



Palm Beach County Water Resources Task Force



January 30, 2020
1:30pm

**Clayton E. Hutcheson Agricultural Services Center (Exhibit Hall A)
559 North Military Trail, West Palm Beach, Florida 33415**

Meeting Minutes

Water Resources Task Force Attendees

Seat ID	Member Name	Status	Alternate Name	Status
1	Monica Mayotte	Present	Vacant	
2	Don MaGruder	Present	Vacant	
3	Chip Block (Chair)	Present	Vacant	
4	Jason Haselkorn	Absent	Vacant	
5	Myra Koutzen (Vice Chair)	Present	Rachelle Litt	Present
6	David Stewart	Present	Vacant	
7	Melissa McKinlay	Absent	Gregg Weiss	Absent
8	Vacant		Vacant	
9	Tommy Strowd	Present	Vacant	
10	Vacant		Vacant	
11	Jay Steinle	Present	Mark Elsner	Present
12	Vacant		Vacant	
13	Vacant		Vacant	
14	Michael Johnson	Absent	Greg Shafer	Absent

1. Call to Order and Introductions

A quorum was observed and Chip Block called the meeting to order at approximately 1:40 p.m. The Palm Beach County (County) Water Resources Task Force (WRTF) members then introduced themselves to the meeting attendees. The attached sign-in sheet provides the full list of meeting attendees.

2. Consider Approval of October 17, 2019 Meeting Minutes

A motion to approve the minutes from the October 17, 2019 WRTF meeting was made by Dave Stewart (Lantana) and seconded by Jay Steinle (South Florida Water Management District or SFWMD). The October 17, 2019 meeting minutes were then approved by the WRTF.

3. Palm Beach County Saltwater Interface Mapping, 2019 Update

Jonathan Shaw, Principal Hydrogeologist at SFWMD, provided a presentation on SFWMD's 2019 saltwater interface mapping in the County. Common sources of saltwater intrusion into groundwater include lateral intrusion from the coast, vertical intrusion from saltwater in the

ground, surface infiltration from canals, estuaries, saltwater marshes, etc. and ancient seawater trapped in low permeability aquifers. Understanding the extent of saltwater intrusion is important as groundwater wellfields are 1) a major water supply source, 2) a major public investment, and, 3) when combined with their associated infrastructure, expensive to relocate. In addition, once saltwater enters groundwater wells, it is difficult, if not impossible, to reverse. SFWMD's saltwater interface mapping, conducted every five years, enables comparisons to historical data, can reveal areas of concern and assists in adjusting the monitoring approach. While there are numerous mapping challenges, the estimated location of the 250 milligram per liter (mg/L) chloride interface is mapped, which corresponds to the drinking water standard. In the County, the 2019 data shows a positive general trend as seaward movement of the saltwater interface has occurred. Some of the changes observed in the 2019 data may be due to new data points or more refined interpretations. And there remains evidence of salty connate water in central portions of the County. In general, shifting groundwater pumpage to the west and to the deeper Floridan aquifer system helps prevent landward movement of the saltwater interface. If there are any additional questions for Mr. Shaw, he can be reached at jshaw@sfwmd.gov or 561-682-6849.

In response to a question, Mr. Shaw stated that some municipalities have implemented activities to reduce saltwater intrusion, for example the City of Lake Worth Beach has shifted to draw more water from the deeper Florida aquifer, and the Town of Lantana has shifted their pumpage to their western wellfields, which has reduced stress on the surficial aquifer system. David Stewart (Lantana) stated that Lantana uses the western wellfields most of the time but that water is harder to treat and the only time they use eastern wellfields (e.g. east of Interstate 95) is at low tide.

Jay Foy stated that some of his clients are concerned that as surficial wells are relocated west, there are negative impacts to surface water systems and asked if more permit applications are being submitted to SFWMD to recharge surface water lakes due to lower surficial aquifer levels. Mr. Shaw was not aware of this and stated that these types of issues are looked at by SFWMD regulation staff on a site-specific basis.

Mr. Steinle stated that with a few exceptions, there appears to have been improvements in the saltwater interface in the County and asked if there is more operational flexibility or more active management occurring. Mr. Shaw replied yes. Jay asked if other areas like Broward County do not have the same flexibility or do not use it. Mr. Shaw stated that Broward County should have the same flexibility but they have a bigger challenge as their 250 mg/L chloride line is west of the Turnpike and closely correlated with the deep regional canals. A question regarding expected impacts of sea level rise was asked. Mr. Shaw stated that there is no reason to believe that there would not be an impact on groundwater wells as sea levels rise.

Monica Mayotte (Boca Raton) asked about methods to help mitigate impacts of sea level rise on the saltwater intrusion. Mr. Shaw stated that wellfield management, as discussed earlier, and keeping freshwater levels high in inland canals would help. Mr. Steinle asked if permits have a

requirement to manage their systems as effectively as possible. Mr. Shaw stated yes and many permits typically have specific guidelines for dry and wet season pumpage to minimize saltwater intrusion. A question was asked about the relative contribution of lateral versus vertical saltwater intrusion. Mr. Shaw stated that lateral intrusion is typically significant due to the proximity to the ocean, but in some isolated areas with overpumping, vertical intrusion can be significant.

4. Proposed Environmental General Obligation Bond Referendum

Deb Drum, Department Director, Environmental Resources Management, at the County, provided a presentation on the County's proposed environmental general obligation (GO) bond referendum, which was the same presentation given to the Board of County Commissioners (BCC) at their January 28, 2020 regular meeting. Ms. Drum stated that per direction from the BCC in November 2019, County staff worked with Sustainable Palm Beach County (SPBC) to develop a list of proposed projects to protect, improve and restore water and environmental resources. The proposed projects are grouped into the following four categories: 1) Restore Lake Worth Lagoon, Loxahatchee River, Lake Okeechobee and the Intracoastal Waterway; 2) Water Supply Storage and Treatment; 3) County-Wide Water Quality Improvement; and 4) Public Access. All of the proposed projects are included in a published management plan, ecosystem restoration plan, water supply plan, regional feasibility analysis or other similar technical study or plan and are located throughout the County. Operations and maintenance (O&M) costs cannot be funded by GO bond funds; therefore, future O&M will be the responsibility of the project owner/funding recipient. GO bonds are backed by the credit and taxing power of the County, are County-wide and the debt service is funded by a separate millage rate on annual property tax bills. The estimated millage rate for a 20-year, \$150 million bond would be 0.0484, which, for a taxable property of \$250,000, would result in an annual tax payment of \$12.10. If there are any additional questions for Ms. Drum, she can be reached at ddrum@pbcgov.org or 561-233-2454.

Mr. Block asked Karen Marcus (SPBC) to provide a brief presentation of proposed community outreach activities. Ms. Marcus stated that SPBC would be developing a public outreach plan and SPBC would serve as advocates for the environmental bond referendum. Mr. Block stated that a lot of what the environmental bond referendum is trying to do builds on what the WRTF and its Technical Professional Working Group has been doing for years. Mr. Block stated that having a great partner at SFWMD has assisted in increasing enthusiasm for the bond referendum. Mr. Block stated that, as a business person, he has found that bringing money to the table, brings out a lot more willing partners and so the proposed \$150 million should be able to leverage funds from state and local partners and multiply the environmental and water resources benefits.

Jay Foy suggested incorporating a forebay at the Structure S-155 that can be used to manage the sediment collected by the proposed modified structure. Mr. Steinle also noted that flood control is not listed as one of the project categories and asked if the assumption is that the Loxahatchee River Watershed Restoration Project (LRWRP) will not go forward. Ms. Drum stated no, the assumption is that the LRWRP will go forward and be authorized by Congress. The County has been coordinating with SFWMD and the U.S. Army Corps of Engineers (USACE) and hope to continue to collaborate on enhancing the environmental benefits of the project. Jeremy McBryan

(County) stated that he sees the proposed bond referendum projects happening in parallel with LRWRP authorizations and activities. For example, if alternative water storage project(s) that have the potential to benefit the Loxahatchee River watershed are implemented via the environmental bond over the next several years, this would enable the County to approach USACE and request that planned Mecca Reservoir be modified to a shallow storage/flow-through marsh. Jeremy also stated that while “flood control” may not be an explicit objective of the proposed bond referendum projects, several projects such as Water Storage in the L-8 Basin, C-51 Reservoir Phase 2 Storage and natural area connector parcel acquisition would provide flood control benefits.

Rachelle Litt (Palm Beach Gardens) asked where the funding for outreach will come from and who will present the bond referendum information to municipalities. Mr. Block stated that SPBC will be the guiding organization for outreach, will fund some of the outreach efforts and hopes to create alliances with other organizations. Mr. Block plans to speak to the Florida League of Cities and SPBC is interested in presenting to city commission and/or council meetings. Mr. Block also stated that since the bond referendum concept was germinated by SPBC, it is natural for SPBC to take the lead in the outreach. Ms. Drum clarified that the County can educate and share facts on the bond referendum and the proposed projects, however the County cannot advocate or attempt to compel voters one way or another. SPBC is finalizing a public education and outreach plan for a future BCC briefing.

Mr. Block stated he would like the WRTF to vote on supporting the bond referendum and communicate that to the BCC. Ms. Mayotte made a motion and Myra Koutzen (Palm Beach Shores) seconded it. Ms. Koutzen stated that she likes that the bond referendum projects are throughout the County and recommends leading off future presentations with the projects that are relevant to all County residents. Mr. Steinle stated that as a SFWMD Governing Board member, he has to abstain from voting until further public awareness occurs. Mr. Stewart stated that he feels uncomfortable voting at this time as a League of Cities appointee to the WRTF as the League of Cities has not been briefed or taken a position on this issue yet. Mr. Block agreed and Ms. Mayotte withdrew her motion and Myra withdrew her second. Mr. McBryan was asked to include a voting item for the WRTF to consider supporting the County’s proposed environmental bond referendum to the agenda of the next WRTF meeting.

5. Loxahatchee River Restoration Local Initiative and Mecca Site Evaluation Update

Jeremy McBryan (County) provided a brief overview of the current status of the County’s Loxahatchee River Restoration Local Initiative and Mecca Site Evaluation. He reminded attendees that alternative elements were included and screened based on stakeholder and local expert input. The final three alternatives assumed the Mecca site as natural or shallow storage, assumed no Aquifer Storage and Recovery (ASR) wells and provided two alternative water storage features to capture excess L-8 Basin stormwater runoff: 1) a shallow impoundment on GL Homes integrated with existing and proposed Indian Trail Improvement District (ITID) impoundments and 2) the C-51 Phase 2 Reservoir. The three County alternatives performed similar to the \$473 million USACE plan and the estimated costs ranged from \$449 million – \$500 million. Mr.

McBryan stated that the intent of the County analysis was not to select an alternative; instead, the goal was to demonstrate that there are other viable water storage alternatives that are feasible with similar performance and costs to the USACE plan while preserving Mecca as a natural shallow storage feature. Unfortunately, there does not appear to be an opportunity within the USACE process that allows incorporation of information from the County's study. It seems the best option for the County is to support SFWMD and USACE in obtaining Congressional authorization and work with SFWMD and USACE to modify or enhance the project after authorization. Following some coordination with SFWMD, the County received a letter from Drew Bartlett, SFWMD Executive Director, on November 25, 2019 committing to engage with County and local stakeholders as project implementation strategies are explored.

Then on December 3, 2019, Mr. McBryan provided a briefing on the results of the County's Local Initiative to the BCC and obtained approval to send a letter to the SFWMD. On December 5, 2019 the County transmitted a letter to SFWMD recommending that SFWMD communicate their support of the Loxahatchee River Watershed Restoration Project to the USACE and requesting SFWMD's letter of support request that the USACE's Chief of Engineers report recommend flexibility or allowance for consideration of alternative water storage. If there are any additional questions for Jeremy McBryan, he can be reached at jmcbryan@pbcgov.org or 561-355-4600.

Mr. Foy reminded attendees that 45,000 acre-feet of storage was previously identified for the North Palm Beach County Part 1 project, with 5,000 acre-feet of that to address flood control. Mr. Foy also stated that he does not believe the very optimistic performance of the aquifer storage and recovery (ASR) wells that is assumed in the USACE modeling and asked if the County modeling study reduced the performance efficiency of the ASR wells. Mr. McBryan responded that to maximize work efficiency and due to the complexity of how ASR wells were conceptualized in the modeling tools, the County's Local Initiative study did not include any ASR wells.

6. Nutrient Total Maximum Daily Loads for Pine Lake and Lake Osborne

Alan Wertepny (Mock, Roos and Associates, Inc.) provided a brief overview and status update of the Florida Department of Environmental Protection's (FDEP) work to develop Nutrient Total Maximum Daily Loads (TMDLs) for Pine Lake and Lake Osborne. Pine Lake is located east of Palm Beach International Airport and west of Interstate 95; Lake Osborne is located east of John Prince Park and the Lantana Airport and west of the City of Lake Worth Beach and the Town of Lantana. A Draft TMDL report was published in December 2019 and FDEP anticipates rulemaking to commence in the Spring of 2020. The Draft TMDL report confirmed that the lakes are not meeting state water quality criteria, provided an assessment of nutrient sources (e.g. groundwater seepage, septic systems, stormwater, etc.) and determined the assimilative capacity of each lake using computer models, and estimated the percent reductions of nitrogen and phosphorus inputs needed to achieve water quality criteria. Stakeholders are reviewing the Draft report and will be providing comments by the February 5, 2020 deadline. The Draft TMDL Report does not accurately represent the contributing areas, does not provide information on other stakeholders/entities responsible for reducing nutrient loads, does not provide fiscal impacts of

achieving water quality criteria or reasonable nutrient reduction project implementation timelines. If there are any additional questions for Alan Wertepny, he can be reached at alan.wertepny@mockroos.com or 561-683-3113.

Drew Martin (Sierra Club) asked if there is sewer runoff into these lakes. Mr. Wertepny responded that any input from septic tanks would be from groundwater flow and that septic tanks were primarily designed to remove bacteria and other constituents that impact public health and not to remove nutrient.

7. Federal Emergency Management Agency's Updated Preliminary Coastal Flood Maps

Mr. McBryan let attendees know that the Federal Emergency Management Agency (FEMA) released preliminary updated coastal flood insurance rate maps (FIRMs) on December 20, 2019 which have the potential to affect unincorporated Palm Beach County and the following municipalities:

West Palm Beach	Riviera Beach	Lake Park
North Palm Beach	Hypoluxo	Palm Beach Gardens
Gulfstream	Boynton Beach	Juno Beach
Briny Breezes	Delray Beach	Jupiter
Lake Worth Beach	Boca Raton	Jupiter Inlet Colony
Lantana	Ocean Ridge	Tequesta
Highland Beach	Manalapan	Palm Beach Shores
Palm Beach	South Palm Beach	

Mr. McBryan also stated that FEMA would be hosting open house meetings on February 4 and 5, 2020 at the Mary V. McDonald-Wilson Center located at 1505 North Australian Avenue in West Palm Beach. Mr. McBryan also let attendees know that the County has hired a consultant to review and evaluate the FIRMs and the underlying data, information and assumptions utilized to develop the storm surge and related models, including FEMA's decision not to use the recently acquired Light Detection and Ranging (LIDAR) topography data.

8. General Task Force Member Comments

None

9. General Public Comments

Drew Martin (Sierra Club) stated he thought the saltwater intrusion mapping results show an overly optimistic scenario because the last year has been fairly dry; Lake Worth has been doing a good job, but this is something we really need to start looking at since sea level rise may happen sooner than later; water conservation is really going to be important; I see irrigation water being wasted all the time. On the bond issue, there are a lot of good projects, but this group needs to help the County determine the priorities, since some of the projects could easily be \$150 million by themselves, so we need to see the details; for example, what do you get for a \$50 million investment in the C-51 Reservoir; the restoration on Mecca is a good start, answers are needed

if you want to get the public on board, I don't think we should give up on purchasing land, there is land in the County that we should consider purchasing, like golf courses; there is no green infrastructure on this, green infrastructure is needed on all new developments.

10. Adjournment

Mr. Stewart made a motion to adjourn, which was seconded by Mr. Steinle. Mr. Block adjourned the meeting at approximately 3:45 p.m.



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Meeting Sign-in Sheet
January 30, 2020
1:30 pm



Name	Organization	Email	Phone
MARK ELSNER	SFLCMD	melsner@sfwmd.gov	(561) 682-6156
Sheryl Wood	MBDV	Swood@mansonbolvers.com	
Dawn Stewart	Town of Loxley		
Danna Ackerman White	Mayor Dave Kerner	dawhite@pbcgov.org	561-355-2203
Anne Cox	Family Lands Renewal	anne@familylandrenewal.com	561-339-1549
Bill Lynch	Jules Edmunds	blynch@julesedmunds.com	561-235-8565
Jeff Hiscock	Baxter + Woodman	jhiscock@baxterwoodman.com	561-425-7760
ALAN WERTZKY	MOCK ROSS	alan.wertzky@mockross.com	561-688-243
Mura Koutzen	League of Cities	mkoutzen@pbstowhall.org	(561) 844-3457
Jeff Koons	ME	JKoons@gmail.com	512 8879
Julie Parham	Lake Worth Beach	jparham@lakeworthbeachfl.gov	561-586-1798
DAN CLARK	LCS	DCLARK@LakeClapke.org	561-722-8110
Brin Smith	LWB	b.smith@lakeworthbeachfl.gov	(561) 586-1575
Richard Walecky	SPBC	rewalecky@gmail.com	561-602-9306



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Name	Organization	Email	Phone
Scott Kelly	CITY OF WEST PALM BEACH	SKKELLY@WPB.ORG	561-822-1421
CHIP BLOCK	JIC	CBLOCKUS@YAHOO.COM	917-923-0056
CHRIS BARLOW	BLACK & VEATCH	barlowc@bv.com	561.236.2858
Jake Leech	PBC Resilience	pleech@pbcgov.org	561 233 2441
DAN MAGRIDER	TOWN OF OCEAN RIDGE	DMAGRID9@GMAIL.COM	561 307 1955
Tommy Stroud	Lake Worth Drainage Dist	tstrowd@lwd.net	561 722 4551
LEN LINDAHL	macvicar consulting	LEN@MACVICARCONSULTING.COM	561-719-4307
Karen Brandon	AECOM	Karen.brandone@aecom.com	561-684-3375
STEVEN MEMBERG	GMA water	steve@gmawater.com	561 318 9532
RACHAEL LITT	VICE MAYOR PBC	Ritt@pbcgov.org	561-635-9159
Brent Whitfield	Chen Moore	bwhitfield@chenmoore.com	561-329-1797
Randy Wertepny	Keshavarz	randy@keshavarz.com	561-329-8762
COURTNEY MARSHALL	Baxter Woodman	cmarshall@baxterwoodman.com	561-655-6175
Jay Strain	SFWMD		



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Name	Organization	Email	Phone
Laura Corry	SFWMD	LCORRY@SFWMD.GOV	561-682-6012
Karen Marcus	Sustainable Pbc	KarenTmarcus@pbc.com	
DREW MARTIN	SIBERRA CLUB	DMartin@Gaol.com	561-533-6811
Jay Foy	FTID	jfoytung@gmail.com	242-0028
Jon Shaw	SFWMD	jshaw@sfwmd.gov	561-682-6849
Ron Rice	PBC Extension	rrice@pbcgov.org	561 233 1712
JEREMY MCBRYAN	PBC	jmcbryan@pbcgov.org	561-355-4600