

# PALM BEACH COUNTY WATER RESOURCES TASK FORCE MEETING



# Lake Worth Drainage District 13081 Military Trail Delray Beach, FL 33484

July 25, 2013 1:30 P.M. to 4:00 P.M.

### I. CALL TO ORDER

A quorum was announced and Chair Jay Foy called the meeting to order at 1:35 p.m.

### **Members Present:**

Jay Foy (Chair), Matt Wilhite (Vice-Chair), Michael Dahlgren, Rod Braun, Mike Mullaugh, Jim Alderman, Dave Stewart, John Flanigan, Mary Lou Berger, Ted Winsberg, Jeff Hmara, Kofi Boateng (Alt. for Dave Brown)

## **Alternates Present:**

Dick Tomasello, John Callaghan

### **Members not Present:**

Adrian Salee

#### **Alternates not Present:**

Shelley Vana, John Whitworth, Dawn Pardo, Scott Maxwell, Chip Block

## **WRTF Working Group Present:**

Ken Todd (Chair), Pete Kwiatkowski, Pat Painter, Lou Aurigemma

#### **County Staff Present:**

Chris Pettit, Brian Shields

### **Guests Present:**

Pat Martin, Carol Connolly, Bob Brown, Laura Corry, Drew Martin, Martha Musgrove, Steve Lamb, Alex Larson, Rosemary Rayman, Ernie Barnett, Mark Elsner, Richard Radcliffe, Albert Carbon, Tom Conboy, Doug Gunther, Danna Ackerman-White, Sylvia Pelizza, Harold Aiken, Donald Rosen, Ernie Cox, Marjorie Craig, Ann Kuhl, Gert Kuhl, Alan Ballweg, David Boyer, Samantha Reilly, Patricia Curry

### II. APPROVAL OF MEETING MINUTES:

A motion was made by John Flanigan and seconded to approve the 4-25-13 meeting minutes as presented. The motion passed unanimously.

No formal presentation was made. Ernie reviewed the proposed purchase of Mecca Site between SFWMD and Palm Beach County. Ernie verified that the L-8 impoundment site has been redirected to act as a flow equalization basin to provide water flows south into the Everglades. The SFWMD Governing Board (GB) has given conceptual approval of Mecca site for \$26 million. Palm Beach County Commission has also given conceptual approval. Final approval of the contract for sale is expected in the September or October timeframe. There are still several outstanding issues. Most importantly, SFWMD is looking to carve out 150 acres for shooting range to convey to Fla. Fish & Wildlife Service (FWS). The proposed 150 acre site is located in NW corner of Mecca and will not affect the ultimate project design. SFWMD is in negotiations for a land exchange with the FWS. The primary target of the land exchange is a long and narrow 150 acre strip along the Corbett property for utilization as a possible future flow way. The backup parcel targeted by the SFWMD is a possible flowage easement over Moss Property to undertake above ground storage to increase regional storage. The contract is slated to go back to the county subject to the exchange in September or October. SFWMD has money budgeted for the purchase. Preliminary discussions are addressing the delivery of additional flows to Loxahatchee Slough and the provision of water supply benefits to Seacoast Utilities and Jupiter.

## QUESTIONS:

Jay Foy disclosed his engineering contract with ITID. He asked if the proposed Mecca project was only to have a function of restoring the Loxahatchee River?

Ernie answered that the primary purpose of the project is to capture C-18 water to meet Minimum Flows and Levels for the Loxahatchee River. Benefits to ITID will be limited, but under some unusual conditions will allow a reduction in higher stages that impact ITID and make flood protection problematic, thus resulting in minimal flood benefits. The purchase will also allow different designs for Corbett levee. Other benefits have not been ruled out. SFWMD desires an easement over the Moss property regardless of final resolution. Possible future storage is a must and SFWMD will work with ITID.

Jay Foy then asked if once Moss Property/C-51 Reservoir occurs, what are SFWMD's thoughts about conveyance, the utilization of M Canal, and the GL Homes property?

Ernie responded that one option would contain a flow way if the C-51 Reservoir Project has an environmental portion. Absent the C-51 Reservoir, it could be possible to redirect Moss property through the MO canal (ITID). If partnership opportunities exist, there is a possibility for collaboration on Flow way 2.

Jay then asked when will Mecca be budgeted and useful?

Ernie responded the acquisition is budgeted now and construction is included in \$880 million budgeted for restoration strategies. The purchase and project is linked to a water quality plan as a replacement feature and is contained in the 11 year SFWMD budget. HB 765 (2013) ratified the plan including replacement of Mecca. Through the legislation, the Legislature agreed that the projects articulated are the plan and authorized \$32 million a year towards the plan, meaning that the plan for the 4' deep reservoir is fully funded. SFWMD hopes to break ground in 2016 on the project with a 2 year construction window. Construction of the reservoir is expected to commence in 2023-2024. Palm Beach County has been supportive of the project.

Jay then asked about the depth of the impoundment?

Ernie said the project has 2 phases; first, a 1-4 ft above ground impoundment. Then, possibly a 2-8 foot impoundment will be constructed, if necessary, after evaluation. SFWMD reiterated that additional water is needed. Ernie then thanked the Palm Beach County Commission and the GB for approval and conceptual purchase.

# IV. Lower East Coast Water Supply Plan (LECWSP) Mark Elsner, SFWMD

Mark presented a power point that gave an overview of the SFWMD LECWSP update. The draft plan is coming in for a landing and staff will seek approval of the Plan at the September GB meeting. SFWMD has solicited and received a significant amount of public input concerning the document. The 2000 LECWSP and 2005 LECWSP update serve as the basis for this update. The LECWSP is intended to be the roadmap to meet future water supply needs. The LECWSP needs to stay current with economy and growth. The LECWSP development process involved large amount of public participation (WRAC, public workshops, and individual stakeholder meetings). This included a June 6 WRAC workshop and a July GB draft presentation. The Lower East Coast is the most complex planning area within the District. Population figures provide a population projection of 6.6 million people in the region by 2030 with an increase in gross water demand of 1.9 MGD. This represents a 25 % increase in population for PBC and a gross water increase of 7%. Public Water Supply is the largest user in the LEC planning area followed by agriculture. Mark said 94% of the water needed in 2030 is already approved in existing permits. The LECWSP projects a consistent per capita, increased brackish water use, and reuse utilization. Plan analysis shows that conservation has worked (per capita determined by dividing permanent population into total use). The ability to meet the demands of the Plan is dependent on water supply development projects that are proposed by 7 utilities, completion of HH dike repairs, revision of Lake Okeechobee Regulation Schedule (LORS), and the completion of CERP. LECWSP additionally gives future direction to all stakeholders and the SFWMD, including completion of model for Floridan (brackish) aquifer. Local governments are subsequently required to update the water facilities portions of their comprehensive plans upon finalization of LECWSP.

### **QUESTIONS:**

Jay Foy asked if it is possible to raise LORS? He said the USACE was previously reluctant to do so.

Mark responded that the EIS indicated a "potential" of revisiting LORS.

Jay then asked, does SFWMD use LECWSP to direct regulatory policy?

Mark said the LECWSP captures existing regulatory strategies and recovery/prevention strategies.

Jay asked about the Environment's demand – is there provision to supply minimum flows?

Mark said that is for modeling folks to determine – parallels CEPP – the next update will include results from CEPP.

Kofi Boateng asked about demand projections for utilities between 2005 and 2030 – are there any other significance to the numbers? Why do the numbers track the way they do?

Mark said the promotion of conservation is very important – conservation ethic.

Kofi asked about an update to the C-51 Reservoir Project – update?

Mark said he was unable to give one as he was not involved.

Matt Wilhite stated that the population increase does not reflect water use increase (25% v. 7%).

Mark responded that the gross demand of all use categories reflects 7% - combination of sources – depends where the population is growing and usage conditions.

Matt then said there appear to be inconsistencies between current reflections and future projects.

Mark responded saying conservation and some other user categories are increasing, but not in proportion to 25%.

# V. FEMA Flood Modeling

# Dick Tomasello, Tomasello Consulting

Dick gave a Power Point presentation that demonstrated the relationship between SFWMD ERP criteria and the National Flood Insurance Program criteria FEMA uses in their Flood Insurance Rate Maps (FIRM). The introduction presented the program descriptions and interactions. Dick noted that there are inconsistencies between the two programs' criteria.

The presentation then reviewed the SFWMD ERP permitting requirements described as onsite flood protection and offsite impacts criteria. He described how these criteria relate to the FEMA maps developed for the NFIP. In particular, the ERP floodplain encroachment criteria and finished floor elevation criteria (both using 100-year, 3-day criteria) often refer to FEMA FIRMs.

Dick pointed out that the ERP limitation of post development discharge to the predevelopment peak discharge from the site during the 25-year, 3-day rainfall comes up short in protection of existing homes and commercial buildings in the watershed. Since the crest of the perimeter berms are designed to the 25-year, 3-day stage, the ERP 25-year, 3-day discharge limitation criterium allows free discharge over the perimeter berms during the 100-year, 3-day rainfall. These uncontrolled discharges would result in higher basin flood stages than computed in for the predevelopment conditions used in the FEMA Flood Insurance Study.

Dick then provided a hypothetical example to demonstrate the impacts of an ERP permitted development on a single family home built to the standards of the FIRM base flood elevations (BFE). He showed that the home built to FEMA BFE was not flooded during the 100-year, 3-day rainfall prior to the construction of the ERP permitted project, but (under the same 100-year, 3-day rainfall) the home flooded after the ERP permitted project was built.

CONCLUSION: Dick believes the design discharge criteria should include limiting discharges to predevelopment conditions during the 100-year, 3-day rainfall so that FIRM maps are not rendered obsolete. This is a weakness in the ERP permitting program.

RECOMMENDATION: SFWMD should revise ERP design requirements to limit discharges during 100-year, 3-day rainfall to the peak predevelopment discharge rates.

It was suggested that Dick present this to the SFWMD Peer Group at their Sept. 6<sup>th</sup> meeting.

Jay Foy asked Ken Todd to give a brief update on the FEMA maps.

Ken stated there is an ongoing coordinated effort by many stakeholders to have FEMA correct the inaccuracies in the Preliminary Maps before the maps go public. He said the League of Cities has coordinated several meetings – with a technical session being held on July 31<sup>st</sup> at city of WPB to discuss technical issues with FEMA staff.

Mary Lou Berger said she was in Dallas-Ft. Worth for a NACO meeting and noted that several other groups were concerned about map accuracy. NACO adopted resolution urging delay of the maps until they are revised.

# VI. Working Group Report

## Ken Todd, Working Group Chair

Ken mentioned that the WRTF packet contained a one page report that hits the highlights of the Working Group discussion on the task reviewing whether or not a minimum depth should be required for reservoirs. He said the report contained a discussion of the safety and cost issues with specifying a 10 foot minimum depth for reservoirs. There is also a discussion of the difference between "minor" and "major" impoundment in the report Issues regarding skyrocketing costs when depth increases over 6 feet, as well as socioeconomic costs associated with construction (example: seepage impacts to septic tank systems near a deep reservoir). Additionally, a required minimum elevation precludes any other minor storage opportunities from being explored. There also exists a possible conflict with the PBC mining ordinance. The recommendation of the Work Group was to leave depth decision on reservoirs to individual agencies to retain design flexibility.

FOLLOW-UP DISCUSSION: Jay Foy said that the report was the answer to a different question than the one that was asked. He said he believed the original question referenced operation grade, not necessarily depth and emphasized whether there was an optimal depth for water supply.

Ken responded that the general consensus of the Working Group was that the report answered the task given. The Working Group concurs that one of the issues of having a 4 foot depth is lack of flexibility given rainfall (very little to no storage will be available in a shallow reservoir during dry season).

Jay said he felt that a 4 foot reservoir is not a reservoir, although it is a valuable facility for water quality treatment. Ken respectfully disagreed with that contention. The report was accepted with no further action required.

### VII. Public Comment

## Jay, Foy, Task Force Chair

Drew Martin, representing the Sierra Club said he was concerned about the C-51 Reservoir process. He believes the WRTF is too focused on the C-51 reservoir project and other solutions are glazed over. He said he believes more conservation is the solution. He said the C-51 Reservoir will not be cheap, however, conservation is. He also said sprinklers should not be running in the rain.

Alex Larson said in regard to the Loxahatchee River restoration that it is a bad idea to move water 34 miles to restore the river. She wanted to know why something could not be done closer to the coast in the form of water storage to provide the MFL to the river.

## **VIII.** Task Force Member Comments

## Jay Foy, Task Force Chair

Matt Wilhite mentioned that Wellington will be requesting Ken Todd to come and talk to the Western Community Council about the FEMA flood maps and to arrange western community gatherings to generate dialogue. Ken Todd mentioned that he was out at the Western Community Council a couple of months ago and will include Wellington in future meetings/dialogue.

# IX. Next Meeting Agenda and Date

# Jay Foy, Task Force Chair

Next meeting will be held at Clayton Hutcheson Exhibit Hall on Thursday, Oct. 17, 2013.

January 16, 2014 will be the date of the following meeting. Ken Todd handed out to the WRTF members the schedule for the coming year.

In his final comment of the meeting, Jay noted that the WRTF was appreciative of LWDD for hosting the meeting.

## X. Adjournment

There being no further business, Chair Foy adjourned the meeting at 3:50 p.m.

### **Next Scheduled PBC WRTF Meeting**

October 17, 2013 1:30 p.m. – 4:30 p.m. Clayton Hutcheson Exhibit Hall 559 N. Military Trail West Palm Beach, FL 33415 Phone No. 561-233-1217