ENVIRONMENTAL ADVISORY COMMITTEE MEETING
TUESDAY, OCTOBER 14, 2025 – 10:00 AM
2379 BROAD STREET, BROOKSVILLE, FLORIDA 34604

MINUTES

Committee Members Present
Jennifer Hecker – Coastal & Heartland National Estuary Partnership
Becky Ayech – Environmental Confederation of Southwest Florida
Jennifer Brunty – Manatee County Chamber of Commerce
Dwayne Carlton – The Ocala Metro Chamber & Economic Partnership
Dave Tomasko – Sarasota Bay Estuary Program
Sid Flannery – Sierra Club – Tampa Bay Group
Ed Sherwood – Tampa Bay Estuary Program

Interested Parties
Jack Prator – Tampa Bay Times
Vanessa Bauzo-Deleon – FDACS

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, October 14, 2025, via Microsoft Teams.

   Chair Ed Sherwood called the meeting to order, and attendance was called.

2. **Additions and Deletions to the Agenda**
   None.

3. **Approval of July 8, 2025, Meeting Minutes**
   A motion was made to approve the draft minutes from the July 8, 2025, meeting. The motion passed unanimously.

4. **Public Comments**
   None.

5. **Sarasota Bay SWIM Plan Update**

Chris Anastasiou, Ph.D., Chief Water Quality Scientist, provided an update on the Sarasota Bay Surface Water Improvement and Management (SWIM) Plan. He gave a brief overview of the SWIM planning process and discussed the status of Sarasota Bay. Dr. Anastasiou reviewed the District's mission and its four core areas of responsibility – water supply, water quality, natural systems and flood protection, emphasizing that the SWIM Plan primarily focuses on water quality and natural systems.

The SWIM program was established in 1987 under the SWIM Act, which directs Florida's water management districts to identify and oversee water bodies of regional or statewide importance that require restoration or protection. As part of this mandate, districts are responsible for maintaining a list of priority water bodies and developing a SWIM plan for each. Currently, there are 12 designated priority water bodies under the program.

Dr. Anastasiou provided an overview of the five estuaries that comprise Sarasota Bay: Palma Sola Bay, Sarasota Bay Proper, Roberts Bay, Little Sarasota Bay and Blackburn Bay. He noted that this region represents one of the smallest and most urbanized watersheds, with approximately 50 square miles of open water and a watershed area of about 150 square miles. His presentation also covered the status of seagrass habitats and the overall estuarine health of Sarasota Bay. He concluded by outlining the water quality and natural systems goals within the SWIM plan, detailing the associated management actions, timeline and next steps toward finalizing the plan update.

The discussion portion of the presentation took place and questions were answered.

6. **SWIM Priority List**

Vivianna Bendixson, SWIM Program Manager, provided an update on the SWIM Priority List. Established by the Florida Legislature in 1987 through the SWIM Act, the program was designed to address nonpoint source pollution and to protect, restore and maintain Florida's threatened surface water bodies. While the state's water management districts lead the implementation of the SWIM program, efforts are carried out in collaboration with the Florida Department of Environmental Protection (FDEP), other federal, state, and local agencies, national estuary programs and private sector partners. Together, these entities help identify and maintain a list of priority water bodies of regional or statewide significance that require restoration or protection.

The SWIM Act initially identified Tampa Bay for consideration as a priority water body within our District. Today, the program encompasses 12 priority water bodies, including watersheds and springsheds that collectively span approximately 74% of the District. The current list includes:

- The three estuaries: Tampa Bay, Sarasota Bay and Charlotte Harbor
- All five first-magnitude springs: Weeki Wachee, Chassahowitzka, Homosassa, Crystal River/Kings Bay, and Rainbow River
- Four lake systems: Lake Panasoffkee, Lake Thonotosassa, Lake Tarpon and the Winter Haven Chain of Lakes

This list is reviewed every five years, with the most recent update approved in 2020.

Ms. Bendixson discussed the SWIM Plans update schedule, highlighted key program accomplishments and acknowledged the vital contributions of the District's many partners, emphasizing their role in the program's continued success. She concluded her presentation with a review of the timeline for updating the priority water body list.

No questions were asked related to the SWIM Priority List review.

7. **Minimum Flows and Levels 2025 Priority List and Schedule**

Gabe Herrick, Ph.D., Chief Environmental Scientist, presented the annual update to the 2025 Priority List and Schedule for Minimum Flows and Levels (MFL). In accordance with Section 373.042 Florida Statutes, the District is required to update this list and schedule each year. The updated priority list must be submitted to the FDEP by November 15 and included in the Consolidated Annual Report by March 1 of the following year.

The schedule outlines a three-year planning horizon, covering 2025 through 2028. It identifies water bodies prioritized based on their regional or statewide significance, those with existing or potential risk of significant harm, and those currently experiencing or anticipated to experience adverse impacts due to water withdrawals.

The priority list and schedule is also required to include all first-magnitude springs. Within the District, there are five such springs, each of which has an established minimum flow. In addition, second-magnitude springs located on state or federal conservation lands must also be included. The list further incorporates water reservations, identifies potential cross-boundary impacts, considers effects within the Central Florida Water Initiative (CFWI) planning area, and evaluates, on a case-by-case basis, whether adoption by the FDEP is appropriate.

Dr. Herrick then reviewed the schedule for upcoming Governing Board meetings and the timeline for submittal to DEP. He then provided an overview of the MFL priority list for 2025 through 2028 for each waterbody and county and highlighted changes in projected dates across the lists.

Dr. Herrick concluded by discussing the proposed MFLs and reservations through 2028. There are 16 total freshwater lakes, six freshwater rivers, two estuaries, two springs, one aquifer and one reservation.

Chair Sherwood inquired about the District's strategy for evaluating second-magnitude springs and how they are prioritized for MFL assessments, particularly in relation to manatee protection. Dr. Herrick explained that manatee habitat is a key criterion and has consistently influenced MFL determinations. He noted that springs are reviewed annually and prioritized based on their alignment with established criteria, including their location within designated conservation areas.

8. **Lower Hillsborough River Third Five-Year Assessment**

Danielle Rogers, P.W.S., Environmental Project Manager, presented the findings from the third five-year assessment of the Lower Hillsborough River. As required by state law, the District and FDEP must establish MFLs for priority water bodies to prevent significant harm resulting from water withdrawals. Minimum flows are designated for flowing systems such as springs, rivers and creeks, while minimum levels apply to standing water bodies including lakes, wetlands and aquifers. MFLs serve as essential tools for water management districts, supporting water supply planning, water use permitting and environmental resource permitting.

Ms. Rogers discussed the geography and history of the Lower Hillsborough River followed by a discussion of its current minimum flows. She explained that the primary objective of the minimum flow is to extend the low salinity habitat toward Sulphur Springs. The established minimum flow is set at 20 cubic feet per second (cfs) of freshwater equivalent from July through March and increases to 24 cfs from April through June.

Ms. Rogers outlined the requirements and timeline for the five-year assessments, as specified in the Florida Administrative Code. She explained that the District is mandated to complete three five-year assessments, each of which must evaluate river flows, water levels, key water quality parameters and biological conditions within the river system.

Ms. Rogers then reviewed the hydrology of the Lower Hillsborough River, presenting several maps illustrating model results and target zones for key water quality indicators, including salinity and

dissolved oxygen. She also discussed the primary recovery sources for Blue Sink, the Tampa Bypass Canal, and Sulphur Springs with Sulphur Springs contributing approximately 70% of the total recovery source water.

Ms. Rogers concluded by noting that the report confirms the successful extension of the low salinity habitat toward Sulphur Springs. However, she emphasized that the long-term sustainability of Sulphur Springs as a recovery source remains a concern. The next steps in the current five-year assessment include gathering stakeholder feedback by October 17, 2025, with the intent to present the findings to the Governing Board in the coming months.

Mr. Sid Flannery shared comments and insights regarding the minimum flows for the Lower Hillsborough River. He recommended that the District stabilize water levels in Sulphur Springs at full stage near seven feet to prevent further increases in salinity in the spring discharge.

9. Reevaluated Minimum Levels for Lake Angelo and Lake Denton

TJ Venning, Senior Environmental Scientist, presented the reevaluation of minimum levels for Lake Angelo and Lake Denton. He explained that a minimum lake level represents a water elevation that must be met or exceeded at least 50% of the time, while a high minimum level must be met or exceeded at least 10% of the time. These thresholds are designed to protect key environmental values outlined in state regulations, including recreation, fish and wildlife habitats, and the aesthetic and scenic qualities of the lakes.

The process for establishing minimum and high minimum lake levels begins with the development of a water budget model based on historical conditions. Environmental criteria are then applied, with a primary focus on determining the appropriate minimum lake level. The P50 percentile represents the highest confidence level, indicating that the lake level should be met or exceeded 50% of the time. In contrast, the P10 percentile is less sensitive to groundwater influences and reflects a level expected to be met or exceeded only 10% of the time.

Mr. Venning explained the development of the water budget model used to establish historic lake levels and generate MFL conditions. He noted that changes in lake stage or volume are calculated by comparing total inflows and outflows over a defined time period. This analysis forms the basis for determining historic percentiles. To extend the water level record back 60 years, a rainfall regression model is applied. Mr. Venning also reviewed the standards and screening criteria used to set MFLs, emphasizing their alignment with environmental benchmarks.

Lakes Denton and Angelo, located in Highlands County, are undergoing minimum level evaluations. One of the initial steps in this process involves acquiring updated bathymetric data for each lake. A consultant is engaged to collect detailed bathymetry and elevation data for key topographic features. This information is then used to develop a digital elevation model, which supports the calculation of stage–area–volume relationships essential for establishing minimum lake levels.

Mr. Venning discussed the impacts of groundwater pumping on Lake Angelo and Lake Denton, referencing both historical and long-term water level trends derived from water budget models. He explained how these models were used to simulate MFL conditions. Additionally, he reviewed the aquatic habitat zone screenings conducted for both lakes, along with evaluations related to aesthetic value, basin connectivity and dock usability.

Mr. Venning concluded by presenting the proposed MFLs and status for Lake Denton and Lake Angelo. He noted that both lakes are currently meeting the proposed MFLs, eliminating the need for a recovery strategy. Additionally, projections indicate that the minimum levels will continue to be met throughout the 20-year planning horizon, so a prevention strategy is not required. The peer review process is scheduled to begin on October 15, 2025, and draft reports outlining the proposed levels for both lakes are available on the District's website. Public comment may be submitted online at www.watermatters.org/projects/mfls/lake-mfl-review-and-comments.

10. Flatford Swamp Aquifer Recharge Project Update

Paige Tara, Environmental Project Manager, provided an update on the Flatford Swamp Aquifer Recharge Project. Flatford Swamp is located approximately six miles east of the most impacted area within the Southern Water Use Caution Area (SWUCA), a region historically affected by declining aquifer levels. The swamp has experienced significant tree die-off, primarily due to excessive surface water inflows. To address this issue, FARMS projects were implemented to redirect and utilize the excess surface water—efforts that have been completed and continue today. Despite these measures, modeling has revealed that additional surface water flows continue to enter the swamp, indicating a need for further evaluation and management.

The geomorphology of the region significantly influences Flatford Swamp's ability to manage excess surface water. A distinctive hard-pan layer in the area restricts infiltration, preventing surface water from draining into the underlying aquifer. Additionally, the swamp is located in a topographically low-lying area, causing excess flows from the surrounding landscape to accumulate and remain within the swamp.

The project was initiated in 2018 following extensive studies and modeling that identified aquifer recharge as the most effective strategy for managing excess surface water. This approach was selected not only to address local hydrologic concerns but also to support the minimum aquifer level established to mitigate saltwater intrusion within the SWUCA. Construction of the first test well began in the northern section of Flatford Swamp, utilizing surplus flows from the Myakka River.

Initially, the system was designed to use minimally treated surface water utilizing a zone of discharge. However, in 2022, a chloramine disinfection system was added to meet regulatory requirements. Between 2022 and 2024, final construction faced delays due to various challenges, including lightning strikes and a flooding event, which was resolved in 2024. Operations officially commenced in July 2024 and continued successfully for nearly a year until a pump failure occurred in June 2025.

During operational testing, a total of 275 million gallons of water were injected into the Upper Floridan Aquifer, with a peak injection rate reaching 1.8 million gallons per day. Water quality monitoring was conducted at three on-site monitoring wells. Two wells located approximately 400 and 1,200 feet from the injection well at comparable depths. In addition, a shallow monitoring well was used to track horizontal migration of the injected water.

Ms. Tara concluded by outlining the next steps for the project. A final report evaluating water quality results is in progress. Ongoing efforts will include continued wetland monitoring and assessment, documentation of lessons learned to inform the development of an Operations and Maintenance (O&M) manual and an evaluation of the system's potential role as an alternative water supply source.

Ms. Ayech inquired about the lightning strike incident. Ms. Tara explained that lightning struck the building, damaging electrical components in the pump house and causing further delays in operations. In response, Ms. Ayech suggested considering diesel-powered pumps as an alternative. She then asked whether the incident occurred in June of this year. Ms. Tara clarified that while the lightning strike was a separate event, a pump failure did occur in June, rendering the system inoperable since then. The team is currently reviewing operational data to determine the appropriate next steps.

Discussion ensued.

11. Development of Agenda Topics

Ms. Ayech requested a review and update of the environmental permitting process related to rainfall maps, specifically those used to input precipitation data into the stormwater system. Mr. Flannery requested to present to the EAC on minimum flows for the Lower Hillsborough River. Chair Sherwood indicated he had no objection to him presenting at the January meeting.

12. Announcements and Other Business

Chair Sherwood recognized Dave Tomasko for his dedicated service and contributions as former Chair of the Environmental Advisory Committee (EAC) and Director of the Sarasota Bay Estuary Program. Mr. Flannery reported that Tampa Bay Water had submitted a permit renewal request to the District seeking increased withdrawals from the Alafia River. In response, the Polk Regional Water Cooperative (PRWC) filed a petition for an administrative hearing to contest the permit renewal.

Mr. Chris Tumminia provided a brief overview of the procedural steps for the hearing and shared information on how the public can follow case developments via the Division of Administrative Hearings website.

Mr. Flannery also noted that he had submitted several questions to the District regarding the Upper Peace River, all of which were thoroughly addressed by Mr. Randy Smith. Mr. Flannery asked whether the District could share with the EAC the preliminary technical information on the Minimum Flows and Levels (MFL) that had previously been provided to the Polk Regional Water Cooperative (PRWC). Mr. Smith confirmed that the information shared with PRWC could also be made available to the EAC. While he acknowledged that the data is now outdated, he stated that the committee would soon receive the fully vetted draft report, including proposed MFL values, which could be distributed to EAC members via email.

Ms. Ayech suggested presenting a certificate of appreciation to Dave Tomasko in recognition of his service on the committee. Ms. Virginia Singer agreed and confirmed that a draft certificate would be prepared and sent to him.

13. Adjournment

The meeting was adjourned at 12:53 p.m.