



**ENVIRONMENTAL ADVISORY COMMITTEE MEETING**  
**TUESDAY, January 9, 2024 – 10:00 AM**  
**2379 BROAD STREET, BROOKSVILLE, FLORIDA 34604**

**MINUTES**

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Committee Members Present

Jenna Taylor – Florida Trail Association – Suncoast  
and Heartland Chapters  
Dave Tomasko (Chair) – Sarasota Bay Estuary  
Program  
Gordon Colvin – Save the Homosassa River  
Alliance  
Sid Flannery – Sierra Club – Tampa Bay Group  
Ed Sherwood – Tampa Bay Estuary Program

Governing Board Liaison

John Mitten

Staff Members

Adrienne Vining  
April Breton  
Brent White  
Cassidy Hampton  
Catherine Wolden  
Chris Zajac  
Doug Leeper  
Jay Hoecker  
Jennette Seachrist  
Jeremy McKay  
Jerry Harding  
Joe Quinn  
John Clarke  
Jordan Miller  
Kaitlyn Maze  
Kristina Deak  
Kym Holzwart  
Mandi Rice  
Michelle Weaver  
Randy Smith  
Robyn Felix  
Ryan Pearson  
Ted Gates

Board Administrative Support

Virginia Singer  
Barbara Matrone

**1. Call to Order and Introductions**

The Environmental Advisory Committee (EAC) of the Southwest Florida Water Management District (District) met for its regular meeting at 10:00 a.m. on Tuesday, January 9, 2024, via Microsoft Teams.

Chair Dave Tomasko called the meeting to order, and attendance was called.

Governing Board Liaison John Mitten welcomed the committee.

**2. Additions and Deletions to the Agenda**

None.

**3. Approval of the October 10, 2023 Meeting Minutes**

A motion was made to approve the minutes from the October 10, 2023, meeting. The motion passed unanimously.

**4. Public Comments**

None.

**5. Draft 2025 Regional Water Supply Plan Projections**

Ms. Cassidy Hampton, Environmental Project Manager, provided an overview of the Draft 2025 Regional Water Supply Plan (RWSP). Regional water supply planning is part of the District's Strategic Plan, with a goal to "identify, communicate and promote consensus on the strategies and resources necessary to meet future and reasonable beneficial water supply needs." This goal is addressed through the RWSP, which is published in accordance with Section 373.709 Florida Statutes (F.S.). Essentially, this plan assesses projected water demands and potential sources of water to meet those demands and is required where water sources are not adequate to supply existing and future uses and sustain water resources and related natural systems. The RWSP is divided into four planning regions: Northern, Tampa, Heartland, and the Southern regions. Pursuant to F.S., the District is not currently required to develop a RWSP for the Northern region where, to date, there have been sufficient water sources; however, the District takes a proactive approach and includes this region within our RWSP. The plan is updated every five years and covers a planning horizon of 20 years. The last update was in 2020 and covered through 2040, and the next update will be completed in 2025 and will go through 2045. The plan covers five key components: resource protection criteria, demand estimates and projections, evaluation of water sources, water supply and resource development projects, and an overview of funding mechanisms.

The RWSP develops demand projections for the public supply, agriculture, industrial/commercial and mining/dewatering, power generation, and landscape/recreation water use sectors. These draft demands generally utilize the same methodology as the 2020 RWSP. For the District's portions of Lake and Polk counties, projections are from the draft 2025 Central Florida Water Initiative RWSP. Other data incorporated into the draft demand projections includes data from the University of Florida Bureau of Economic and Business Research, the District's Estimated Water Use Reports, and the Florida Statewide Agricultural Irrigation Demand Model X by the Florida Department of Agriculture and Consumer Services. Population is projected to increase Districtwide across the course of the planning horizon, with an overall increase of nearly 1.7 million people, or 27%. When looking at absolute growth, the most growth can be seen in Hillsborough, Polk, Pasco, Manatee, and Sarasota counties. However, when looking at percentage growth, Lake, Sumter, Polk, Manatee, and Pasco counties are in the lead.

Ms. Hampton discussed the draft projections for the four planning regions. The District's Northern Planning Region includes District portions of Marion, Citrus, Lake, Levy, Sumter, and Hernando counties. The largest absolute growth can be seen in the public supply sector, with an increase of approximately 33.9 million gallons per day (mgd) from 2020 to 2045, or about 34%. However, the greatest growth percentage wise can be seen in the power generation sector with an increase of nearly 96%. This corresponds to an increase of 1.35 mgd over the planning horizon. Overall, all water use sectors are expected to increase over the planning horizon for this region, except for agriculture, which is expected to decrease slightly at -0.33% at 0.07 mgd even though Levy, Hernando, and Citrus counties are collectively expected to increase by 1.75 mgd. The Tampa Bay Planning Region includes Pasco, Pinellas, and Hillsborough counties. The highest absolute growth is in the public supply sector with the highest percentage of growth in power generation. Similar to the Northern Planning Region, the Tampa Bay Planning Region is expected to see a decline in agriculture of nearly 12 mgd or 24%. The Heartland Planning Region includes District portions of Polk, Hardee, and Highlands counties and is showing the highest absolute growth in public supply, with an increase of 34.4 mgd or 37%. The only use sector expected to decline in this region is agriculture, with a projected decrease of 2.25 mgd, or 2%. The largest percentage of growth can

be seen in the industrial/commercial and mining/dewatering sectors at 65%. The District's Southern Planning Region includes Manatee, Sarasota, Desoto, and Charlotte counties. Similar trends are shown, with increases in all water use sectors, except for agriculture, which is projected to decline about 1% over the planning horizon. When rolling up all planning regions, the draft projections Districtwide show an increase in total water demands from 2020 to 2045 of just over 205 mgd, for a total of 1,300 mgd in 2045. This corresponds to an increase of nearly 19%. As was seen in several planning regions, Districtwide, the highest absolute growth is expected to occur in public supply at an increase of 175 mgd as population continues to grow. Percentage wise, power generation is highest at approximately 67%. All other water use sectors are also expected to continue growing, except for agriculture, which is expected to decline in all four planning regions for an overall net decrease of about 4.8%. When comparing the makeup of water demands from 2020 to 2045, however, the percentage shares have not changed significantly. Changes in shares include an increase in industrial/commercial and mining/dewatering of approximately 2%, an increase in public supply of approximately 4%, an increase in power generation of approximately 1%, a decrease in landscape/recreation of 1%, and a decrease in agriculture of about 6% of total water demands Districtwide.

Ms. Hampton concluded by providing an overview of the proposed RWSP timeline and next steps. The 2025 RWSP is currently in the early stages of development and will continue over the coming years. The public draft is anticipated to be released in early 2025, with the final draft to be completed by the end of 2025. She invited committee members to review and provide comments and feedback on the draft demand projections by February 8. Draft technical memorandums for each water use sector are also available for review and can be provided upon request.

Mr. Ed Sherwood asked if the 2025 RWSP identified trends across each of the water use sectors for the Tampa Bay and Southern planning regions where it appears that demands are outpacing what was projected in 2020. He also asked if public supply is outpacing agricultural demands. Ms. Hampton replied that in 2025 for the Tampa Bay Planning Region there is a small jump due to a planned expansion by Mosaic regarding industrial/commercial and mining/dewatering, as site plans are taken into consideration for these use sectors. Mr. Ryan Pearson added that population growth has been robust and has been a driving factor of the public supply projections. Mr. Brent White added there is a relationship between public supply and agriculture that is reflected in the new projections, and oftentimes there is conversion of agricultural land to public supply. Mr. White also noted that these projections are based on the most recent five years of water use data. The 2020 projections are older water use data and these projections are based upon current use and projected growth rates. Additionally, it was requested that the District provide additional information after the meeting.

Chair Tomasko asked about landscape/recreation and if it included lawn irrigation. Ms. Hampton replied that there is some irrigation within public supply for homeowners who are connected to municipal public supply utilities, but landscape/recreation does include large recreational facilities and golf courses. Chair Tomasko added that not having lawn irrigation captured within landscape/recreation can cause confusion and recommended clarifying this in the future. Mr. White added that common area irrigation off a public supply meter is quantified in the per capita of a residential community whereas landscape/recreation includes parks and golf courses for example. Per capita is the metric for public supply includes anything going through a public supply meter to a community, including common area irrigation or lawn irrigation for residents.

## **6. Status and Trends in Sarasota Bay's Water Quality**

Dave Tomasko, Sarasota Bay Estuary Program, gave an update on the status and trends in Sarasota Bay's ecosystem health. Sarasota Bay is easy to manage due to it being a much smaller watershed than its adjacent systems: Tampa Bay, Charlotte Harbor, Indian River Lagoon, and Biscayne Bay. The watershed is only 150 square miles, has a much smaller amount of open water and is mostly better flushed than its adjacent systems. Alternatively, it has a much higher population density than its adjacent systems and human impacts are quite strong in this intensely developed

watershed. The Palma Sola Bay and Little Sarasota Bay areas are not as well flushed as the rest of the bay. One thing Sarasota Bay has in common with its adjacent systems is that it is a nitrogen-limited system that must be managed. Algae growth responds directly to small increases in nitrogen concentrations causing it to grow very quickly and outcompete important parts of the food web such as seagrasses.

The ecosystem report card is based on four metrics: total nitrogen, phytoplankton, macroalgae abundance, and seagrass acreage. These metrics help to set targets to determine whether we are consistently using a good management approach. Segments are compared across the bay, and it was found that there were healthier conditions during the reference period of 2006 to 2012. Bay-wide, nitrogen loads were 20% lower than in later years from 2013 to 2019.

According to the Florida Department of Environmental Protection (FDEP) who independently set the water quality criteria approximately 10 years ago, none of the open waters in Sarasota Bay are nutrient impaired. Palma Sola Bay and Upper Sarasota were never considered impaired for nutrients, but the lower part of the bay did not meet their water quality criteria at that time.

Chair Tomasko showed some graphs and discussed rainfall and the recent improvements from 1995 to present. He then discussed water quality trends, some important lessons learned, sea level data, and the expectations for the future of Sarasota Bay.

## **7. Overview of the District's Water Quality Monitoring Networks**

Ms. Catherine Wolden, Water Quality Monitoring Program Manager, gave an overview of the District's water quality monitoring networks. The Data Collection Bureau (DCB) is composed of an administration section and four data collection sections:

- The Geohydrologic Data section performs exploratory coring, monitor well construction oversight, aquifer testing, and well repairs, abandonments, and modifications.
- The Hydrologic Data section collects hydrologic data including groundwater and surface water levels and atmospheric data.
- The Water Quality Monitoring section performs water quality sampling from wells and surface water bodies, and the chemistry lab analyzes water samples for District projects and initiatives.
- The Mapping and GIS section provides visualization and management of spatial data using mapping products, and the survey section provides professional surveying services for District projects and initiatives.

The main goal of DCB's data collection efforts is to support resource management decisions and to help staff understand and manage the water resources with the District.

The WQMP and Chemistry Lab are made up of 21 staff members, including field and lab technicians, chemists, a data analyst, data managers, a professional geologist, student interns and two supervisors. They collaborate to collect, analyze, and manage data and samples from surface, groundwater, and springs resources throughout the 16 counties that are within the District. Annually, 2,700 samples are collected and analyzed for the parameters that are relevant to the objectives of the project. Approximately 60,000 individual analyses are performed annually in the lab and 21,000 field observations are collected to accompany the laboratory data in the database.

The District has observation well and springs networks that collect and maintain data from more than 500 sites to evaluate water quality trends. The main objective of these networks is to track water quality changes in groundwater throughout the District. The aim of the Coastal Groundwater Network is to assess the quality of groundwater in the coastal and inland regions of the District. The data is mainly used to track the landward movement of saltwater resulting from groundwater withdrawals. The network is also designed to monitor the up coning of sulfate rich waters in coastal and inland areas.

The Inland Floridan Aquifer System Network supports the Central Florida Water Initiative (CFWI) technical activities by collecting and analyzing groundwater quality data from wells drilled into the Lower Floridan aquifer. The Springs Network tracks nitrate concentrations at our spring vents in support of the development of nitrate management plans in the spring recharge areas. The Upper Floridan Aquifer Nutrients Network monitors regional trends of nitrates in the Upper Floridan Aquifer system, within areas of the Coastal Springs recharge basins.

In addition to groundwater monitoring, surface water networks track water quality changes in surface water throughout the District. The primary intent of our rivers, streams and coastal spring-fed river monitoring networks is to track nutrients within these systems. Lake monitoring is primarily used in support of establishing and maintaining minimum levels for District lakes. All the District's surface and groundwater data collection efforts support various programs and initiatives; some of the more prominent examples include groundwater modeling, springs restoration, the Central Florida Water Initiative and the establishment and maintenance of minimum flows and levels.

Ms. Wolden concluded by demonstrating how to access the data and tools on the District's website. This Environmental Data Portal can be used to access reliable water quality data from the District.

Mr. Sid Flannery asked, with regard to groundwater levels, if there was a gap in monitoring wells between northern Hillsborough and Pasco counties because the data was being collected by Tampa Bay Water. Ms. Wolden responded that it was a combination of the fact that both the District and Tampa Bay Water are collecting data in this area as well as the map she was displaying was showing water quality monitoring locations rather than both water quality and water level monitoring locations.

Mr. Sherwood asked about the URL generator and if it would allow you to do an API request to batch multiple stations and parameters or if you had to interface through the District URL generator portal. Ms. Wolden responded that there are other options available, and for API requests, they could create something that would work for the requestor and focus on specific interests. Mr. Sherwood asked if there was a way to access corrected flow information through any consumptive water use permit that might be downstream of gage flow. Ms. Wolden responded that she would reach out to staff and provide an answer.

**8. Development of Agenda Topics**

Mr. Sherwood requested a 2024 Seagrass Mapping update due to El Niño conditions.

**9. Announcements and Other Business**

None.

**10. Adjournment**

The meeting was adjourned at 11:30 a.m.