

INDUSTRIAL ADVISORY COMMITTEE MEETING TUESDAY, August 8, 2023 – 10:00 AM 2379 BROAD STREET, BROOKSVILLE, FLORIDA 34604

MINUTES

<u>Committee Members Present</u> James Morris, CEMEX Ilia Balcom, Duke Energy Florida, Inc. Keith Nadaskay, Mosaic Fertilizer LLC (alternate) Chris Cooley, Port of Tampa Justin Gostnell, Seminole Electric Cooperative Michael Lee, Seminole Electric Cooperative (alternate) Brandon Wren, Standard Sand and Silica Terry Easley, Tampa Electric Company

<u>Governing Board Liaison</u> James Holton Staff Members Michael Molligan Jennette Seachrist Robyn Felix Patrick Doty Steve Desmith Ryan Pearson Cassidy Hampton Jay Hoecker Seung Park Joe Quinn Jordan Miller Bob Thompson Kaitlyn Maze Jeremy McKay

Board Administrative Support Virginia Singer Barbara Matrone

1. Call to Order and Introductions

The Industrial Advisory Committee (IAC) of the Southwest Florida Water Management District (District) met for its regular meeting at 10:00 a.m. on Tuesday, August 8, 2023, via Microsoft Teams.

Chair Ilia Balcom called the meeting to order, and attendance was called.

Governing Board Liaison James Holton welcomed the committee.

2. Additions and Deletions to the Agenda

None.

3. Approval of the May 9, 2023, Meeting Minutes

A motion was made to approve the minutes from the May 9, 2023 meeting The motion passed unanimously.

4. <u>Public Comments</u> None.

5. Elections of Chair and Vice Chair

Mr. James Morris was nominated for committee Chair and Mr. Chris Cooley was nominated for Vice Chair. A motion was made and passed by the committee.

6. District Resiliency Activities

Mr. Patrick Doty, Senior Planner, gave a brief overview of the District's resiliency activities. Resiliency has been part of the District's efforts for decades and is embedded in all aspects of its core missions: flood protection, water supply, water quality, and natural systems. Mr. Doty discussed the four core missions.

- Flood Protection: Watershed management plans identify, prioritize, and address flood-related water resource issues within a watershed and takes sea-level rise into account when planning for future conditions. The District partners with the Federal Emergency Management Agency in the development of coastal flood models to better identify flood risk from storm surge. The District controls numerous water control structures such as the Tampa Bypass Canal (TBC) and the Lake Tarpon Outfall. In the most current cycle of funding for resiliency grants, the District was awarded \$1.2 million from the Florida Department of Environmental Protection (FDEP) for Structure 160 on the TBC for saltwater protection and updating structure materials. The District is also seeking additional funding in the amount of \$1.7 million in fiscal year 2024 for gate replacements.
- Water Supply: The District has robust drought-resistant alternative water supply planning with Peace River Manasota Water Supply Authority, the Bill Young Reservoir, desalination plants, and reverse osmosis plants. The District participates in the Central Florida Water Initiative and leads the nation in reclaimed and reuse water. The District works closely with local governments on conservation and education measures through the Florida Water Star program and works with the St. Johns River and the South Florida water management districts to address water supply needs for future and present conditions.
- Natural Systems: The District has been a leader in seagrass mapping and monitoring, and maps in two-year cycles for Suncoast estuaries and four-year cycles for Springs Coast estuaries to measure seagrass in the ecosystem. We monitor minimum flows and levels (MFL) for dozens of different waterbodies and rivers in the District. Surface water improvement projects such as the Rock Ponds project were designed with tidal migration considered. It is a habitat restoration design using 20-year sea level rise projections in estuarine models to account for changes in salinity in freshwater systems' coastal vegetation zonation in MFL evaluations.
- Water Quality: The District has five first-magnitude springs, so it has a robust springs watershed monitoring system. The District has vast amounts of stormwater projects and monitoring networks on all aspects of water. The Freshwater Saltwater Interface monitoring system, or Isochlor, monitors chloride levels present in the upper Floridan aquifer via dozens of different monitoring wells. Numerous sources of data and mapping tools are used to make decisions on current and future projects.

The District also uses meteorological data, geohydrologic data, stream flows and levels, groundwater levels, and biological data sources which all contribute to creating resiliency. The Five-Year Capital Improvement Plan identifies how to improve the District's infrastructure and maintain it while focusing on water resource planning, land acquisition and restoration of existing projects and public works, and the operation and maintenance of our conservation lands and stormwater projects. The District partners with numerous stakeholders in local and regional efforts to ensure resiliency is in every aspect of what the District does on a daily basis. Mr. Doty concluded by mentioning that there are funds and several different types of grants available on the FDEP website. The funding portal opened on July 1 and will close on September 1.

7. Hydrologic Conditions Update

Mr. Steve Desmith, Senior Professional Geologist, gave a hydrologic conditions update. Typically for the month of May we receive 3.6 inches of rainfall, but this past May we received 4.7, so there was a surplus of 1.1 inches. May is the last month of the dry season. The dry season runs from October of the previous year until May of the current year. The highest amount of rainfall this year in

May was in Marion County with 14.4 inches and the lowest amount was in Pinellas County which was about .4 inches. June rainfall this year was just a little bit below average, but still within the normal range. Typically, we receive about 7.5 inches of rainfall, but this June we received 7.2 inches which was a 0.3-inch rainfall deficit. July was a very dry month. Typically, we get about 8.2 inches of rainfall, but this past July we only received 6.0 inches which was a deficit of 2.2. The drier areas during July were in the lower central region and in the southern region. Mr. Desmith showed a graph of the 12-month rainfall distribution from August 2022 through July 2023. Typically, we receive 52.7 inches for the 12-month period, but in the past 12-month period we only received 52.3 inches, which was about a 0.5-inch rainfall deficit. The high rainfall for the 12-month period was 77.5 inches in Highlands County and the low was 28.6 inches in Citrus County.

Mr. Desmith showed a graph of the 12-month departure from mean and discussed the rainfall surplus and deficits for the month of June. This year in June we had a 0.6-inch rainfall surplus and last year we had a -1.6-inch rainfall deficit. He then discussed the groundwater levels in the northern, central, and southern counties from January 2004 through July 2023, as well as the surface water levels in the Northern lakes region, Tampa Bay lakes region, Polk Upland lakes region, and Lake Wales Ridge lakes region. He then showed graphs and discussed the 8-week streamflow of the Withlacoochee and Hillsborough rivers.

Mr. Desmith discussed the public supply volumes for the City of Tampa's "Hillsborough" reservoir, the Bill Young reservoir, and the Peace River reservoir and the ASR systems. He showed graphs and discussed the 8-week streamflow of the Alafia and Peace rivers. He discussed the Climate Prediction Center Near-Term Climate Forecast showing seasonal outlooks for temperature, precipitation, and the extended climate forecast. He stated that we are in tropical storm season which began on June 1 and runs through November 30. The National Weather Service is predicting 12-17 named storms for this year. Five to nine of them are predicted to turn into hurricanes, and one to four are predicted to turn into major hurricanes. He concluded by discussing the August tropical storm origins and the predicted rainfall activity for this August and September.

Mr. James Morris asked how many rain collection gauges the District has.

Mr. Desmith responded that we have near real-time which means we get the data hourly, and there are 170 distributed throughout the District.

Ms. Balcom asked since June and July were very dry months and below average rainfall, would the District consider this an El Nino year.

Mr. Desmith responded that El Nino conditions are only dominant near the fall, winter, and early spring. During the summer, convection storm activity with sea breeze and tropical storms are dominant weather conditions so although El Nino could be having a little bit of effect, it will only be minimal.

8. 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 Southern planning regions. Pursuant to F.S., we are currently not required to develop a RWSP for the Northern region where there are currently sufficient water sources; however, the District takes a proactive approach and includes this region within the regional water supply planning process. The plan is updated every

five years and covers a planning horizon of 20 years. The last update was in 2020 and covered the time period through 2040. The next update will be completed in 2025 and will cover 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.

Mr. Ryan Pearson, Senior Economist, gave an overview of the Draft 2025 Regional Water Supply Plan projections as they relate to the industrial commercial (IC), mining dewatering (MD) and power generation (PG) water use sectors. The methods used are the same as those used in the 2020 RWSP, but the data sources have been updated with the best available information. Mosaic demands were developed based on current mining plans to better reflect the movement of pumpage across counties as mines and demands shift during the planning horizon. The latest IC, MD and PG demand projections have been incorporated from the Central Florida Water Initiative projections for Polk and Lake counties. The base year is being updated from 2015 to 2020 and the planning horizon is being extended to 2045. The projections for 2025-2045 were developed by multiplying metered and estimated 2020 water use by a growth factor. The growth factor being used is the latest county-level projections of Gross Regional Product (GRP) from Woods and Poole Economics from the 2022 publication. GRP is the market value of all final goods and services produced within a region. The average is 2.21% with the assumption that water sectors may grow with county economic activity.

Districtwide, the IC and MD sectors are anticipated to grow by 26.24 million gallons a day (mgd) over the planning horizon to a total of 84.26 mgd in 2045. The largest growth in terms of water use is anticipated to occur in the Heartland Planning region, which is where most of the IC and MD production resides. In comparing the latest demands to the 2020 RWSP, they are at least 10% lower than the 2040 projects with 2040 being the end of the planning horizon for the 2020 RWSP. Mr. Pearson showed a graph of the IC and MD water use projections by planning region and discussed the historical water use projections, and a comparison of the draft IC and MD 2025 RWSP projects to the 2020 RWSP.

Mr. Pearson then discussed power generation and stated that they are staying consistent with the 2020 RWSP methodology based on facility level site plans to develop a projection of megawatts and water usage over the course of the planning horizon. Overall, it is expected that water use in the PG sector will increase 7.6 mgd or 67% by 2045. Some of that difference is the addition of the facility in Hardee County based upon feedback received from Seminole Electric Cooperative in the 2020 RWSP process. It is anticipated that water use across all three sectors will reach 103.298 mgd in 2045 with most of the gains in the IC and MD sectors. Mr. Pearson showed the total District demand projections draft 2025 RWSP and stated that in comparison to the 2020 RWSP, they are lower across the planning horizon of 2025-2045.

Mr. Pearson concluded by summarizing the projection trends. All three sectors are expected to reach 103.29 mgd by 2045, new 2040 water demand projections are lower than the 2020 RWSP, and there is a noticeable difference in 2020 base year, which is similar to 2019.

Ms. Hampton then provided an overview of the proposed RWSP timeline and next steps. The RWSP is currently in the early stages of development and will continue over the next couple of years. Ultimately, the public draft is anticipated to be released in early 2025, with the final draft to be completed by the end of 2025. Stakeholder buy-in is key to the success of the RWSP, so comments and feedback are welcomed. A draft technical memorandum is also available for review and can be provided upon request. Comments and questions may be submitted to Mr. Pearson by September 7.

9. Committee Expansion Discussion

Mr. Michael Molligan, Employee, Outreach and General Services Director, discussed expanding the Industrial Advisory Committee to add more organizations and to change the name to the Industrial, Commercial and Institutional Advisory Committee with the idea that a larger group and broader representation would bring more participation and better opportunity for topics for future meetings. The District's Water Resources Bureau will help identify organizations that would be best suited for the committee. The committee was created by Governing Board policy so approval will be needed from the District's Governing Board to make changes to the committee. Committee members expressed support for the change.

10. <u>Development of agenda topics for the next Industrial Advisory Committee meeting</u> <u>tentatively at 10:00 a.m. on Tuesday, November 7, 2023</u> None.

- 11. <u>Announcements and Other Business</u> None.
- 12. <u>Adjournment</u>

Meeting adjourned at 11:03 am.