

Memorandum

To: Suwannee-Satilla Regional Water Planning Council

From: Shayne Wood, CDM Smith

Date: November 2, 2022

Subject: Suwannee -Satilla Regional Water Planning Council Meeting

This memorandum provides the meeting summary of the Suwannee-Satilla Regional Water Planning Council (Council) Meeting held on November 2, 2022, at the Georgia Museum of Agriculture (Conference Room East) in Tifton, Georgia. This meeting also included participation virtually via the MS Teams platform. This memorandum provides a summary of the major items discussed at the Council Meeting. The meeting began at 10:00 AM and completed at 2:00 PM and followed the agenda outlined below.

1) Welcome and Introductions

Council Chairman Scott Downing, initiated the meeting, welcomed Council Members and guests, and asked each Council Member (CM) and attendee to introduce themselves. Mr. Grady Thompson, a CM, welcomed everyone to Tifton. An outline of the agenda items that would be covered during the Council Meeting was then presented. Chairman Downing called for a Motion, which was seconded and a vote from other council members in attendance to approve the previous meeting summary. The previous meeting summary was approved. Chairman Downing then asked Council Members (CM) to review the agenda. A motion was made to approve the agenda, followed by a second and a vote passed to approve the agenda.

2) Review of the Suwannee Satilla Regional Water Plan

Mr. Wood with CDM Smith (the planning contractor (PC)) updated the Council Members that Sections 1,2, 4, and 5 in the Draft Suwannee Satilla Regional Water Plan have been completed. Chairman Scott agreed to revisit and review Section 3 with the Council Members.

- Mr. Wood reviewed the tracked changes version of Section 3. He noted that this version is posted online, and responses have been added to any comments that were made. New comments were made to highlight areas of the report that did not change or areas that are in progress of being updated.
- Council members did not have any comments on Section 3.

Mr. Wood noted that Sections 6-8 still need to be drafted. The Council Members confirmed they still would like to finalize the document by the end of the calendar year. A CM added that most back and forth comments have been addressed, so the remaining sections will likely only need minor clean-up work. Mr. Wood noted that a review with Georgia Environment Protection Division (EPD) needs to be coordinated followed by a public review period of 45 days.

- Ms. Jennifer Welte (GA EPD) added that she will confirm if the public review period can occur before other planning regions' review. Sometimes general comments are received, but it's been typical in the past that the public does not request specific revisions.
- Ms. Welte confirmed EPD's review can occur prior to December. EPD will coordinate their review with the PC.

3) Updates on Seed Grants

Mr. Wood reached out the U.S. Army Corps of Engineers (ACOE) prior to the meeting and provided a general update on the Seed Grant funding projects, timelines, and events ahead related to the Lake Beatrice Seed Grant Project. He noted that the Lake Beatrice geotechnical borings have been finished onsite, and the team is now updating the hydrologic and hydraulic models to evaluate and compare the pre-project condition and proposed design condition.

- Mr. Downing acknowledged that there is a lot that needs to be accomplished with the Seed Grant process and thanked everyone for being patient.
- Mr. Downing reviewed the Seed Grant process and noted that Seed Grant applications are usually posted by EPD in July (next cycle would be July 2023) and that a pre-application meeting with EPD would need to be by October 15th.
- Mr. Downing added that some of the more recent Seed Grant applications have not been presented at a Suwannee Satilla council meeting and that has been frustrating for him as a chairman and has made it difficult, with very little time, to coordinate with the other council members. Chairman Downing noted that he would like to see the following changes incorporated:
 - If an applicant would like to apply for a Seed Grant, they should attend the water council meetings and during the standing agenda item reserved for Seed Grants (every council meeting has a Seed Grant agenda item reserved) have the grant applicant report out to the Council about the proposed seed grant project(s). This would ideally occur during an early spring to late summer council meeting.
 - There is also a desire of the council that proposed seed grant projects be more focused on implementation of action items/management practices that implement projects to address the issues identified in the plan, for example, implement a project that provides water quality improvements or addresses water resource challenges. Some of the recent seed grant applications have been focused on collecting more data. The preference would be to see proposed seed grant projects that implement projects that address the water quality and water quantity issues identified in the regional water plan.
- A CM asked if the Council is going to pursue the Seed Grant that RDC decided not to apply to. Mr. Downing said the Council can address specific waterways and look into this grant.
- Mr. Wood noted that if the Council becomes pinched for time, an online meeting can be set up with the to review the Seed Grants with the council and the applicant.

- CMs discussed a concern regarding vegetation overgrowth and lack of fish in the New River.

4) Receive updates from EPD on Water Quality Resource Assessments (Dr. Elizabeth Booth, Georgia EPD)

Dr. Booth provided an overview of her role at EPD. She explained that EPD has the responsibility to set water quality standards for Georgia. There are EPD staff located throughout the state for example, in Tifton, and in Brunswick, etc., who work to assess water bodies and determine if the water quality is meeting the water quality standards. If water bodies do not meet the standards, EPD then must develop TMDLs (total maximum daily loads) which may then require updated permit limits related to discharges from a wastewater treatment plant. Dr. Booth then reviewed the following items:

- 2019 Triennial Review:
 - The United States Environmental Protection Agency (EPA) recommended EPD adopt EPA's herbicide and pesticide standards (acrolein and carbaryl criteria to protect aquatic life criteria).
 - The following EPD changes have been adopted by EPA:
 - *Primary and secondary recreation definitions were added*
 - *Added water effect ratio for metals criteria*
 - *Revised the bacteria indicator from fecal coliform to E. Coli (freshwater) and enterococci (tidal water)*
 - A CM asked if EPD checks for flesh eating bacteria. Dr. Booth responded that EPD does not check for this bacterium and explained that these bacteria are found ubiquitously in the environment. EPD tests for E. coli because this is a better indicator than fecal coliform for gastrointestinal illness. She added that EPD does not recommend swimming in rivers and natural water bodies that may show signs of poor water quality – for example ones with a green “pea soup” type coloration.
 - Bacteria criteria for drinking water and fishing designated uses were reviewed. Dr. Booth noted that EPD removed non-human source bacteria criteria.
 - It was noted that through molecular source tracking (MST) studies, the primary source of E. Coli on the Withlacoochee River was cattle and feral hogs.
 - Dr. Booth discussed the adopted lake standards for Lakes Oconee and Sinclair. She noted that the pH standard was revised from 9.5 to 9.0 and total nitrogen and phosphorus limits were removed. Nutrient permit limits will be implemented to ensure chlorophyll (a) criteria are met.
 - A CM asked how nitrogen is removed. Dr. Booth explained that organic nitrogen is converted to ammonia and then to nitrate and nitrite. To eliminate nitrate and nitrite,

it has to be off gassed. If the facility is not operated this way, they could recycle more mixed liquor and dissolved solids.

- A CM asked where phosphorus goes when removed from Lake Lanier. Dr. Booth noted that there are tight phosphorus limits set for discharging into Lake Lanier. When phosphorus is removed, it is captured in the biosolids that are typically then sent to a lined landfill.
- Dr. Booth added that 14 streams' designated use was changed to recreation. Most of these streams are located in South Georgia and due to the warmer weather they are used more for year round recreation (versus North Georgia where it is colder in the winter and the water is colder, thus not as much recreation occurs in the winter).
- A public attendee asked if EPD is looking at assessing dissolved oxygen (DO) levels for black water systems since these systems have naturally lower DO and but are still considered impaired. Dr. Booth said that EPD evaluates natural conditions and realizes certain areas have naturally low DO and pH.
- 2022 Triennial Review:
 - Dr. Booth reviewed the following items that are being considered:
 - Revising the human health ambient water quality criteria – we plan to
Switch from lumped deterministic/mechanistic modeling to probabilistic (with Monte Carlo – based) modeling
 - Consider adapting swim advisories or microcystin and Cylindrospermopsin criteria to protection from harmful algae blooms
 - Consider aquatic life contaminants including selenium and aluminum
- Dr. Booth reviewed the State Water Planning Process, including process flow and land use changes
- Dr. Booth reviewed the Water Quality Resource Assessment and Modeling:
 - Water flowing from Georgia to Florida must meet their numeric nutrient criteria and TMDL for DO, total nitrogen (TN) and total phosphorus (TP)
 - The assimilative capacity of waterbodies for current and future assessments must be determined. Models are developed, and available data and conservative assumptions are used to determine the assimilative capacity.
 - EPD targets reduction in point sources (wastewater treatment plant (WWTP)- 30 mg/L to 15 mg/L TN) and non-point sources (agriculture fertilizer and cow/poultry manure)

- EPD assesses the contribution of groundwater TN to surface water from in-stream springs
- The water quality models can be run with rainfall values and will look at whole watershed, not just the lake. This model is hydrodynamic.
 - DO modeling was presented for multiple reaches in the Suwannee Satilla region. The Hydro Model changes hourly and accounts for rainfall, irrigation, and storage in ponds. It was clarified that irrigation values are metered values and not the permitted capacity.
 - A public attendee asked if the map showing low DO coming up through the aquifer due to a sinkhole? Is this the same map as the 303D map? Dr. Booth explained that it is.
 - A public attendee asked if DO can be lower, why is EPD driving DO reductions as state criteria if it does not benefit the system. Dr. Booth explained that EPD models the system for low flow and high temperatures with and without point sources. Then, EPD will allow 10% reduction from the natural DO for permit limits. Dr. Booth asked the public attendee to email her to discuss this further. A call is scheduled for 12/14/2022.
- 2022 listed segments:
 - It was noted that there needs to be a focus on TN management, especially for water bodies that do not have nitrogen limits.
 - A CM asked if the Valdosta WWTP improvements decrease TN. Dr. Booth replied that the improvements did decrease TN, as shown in the required discharge monitoring reports.
 - A CM asked if new septic systems were considered. At this time, no septic system assessments have been conducted evaluating number, service status, distance from water bodies, etc.).
 - A CM asked of all water quality issues in GA, what is biggest issue? Is it nitrogen or something else and where is the point source? Dr. Booth explained that it is a combination of wastewater treatment plants and nonpoint sources, from such items as stormwater and agriculture.

After lunch, Mr. Joe Lewis (CM) shared his newly published book, *New Farm Language*. Mr. Lewis provided a brief overview of the publication.

5) Updates from EPD (Cliff Lewis, Georgia EPD)

Other than the timeline previously reviewed by the PC to update the plan, EPD did not have any updates to share with the Council.

6) Surface Water Availability Resource Assessments – Discussion with Ecotour Outfitters from the Region on Recreation Metrics (Dr. Wei Zeng, Georgia EPD and State Line River Outfitters)

Mr. Wei Zeng presented on the draft resource assessment by OSSS Beam for SS Water Planning Group.

- Dr. Zeng first reviewed the map of discharging facilities. He then discussed the basic elements and configuration of the new model. Dr. Zeng explained that EPD is migrating to facility-based modeling from node-based modeling, and they now have the data support this change.
- Dr. Zeng noted that the model has 80 years of historical flow data and evaluates the following scenarios to evaluate different conditions:
 - Baseline condition – marginally dry period from 2010-2018
 - Baseline dry condition 2011 – 2011 drought year
 - Projected – 2060 M&I and 2060 AG demand
- Dr. Zeng also reviewed facilities with a wastewater assimilation challenge and additional performance measures.
- Will Hart (State Line River Outfitters) and John Quarterman (Suwannee Riverkeeper) reviewed the Suwannee Satilla Participation map to identify specific areas used for recreation and noted metrics that could be used to evaluate results and usage scenario statistics with the BEAM model by Dr. Zeng’s team, including low and high water recommendations on the WWALS water trail maps. Mr. Wood noted that the online map can be edited by those who have access. Notes can be added to each location and the compiled map will be circulated around and shared with the council and attendees.

7) Review of Management Practices and Discussion of Regional Water Plan Updating Process/Schedule (Shayne Wood, CDM Smith)

Mr. Wood reviewed the management practices with the Council Members to determine if all the practices still apply or need revisions. The Council Members requested the following changes:

- Remove DCAR-2
- Revise DCAR-8 – Replace “gap” with “challenge”.
- Revise End-Gun Shutoffs. Revise to “install and use end-gun shutoff with pivots”
- WC-12 – include fertigation and precision agriculture
- MWWPC-1 – review the permitting capacity tables and note if any updates are needed
- MGWPC-1 – remove specific counties and note instead “in areas as needed”
- SW-2 – remove reference to the Satilla River as it is not applicable to this MP

- NPS-1 - remove fecal and change to E. Coli and Entero bacteria. Remove note to “human induced”.
- OCP-4 - review references

The Council Members would like to consider septic tanks, especially older tanks closer to tributaries – the PC will draft up a new MP for review and consideration by the council.

8) Public Comments

One public comment was received in person from John Quarterman, the Suwannee Riverkeeper. Mr. Quarterman suggested the Council consider the following in relation to greenspace, stormwater, water quality, fish, and ordinances:

- Encourage local governments to enforce trash ordinances, like the City of Valdosta
- The City of Valdosta has excellent trash ordinances that require parking lot owners to keep trash from escaping their property and getting into waterways and that require so many trash cans per number of parking spaces. Mr. Quarterman noted more enforcement was likely needed for these ordinances to be more effective.

No online public comments were received.

9) Next Steps

Mr. Wood reviewed the water planning overview and schedule moving forward. Mr. Downing thanked everyone for attending the meeting, and the meeting was adjourned.

10) Meeting Attendance

Suwannee- Satilla Regional Water Planning Council members in attendance:

- Ben Copeland, Scott Downing, Brittney Hull, John McCall (proxy for Rusty McCall), Grady Thompson, Joe Lewis and Brent James

Georgia EPD Representative in attendance:

- Cliff Lewis, Jennifer Welte, Elizabeth Booth and Wei Zeng

Regional Water Planning Council contractors in attendance:

- Shayne Wood, Emory Gawlik, Justin Saarinen (CDM Smith)

Public/Agency attendees:

- John Quarterman (Suwannee Riverkeeper)
- Merrill Varn (St Marys River Management Committee)
- Chris Bertrand (Satilla Riverkeeper)
- John Milam (Packaging Corp of America)
- Suzanne Welander (Guest)
- Bryce Trotter (Guest)
- Ashley Bailey (Guest)

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- Will Hart (State Line River Outfitters)
- Maureen Metzler (Guest)