and Albert Carbon for Co-Chair. The Co-Chair requested the Motion be amended to nominate Albert Carbon for Chair. John Crouse amended the Motion nominating Albert Carbon for Chair. The nomination was seconded by Harold Aiken. *The Motion passed unanimously for Albert Carbon to be the new Chair of the TAC committee.

Then the Co-Chair requested nominations for Co-Chair. Albert Carbon nominated Kevin Hart. The nomination was seconded by Harold Aiken. *The Motion passed unanimously for Kevin Hart to be the new Co-Chair of the TAC committee. Both Albert Carbon and Kevin Hart thanked the committee members for their votes of confidence. Patrick Davis continued to direct the rest of the meeting.

The votes were then collected, tallied, and recorded on the voting ballots.

Mr. Davis switched the order of the presentations, introducing Jeremy Decker to present first.

Numerical Model Development for the Evaluation of Drainage Infrastructure Capacity under Projected Sea-Level and Climate Conditions in Broward County

Jeremy D. Decker, Hydrologist USGS

Referring to maps and graphs in his hand-out, Jeremy Decker provided an overview of this cooperative project between USGS and Broward County EPCRD. He explained the primary objective is to characterize the drainage capacity and potential for inundation of the urbanized areas of Broward County under projected climate conditions and rising sea levels.

Mr. Decker informed that it is a 3-year project that began in June 2018 and will finish in June 2021. He referred to a schedule in his hand-out that outlined its 4 components and when they should be finished. Year 1 involves data compilation and model construction. Year 2 involves further model construction

and scenario simulations. Year 3 involves documentation. The deliverables include USGS Data Release of flow model and archive, and USGS Report documenting flow model and model results.

Mr. Decker provided background information on the Northern Broward County Saltwater Intrusion Model, the Southern and Central Broward Intrusion Model, and the Broward County Inundation Model. He explained that the new project is a continuation to these previous USGS/Broward County studies.

Results of the first study of the Inundation Model identified several needs, and Mr. Decker outlined the current tasks of Phase 2 which is a continuation of this model:

- Data Compilation - GIS coverage of canals, control structures, etc., previous and ongoing projects, water control district information, current elevation data, etc.
- Model Construction -Groundwater flow model – increase grid resolution, improve western and eastern boundaries
- Model Construction – Surface-water flow model – simplify model, increase feature density, decrease run times

He informed that the initial data compilation has been completed, and the steady-state groundwater/surface-water model constructed. Additional data may be required for calibration and further model refinement.

He outlined the future tasks of Phase 2:

- Calibrate steady state surface-water parameters
- Convert model to run transient historical and projected scenarios
- Document the model construction and testing results

In conclusion, Mr. Decker assured that USGS will work with Broward County during scenario development. The deliverables include USGS Data Release of flow model and archive, and USGS Report documenting flow model and model results. He remarked that the ultimate goal is to provide an additional tool for Broward County to use during future planning and evaluation.

Mr. Davis thanked Mr. Decker for his presentation. A question and answer session followed. Dr. Jurado stated that SFWMD is currently involved with Geosyntec in evaluating future flood scenarios, and ongoing conversations are required regarding the level of service and management activity that is necessary. She informed that several meetings were held last week emphasizing that this project needs to be prioritized now, decision-making must take place, and investment of funds need to progress to meet required timelines. She added that there is awareness now and a more robust evaluation of the project should move forward. Pete Kwiatkowski announced that a public meeting will be held next week regarding comments on modifications to the Lake Okeechobee regulation schedule. He emphasized that the model can make changes to conditions of the revised regulation schedule on conservation areas and incorporate them into the scenarios. Mr. Decker assured that any large-scale changes are easily adaptable in the model. Mr. Davis inquired if Mr. Decker has received all the data he needs. He replied that he had.

Future Conditions 100-Year Flood Map Update

John Loper, P.E., Associate Vice President, Taylor Engineering

John Loper provided an update on the Broward County 100-year flood elevation map along with its associated modeling.

He informed there are 4 consultants on the project team:

- Geosyntec is the prime consultant responsible for data compilation, stakeholder outreach, rainfall analysis (current and future conditions), and CRS evaluation and recommendations
- Taylor Engineering handles the hydrologic and hydraulic modeling for updating current conditions, developing future conditions, and integrating with coastal analysis
- Stoner & Associates are the surveyors tasked with incorporating new survey data
- Adept Strategy and Public Relations are the public relations consultant

Mr. Loper explained the goal is to map future floodplains throughout Broward County. He described in detail the major tasks:

- Data collection and review
- Stakeholder outreach began during summer 2018 with follow-ups thru January 2019 (Referred to summary of individual stakeholders with respective data received)
- Stakeholder coordination for the model involves GIS and mapping data into a project map atlas that provides a reference and assists future level of service efforts by SFWMD and the County (Referred to schematics of MIKE Hydro 1-D model network)
- Updating the model grid resolution (Referred to schematics comparing previous and new computational grids) for refining storage and conveyance characteristics
- Updated current land use with changes since 2000
- Implementation of new version of ponded drainage design that routes runoff to specified canals
- Stakeholder information identified 200+ items divided into Priority 1 and Priority 2 levels
- Model launch calibration occurs when all data has been input. Candidates for model validation based on 2 events – June 5-7, 2017 (rain event) and September 9-10, 2017 (Hurricane Irma) Chosen event was June 5-7 due to greater rainfall runoff

Mr. Loper provided the schedule of events for the current conditions model update. A presentation on the current conditions results and future conditions assumptions is scheduled for this committee on June 21st. The target date for mapping completion and presentation to stakeholders is September 20th.

Mr. Davis thanked Mr. Loper for his update. A question and answer session followed. Dr. Jurado stated that as this project is completed, map adoption process occurs, and if budget process is successful; the next step is to apply this model in countywide critical infrastructure analysis for adaption recommendations. Discussion took place regarding expanding in the future for planning for a 500-year storm event. Dr. Jurado answered that has not been done, but the next step intended is to bring risk analysis to the process for implication evaluation planning cost estimates.

Broward Youth Climate Summit and Bioswale Demonstration Project

Maena Angelotti, Project Coordinator, Broward County EPCRD

Maena Angelotti explained the purpose of the Youth Climate Summit was to convene, engage, connect and empower young people for action on climate change in South Florida to help them understand the basics of climate science to make informed decisions for their future. The event was held on January 26th at the Global Event Center in downtown Fort Lauderdale. It was attended by 500 students and teachers from 10 middle schools, 5 high schools, and the PACE Center School for Girls, along with lots of media. Referring to photos in her hand-out, Ms. Angelotti described the various lunch panelists and their programs. Students from 6 schools showcased the environmental initiatives they have been involved with. She shared a video, offered to send a link, and mentioned there were exhibitors from 15

businesses, local government agencies, academia and non-profit organizations. She also acknowledged the various sponsors.

Ms. Angelotti explained that as part of the Youth Climate Project, a bioswale was planted on a 2-acre lot located on Sistrunk Boulevard in Fort Lauderdale. The bioswale consisted of the installation of 6 trees, 23 native shrubs, wildflowers and groundcovers. There were 100 students from Dillard High School and Parkway Middle School involved. The goal of the project was to address stormwater management, and the water quality, quantity, and safety of the downstream North Fork of the New River Canal. NatureScape staff and engineers from Carollo and E-Sciences presented about green infrastructure and bioswale function design with students designing their own landscape plans. She acknowledged the various partners. Future plans are continued monitoring of the site, student design of a solar kiosk, and another inauguration event with students and the community.

Mr. Davis thanked Ms. Angelotti for her presentation. Kevin Hart expressed his appreciation for this program in particular, and encouraged opportunities for volunteer participation in similar programs. He commended Broward County and the Schoolboard for their efforts.

2019 Broward Countywide Integrated Water Resources Plan – Final Recommendations
Robert Rudolph, Water Planning Program Manager, Broward County EPCRD

Robert Rudolph reminded the members that he had distributed the updated IWRP Plan in its new SWAY format. He informed that he had received 5 sets of comments SBDD, Lanier Consulting, Carollo Engineers, SFWMD, and Broward WWS. Some suggestions received included providing links to facility reports, track regulatory updates of PRC, provide information on policy reforms, clarifications on Lake Okeechobee's significance and Phase 1 and Phase 2, etc.

He informed that 3 new recommendations from WWS have been incorporated in the latest version:

- The County should advocate SFWMD to consistently fund their cooperative funding program
- The County should work with Florida Legislature to improve statewide water, wastewater, and stormwater infrastructure funding by moving towards FDOT's 5-year planning model
- The County should coordinate with local water, wastewater, and stormwater entities to investigate future funding opportunities in America's Water Infrastructure Act of 2018
- Recommendation on removing 10% Conservation Goal
- Change "geotechnical" to "geophysical"

Also, the 2019 IWRP Conceptual Graphic was revised.

In conclusion, Mr. Rudolph outlined the next steps:

- Present recommendations for WAB endorsement along with SWAY link
- Prepare hard copy document for County Commission agenda
- Present document for adoption by County Commission
- Distribute IWRP Update
- Update SWAY on semi-annual basis as new studies and results become available

Mr. Davis thanked Mr. Rudolph for his report and asked for a Motion to approve the recommendations.

*Kevin Hart made the Motion for the committee to approve the IWRP final recommendations and to forward on to the WAB for adoption by County Commission. Albert Carbon seconded the Motion.

*The Motion passed unanimously.

**The votes were now all collected, tallied, and recorded on the respective vacancy voting records.

Mr. Davis announced the results of the voting, declaring Mark Collins the winner to fill the Utility/Director/City Engineer/Public Works Department Director vacancy; and Rafael Frias won the At-Large position. Mr. Davis congratulated the new members and encouraged the other candidates to continue participating.

NEW BUSINESS

Mr. Rudolph reminded the audience that Water Matters Day is coming up on March 9th at Tree Tops Park in Davie. Dr. Maran commented that that are 1000 participants playing in the Conservation Pays Play-to-Win Game; a level of participation not noticed before. She thanked the partners.

Dr. Jurado thanked Mr. Davis for his role in directing the meeting today, his last meeting she added. She expressed her appreciation for his consistent participation in the committee. Mr. Davis remarked on the changing role and focus of the committee over the years, the growing challenges, and how its voice of is more important than ever.

NEXT SCHEDULED TAC MEETING – April 19th

NEXT SCHEDULED WAB MEETING – March 29th

ADJOURNMENT

There being no further business to discuss, the meeting adjourned at 11:36 pm)

