

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD)  
STAKEHOLDER MEETING #3  
2017 LOWER WEST COAST WATER SUPPLY PLAN UPDATE**

August 30, 2017 9:30 a.m.  
Bonita Springs Government Center  
9101 Bonita Beach Road  
Bonita Springs, FL

MEETING SUMMARY

**Item 1. Opening Remarks – Mark Elsner, Chief, Water Supply Bureau, SFWMD**

Mr. Elsner opened the workshop and welcomed participants, then walked through the meeting's agenda. He announced the Floridan aquifer system model for the Lower West Coast (LWC) was not complete and would not be included in the 2017 LWC Plan Update.

**Item 2. Lee County Utilities – Rand Edelstein, Jr., Engineer Manager Hydrogeologist**

Mr. Edelstein gave an overview of Lee County Utilities' operations, including its 5 water treatment facilities, 3 water use permits, 111 production wells, 5 aquifer storage and recovery (ASR) wells, and 3 reclaimed water distribution systems. The utility meets a total maximum daily potable demand of approximately 33 million gallons per day (mgd) from fresh and brackish groundwater as well as surface water. The reclaimed water system meets a total average demand of nearly 23 mgd, with 65 percent utilization of the treated wastewater. Initiatives to meet current and future reclaimed water demands include a supplementation system and a reclaimed water ASR system.

Questions/comments included:

- ***Is Lee County working on expanding its reclaimed water distribution?*** The utility is moving from individual agreements to a permit process that will be established by ordinance. Most supply and demand balances will remain the same, but the methodology will change.
- ***Are you able to move potable water from one area to another?*** Yes, the potable water distribution systems are interconnected and the utility is looking for more transmission lines.
- ***Is your total reuse utilization 65 percent? Is that lower than other places in southwest Florida? I thought it was closer to the 90<sup>th</sup> percentile.*** Utilization has not gone down; the higher end typically is 75 percent. Lee County Utilities is working on reclaimed water initiatives but we are limited by low demand. Mark Elsner of the SFWMD interjected that the areas reporting 85 to 90 percent utilization are including the use of supplemental water in their calculations.
- ***Is surface water used for supplementation treated?*** Mark Elsner answered: yes and no. It depends on the area. For example, Cape Coral supplements reclaimed water with surface water and then filters the water.
- ***How much water is recovered from your ASR system?*** Approximately 75 to 80 percent of the water stored in ASR wells is recovered.

- ***Are you planning on having a reclaimed water ASR system in the underground source of drinking water?*** Lee County Utilities is looking to get a permit to inject above the underground source of drinking water.

**Item 3. Bonita Springs Utilities, Inc. – John Jenkins, Executive Director, and Kim Hoskins, Director of Engineering**

Mr. Jenkins provided an overview of Bonita Springs Utilities’ operations, including its service area, waterworks, and wastewater system. The utility serves portions of the City of Bonita Springs, the Village of Estero, and unincorporated Lee County, and has interconnects with Lee County and Fort Myers Beach for emergency water supply. The water system relies on Lower Tamiami and Upper Floridan aquifer wells with a lime softening facility and a reverse osmosis (RO) facility. They have no issues with water quality in the utility service area. The utility has two water reclamation facilities and 100 percent of the reclaimed water and biosolids is reused as irrigation water and fertilizer pellets.

Ms. Hoskins discussed Bonita Springs Utilities’ sustainability program, current water supply projects, as well as successes and challenges. The utility is working on increasing water supply sustainability through five new RO wells as well as expansion of its RO facility. Improvements to the lime softening facility are also under way. The water supply is approximately half fresh (treated by lime softening) and half brackish (treated by RO), and funding is committed to increasing supply and treatment capacity. Challenges include identifying sustainable water supplies from the Lower Tamiami and Upper Floridan aquifers, and addressing sea level rise and saltwater intrusion.

Questions/comments included:

- ***Do you have a biosolids facility?*** Yes, the utility dewater and dries biosolids and ships them to Clewiston for mixing with other materials to make fertilizer.
- ***How many people do you serve for sewer?*** The utility has sewer service for approximately the same number of people that are served fresh water.
- ***The Bonita Springs Utilities public-private partnership with Resource Conservation Systems may be one of the few partnerships that was created to help the supply-demand issue.***

**Item 4. Introduction to the 2017 LWC Plan Update – Mark Elsner, Chief, Water Supply Bureau, SFWMD**

Mr. Elsner briefly discussed the current schedule for the plan and the open forum environment of the meeting. The draft planning document and appendices had been available for almost 2 weeks at the time of the meeting. Mr. Elsner encouraged attendees to ask questions during the meeting, but requested that comments on the plan also be submitted in writing. The public comment period ends on October 5, 2017, and SFWMD staff are available to discuss any questions and concerns. The plan will go to the SFWMD Governing Board for approval in November 2017.

**Item 5. Water Supply Planning Overview – Tom Colios, Leader, Water Supply Planning Section, SFWMD**

Mr. Colios provided a general overview of the water supply plan process. He remarked on the importance of public participation and the linkage between regional and local planning efforts.

**Item 6. 2017 LWC Water Supply Plan Update – Bob Verrastro, Lead Hydrogeologist, Water Supply Planning Section, SFWMD**

Mr. Verrastro began his presentation by identifying the objectives of this water supply plan update and outlining the chapters and associated appendices that comprise the plan update. He then moved into a discussion of the regional land use, identifying agriculture as the largest land and water use category. To determine current and future water demands, Mr. Verrastro briefly explained how the SFWMD gets its population estimates and projections. He noted that Collier County Water-Sewer District, Lee County Utilities, and Cape Coral Utilities have the largest 2040 projected service area populations. However, Mr. Verrastro pointed out that water demand is increasing at a much slower rate than population, exemplifying the great conservation ethic in the LWC region. Given its dominance in the region, Mr. Verrastro provided greater detail on agricultural acreage and water demand projections. He showed that very little increase or decrease is expected for most crops except fresh market vegetables, which are projected to noticeably increase by 2040. Mr. Verrastro concluded the demands portion of his presentation with a summary of the estimates and projections for all six water use categories discussed in the plan.

Questions/comments included:

- ***Do the population estimates and projections include seasonal population?*** No, all population estimates are for permanent residents.
- ***Do you think the slower increase in water demand is because there are more permanent residents with a conservation ethic?*** The SFWMD believes that is a factor in the slower increase in water demand compared to population growth.
- ***How did you determine the gallons per capita per day for the region? Does it reflect the use of reclaimed water?*** This is the weighted average of per capita use rates from utilities and service area population. Yes, use of reclaimed water is a factor in creating these numbers.
- ***Does the plan include agricultural acreage declines by county?*** Yes, acreage and demand estimates for agriculture are provided by crop and county in the appendices document of the plan.

Mr. Verrastro continued his presentation by identifying the water supply issues and resource protections in effect in the region. Major issues include limited potential for increased surficial aquifer use as a result of environmental protections, salinity and health of the region's estuaries, and sustainability of the Floridan aquifer system. Saltwater intrusion also is a concern and the SFWMD is mapping the saltwater interface in the aquifers over time. Water resources primarily are protected through permitting rules such as Water Reservations, Minimum Flows and Minimum Water Levels (MFLs), and Restricted Allocation Areas (notably the Lake Okeechobee Service Area).

Mr. Verrastro went on to discuss the water source options available in the LWC region, including traditional and alternative sources. He reviewed some of the resource issues and analyses, monitoring water levels, water quality, and trends in the region. As Mr. Elsner mentioned at the beginning of the presentation, the regional groundwater models are not complete and therefore not included in this water supply plan update. Mr. Verrastro provided an update on the status of the models, and stated that they will be documented in a separate technical publication once complete.

Mr. Verrastro discussed water resource and supply projects next. Many water resource development projects are under way in the region and should be complete for the next 5-year update of the LWC water supply plan. Water supply development projects were proposed by the utilities and submitted to the SFWMD.

Questions/comments included:

- ***Is Lehigh Acres projected to remain heavily domestic self-supply/private wells? Or is someone like the Florida Governmental Utility Authority going to step in and move the region to a public water supply utility?*** For now, the SFWMD is projecting the Lehigh Acres area to remain domestic self-supply.
- ***You did not mention Basin Management Action Plans in your discussion of projects in the region.*** Basin Management Action Plans are focused on water quality whereas this plan focuses on water supply. We are connected through programs like the Lake Okeechobee Watershed Restoration Project and the Western Everglades Restoration Project, which border but are not part of the LWC region.
- ***There is a large gap in groundwater monitoring where data are not available in the Mid-Hawthorn and Lower Tamiami aquifers. Are you going to expand the monitoring well network or perhaps shift monitoring to areas with expected increases in domestic self-supply?*** The SFWMD monitors a lot of locations so there often is pressure against adding more monitoring wells. We would be very interested in discussing where you are seeing major data gaps in the monitoring network. If funding becomes available, shifting monitoring efforts to areas that currently lack data would be a possibility.

Mr. Verrastro concluded his presentation with a summary of the guidance for future work and the plan conclusions. He walked through the next steps in the schedule of getting the plan approved by the SFWMD Governing Board and reiterated the request for attendees and other members of the public to submit their comments in writing by October 5, 2017.

Questions/comments included:

- ***You mentioned that the SFWMD coordinates with other water management districts. How exactly do you coordinate with the Southwest Florida Water Management District?*** Water management districts are political boundaries, not resource boundaries, so it is important that the SFWMD works with other districts to responsibly manage Florida's water resources. We make every effort to be consistent with our terminology, permitting requirements, and planning processes. The Central Florida Water Initiative is a good example of interagency coordination as we work with the Southwest Florida and St. Johns River water management districts on planning and modeling simultaneously among the agencies. From a permitting perspective, there are monthly coordination meetings for

permits within 5 miles of the water management district boundaries. In addition, the groundwater models in process right now cover part of the Southwest Florida Water Management District, so there was coordination to acquire data as well.

**Item 7. Adjourn**

The meeting adjourned at 12:30 p.m.