

Memorandum

To: Savannah-Upper Ogeechee Regional Water Planning Council

From: Laura Hartt, Jacobs & Lee Smith, CDM Smith

Date: November 7, 2019

Subject: Savannah-Upper Ogeechee Regional Water Planning Council Meeting Summary

Welcome, Introductions, & Council Business

Chairman Bruce Azevedo called the meeting to order. The Chairman called for a motion to approve the prior Savannah-Upper Ogeechee (SUO) Council Meeting Minutes (July 25, 2019). Minutes were approved by motion, second, and unanimous vote.

Chairman called for a motion to approve the draft agenda. Council member noted that the draft agenda was different from the one originally circulated. Agenda was then approved by motion, second, and unanimous vote.

Jennifer Welte (EPD) circulated a handout with updated information regarding current Council composition, including member names, county/city affiliations, and sector representation. Currently, the Council consists of 22 members and 3 alternates. The handout included suggestions regarding current members who could be recommended for reappointment, and suggestions for several new appointments to fill vacancies.

Chairman Azevedo noted that the current list of recommendations has a deficient number of elected officials, because Council membership must contain a minimum number of elected officials. The Chairman noted that many members were commissioners who most likely were not reelected. Planning contractors have drafted a letter to be sent to county and city officials to solicit additional appointment recommendations. The Chairman also noted that Ms. Welte indicated that all recommendations would be compiled and forwarded to state leadership for consideration and that appointments would be made after the new year.

Council Updates – Website Improvements

Lee Smith (Contractor) provided the Council with an update on website improvements, focusing on the addition of content concerning funding for plan implementation—e.g., GEFA grants, 319(h) grants, and/or Seed Grants.

Chairman Azevedo noted the need to promote Council activities to county and city leadership. Laura Hartt (Contractor) suggested sending emails to county/city representatives to highlight recent activities of the Council. David Bell (Contractor) also recommended that the Council host one or more social events to provide an informal opportunity for county/city leaders to learn more about Council activities.

Council Updates – FERC Relicensing

Mr. Smith noted dates and locations for upcoming public meetings concerning management and operations of the Augusta Canal Headgates and Locks and the Stevens Creek Dam FERC relicensings. He also noted that for the Augusta Canal project, the National Marine Fisheries Service (NMFS) had recently submitted a filing regarding the fish passage. The current plan does not require passage of sturgeon, but the fishway must be built to accommodate the Atlantic sturgeon in the future if desired, and this should clear the way for the FERC license to proceed. Regarding the Stevens Creek Dam relicensing process, Mr. Smith noted that the project is now in a data gathering phase, and the project team is hoping to present to the Council after they file their Pre-Application Document in May of 2020.

Council Updates – Seed Grants

Oscar Flite (City of Augusta) provided the Council with a brief update of the 2018 Seed Grant awarded for a variable rate irrigation project that allows for irrigation on demand. One key result of the study was that yields were higher with less water and use of less water also meant energy and cost savings.

Mr. Flite and Tonya Bonitatibus (Savannah Riverkeeper) also gave a brief update of the 2019 Seed Grant, involving both the City of Augusta and the Riverkeeper, awarded to consolidate and publish online Savannah and Ogeechee basin water quality data. Postcards were sent out to 2,000 Georgia and South Carolina water permit holders in the Savannah basin. Postcard recipients were asked to identify current data available and data gaps. The first stakeholder meeting was convened October 30, 2019, with representatives from both South Carolina and Georgia state agencies participating. During that meeting, stakeholders noted that more agriculture participation was needed. In terms of data collection, stakeholders agreed that citizen science driven efforts such as Adopt-a-Stream yielded useful information and should be included in the effort. Ms. Bonitatibus stated that the project was about one year out from the website launch.

Council Member Sue Parr asked how many responded to the postcard survey. Ms. Bonitatibus indicated that 23 had responded thus far but that she would be resending the postcard to solicit additional participation.

Haydn Blaize (EPD) mentioned two other grant-funded projects completed within the SUO basin:

- 319(h) grant to Augusta/Richmond County: Development of a Nine-Element Watershed Management Plan for the Augusta Canal/Butler Creek/Beaverdam Ditch Watershed in the Savannah River Basin
- Seed Grant to Northwest Georgia Regional Commission: Alternative Nutrient Permitting Strategy Development for the Coosa-North Georgia and Savannah-Upper Ogeechee Water Planning Regions.

Mr. Blaize also updated the Council on two recent Seed Grant Applications, which were submitted with Council support:

- University of Georgia: Historical Analysis of Instream Water Quantities (Ogeechee, Savannah, Altamaha, & Oconee basins)
- City of Augusta: High Frequency Agricultural Meter Reading and Hydrology Study

Chairman Azevedo emphasized that the Council could and did support more than one application for this year's seed grant solicitation and that Councils were free to coordinate with one another jointly regarding proposed projects.

Ms. Welte confirmed that all pending applications were received on time (by October 31) and that a group of EPD staff (other than Council liaisons) will review and score projects to finalize recommendations to the EPD Director for seed grant awards.

Chairman Azevedo urged other members to become more involved during the seed grant process in the future.

Council Updates – Regional Water Planning Video

Mr. Smith showed a video highlighting issues and activities for three of the Regional Water Planning Councils: the Middle Ocmulgee, Coastal Georgia, and SUO Councils. The Council then discussed how to use the video. Chairman Azevedo suggested that the video be distributed by email to county and city leaders as well as to the general public. Contractors suggested the use of a regular email/e-blast for distribution of the final video as well as posting the video on the website. It was noted that the video is still subject to additional editing before the final version is ready for distribution.

Council Member Braye Boardman said the video provided a good 10,000-foot view of regional water planning, but that other than a weblink at the end of video, the video does not provide information on how the public can get more involved in regional water planning. Mr. Boardman suggested adding more details for how the general public could get more involved in the water planning process.

Mr. Sam Booher (Sierra Club) asked if it would be possible to share the video with the public via a Facebook posting. Council members agreed that Facebook might be a good medium for sharing the video once it is finalized, although the Council currently has no Facebook site.

Chairman Azevedo suggested forming a committee focused on raising awareness of Council activities and developing talking points. Ms. Welte noted that the Council has access to a PowerPoint presentation that can be tailored for Council members to use for different audiences. Ms. Welte also noted that she has a one pager that she uses at meetings/conferences which outlines the general water planning process. She further noted that each Council has a unique fact sheet which is available for download off the website.

Ms. Bonitatibus noted a lack of diversity in the video and suggested the use of stills to add content/images.

Council member Scott MacGregor suggested the video could be shared with state leaders, including staff at OPB, the Governor's office, and Senators' offices.

Mr. Smith reminded Council members of general opportunities for outreach, including conference presentations and tabling. He further noted that the next GAWP summer conference was coming up in early July.

Ms. Welte gave examples of other outreach forums used by other Councils, including:

- The Middle Chattahoochee Regional Water Planning Council convening a regional forum focused on drought planning; and

- The Coastal Georgia Regional Water Planning Council held multiple outreach meetings, with one or two counties at a time, with topics tailored to the interests in those areas.

Mr. Flite suggested that a short, Council-specific video might be beneficial. He noted that duration might be a challenge for some viewers, suggesting a short, 30-second clip as opposed to the 8-minute format. He also suggested trying to get a clip shown in movie theaters during the previews.

Technical Information – Forecasting & Population Projections

Ms. Welte described how new and updated technical information will feed into the next 5-year planning update.

Bill Davis (Contractor) then provided more specific information concerning updates to the technical information to be used during the next 5-year planning cycle, including:

Population projections

- OPB has updated population projections, used by all state agencies for planning purposes.
- The 2020 U.S. Census information will not be available in time for incorporation into the next Regional Water Plan updates.
- A handout was provided with the most current (October 2019) OPB projections for SUO counties.

Water demands

- Water demands are projected for four sectors: municipal, industrial, energy, and agricultural.
- The prior Regional Water Plan results suggest an even distribution of demand in the SUO region across the sectors.

Municipal water demands

- The next demand projections will consider results of water audits to inform per capita use.
- Preliminary results for 5-year averages show some counties with large changes from the prior planning period, while others have little change.
- Ms. Welte indicated that correcting for water used by industrial customers by county might impact some of the figures; she also indicated that EPD will be reaching out to individual municipal systems to ground truth instances of very low or very high per capita values.

Municipal wastewater demands will be based on municipal water demands.

Industrial demands

- These demands were not updated in 2017 due to a lack of updated employment projections.
- Major industrial water users in the region include paper, chemical, and stone and clay.

- A review of how other states have conducted industrial forecasting was provided (AR, CA, CO, OK, TX).
- Some states rely on county-level employment projections; Georgia does not have this information.
- Some states can classify industrial users by the North American Industry Classification System (NAICS) by county which is useful in grouping types of industries (i.e., large water using industries).
- Georgia does have employment projections by state agencies by NAICS groups for Workforce Development Areas, which are multi-county areas.
- Ms. Welte indicated that EPD will be convening a stakeholder group to further vet the methodology that will be used in updated industrial water demands.

Chairman Azevedo noted that often technical information comes too quickly to provide meaningful input and that Council members were not always aware of new permittee interests/uses.

Ms. Welte noted that new users/permits would be incorporated in the next plan update, as well as a process by which the Council could monitor new water users during the interim planning periods.

Lunch/Guest Speaker

During lunch, Ruth Mead, Education Director for the Phinizy Center for Water Sciences gave an overview of the Center's history and ongoing activities.

Technical Information – Forecasting & Population Projections (continued)

Mr. Davis resumed the discussion of technical information.

Thermoelectric Energy water demands

- Since 2011, some power production facilities have expanded, while others have been decommissioned or are slated for retirement.
- A stakeholder group will assist in updating the inventory of power production facilities.
- Mr. Davis provided an overview regarding the use of water for cooling purposes (including once-through and closed-loop cooling systems).
- Statewide estimates of power needs and resulting water demands are developed first, then allocated to regional demand based on facility locations, fuel type and generating capacity.
- The new units at Plant Vogel are reflected in the demand projections.

Ms. Welte provided an overview of the Agricultural water demands.

- UGA and Albany State University work with the state on these demand projections.
- Irrigated acreage is major portion
 - Permits provide information on acreage and pumping rates
 - Aerial coverage is used to inform updates to wetted acreage

- Metering information and crop types are used to inform estimates of water use on the wetted acreage
- Agricultural water use in the SUO region is concentrated in the southern portion of the region (Burke, Screven, Jefferson & Jenkins Counties)
 - Demands are met through both surface and groundwater

Chairman Azevedo asked how the Council can make sure implementation is occurring and addressing Council planning goals. Ms. Welte said that one way to do this is to evaluate various projects (GEFA-funded, Seed Grant, etc.) to make sure they are on point, as well as to gather available information from water users in the region.

Technical Information – Resource Assessments & Gap Analysis

Ms. Welte provided the Council members with copies of the “Gap Analysis Technical Memorandum: Savannah-Upper Ogeechee Regional Water Planning Council” (October 2019). This document evaluates potential gaps between surface water quantity, groundwater quantity, and surface water quality (primarily wastewater assimilation) and current and future water demands. Contractors will post this memorandum on the website.

Ms. Welte also reviewed key findings from the 2017 Resource Assessments and noted any updates to methodology planned for the next planning iteration:

Groundwater Availability Resource Assessment:

- Since the 2017 update, the groundwater modeling tool has been updated;
- Grid spacing has been reduced from 5,280’ to 1,760’ to improve model resolution; and
- While the former model only analyzed steady state/constant groundwater use, the new model operates in transient mode/incorporates time-varying flows.

Surface Water Availability Resource Assessment:

- Nearly 70% of water demands in the SUO region come from surface water;
- The energy sector is one of largest users;
- Surface water availability is assessed at locations with long-term flow gages;
- The Resource Assessment modeling estimated unimpaired flows, and then imposed current and future demands; comparing the resulting modeled flows to flow regimes at each node identified potential gaps
- Results revealed potential gaps at the Eden, King’s Ferry, and Claxton nodes in the Ogeechee basin
- Most potential gaps occurred in watershed where agricultural water users are the only permitted surface water users; a small potential gap at the Eden node occurs in a watershed that also has permitted municipal surface water users; and
- EPD is working to develop a finer-scale hydrologic model that would incorporate more nodes and consider more tributaries. A pilot study for this model is underway in the Oconee, Ocmulgee and Altamaha Basins.

Surface Water Quality/Assimilative Capacity Resource Assessment:

- Multiple models are used for this Resource Assessment, including DOSAG (steady state), RIV1 (hydrodynamic), GA ESTUARY (lakes/estuaries), watershed models, and nutrient loading models; and
- The models incorporate tighter BOD limits, ammonia limits, and DO limits in future conditions scenarios.

Mr. Boardman noted there is a portion of the Floridan aquifer that overlaps both the Coastal and the SUO regions but that fact is not acknowledged in the SUO water plan.

Mr. Flite asked what hydrological model was being used. Ms. Welte responded that the Corps' HEC models were being used in conjunction with a new tool developed by Hydrologix, BASINS.

Council Committees – Next Steps

Chairman Azevedo led the Council in a discussion of next steps with respect to committee needs. Council Member Lee Webster commented that the Council needs another county commissioner member. Ms. Welte asked the Council to decide which Counties should receive the letter soliciting appointment recommendations.

Chairman Azevedo asked if the members could receive a list of contact information (including phone, email address, and County/City affiliation).

The Chairman then identified the following potential committees:

- Communication/public awareness/outreach
- Legislative
- Economic development to follow what state is doing and how it effects Council
- Planning/technical to follow Plan's goals and make sure the Council is tracking those goals

The Council agreed that waiting until new members were appointed before forming committees made sense.

Ms. Parr emphasized the importance of an economic development committee. She also suggested inviting leadership from the Augusta Economic Development Authority, Columbus Economic Development Authority, and Burke Development Authority to present at an upcoming meeting.

Wrap Up & Adjourn

Chairman Azevedo asked if there were any members of the public or elected officials present who wished to provide any comments. No comments were forthcoming.

Mr. Boardman asked how often Councils typically meet. Chairman Azevedo said once a quarter is common.

Chairman Azevedo proposed Thursday, February 6, 2020, from 10 am – 2 pm, at the same venue for the next meeting. Council members agreed.

Meeting was adjourned at approximately 2 pm.

Meeting Attendance

Council

- Bruce Azevedo
- Braye Boardman
- Jerry Boling
- Charles Cawthon
- Dan Fowler
- Sue Parr
- Scott MacGregor
- Lee Webster
- Sue Parr
- D. Scott Williams

EPD

- Jennifer Welte
- Haydn Blaize

Planning Contractors

- Bill Davis (CDM Smith)
- Lee Smith (CDM Smith)
- David Bell (Jacobs)
- Erika Colaiacomo (Jacobs)
- Laura Hartt (Jacobs)

Public

- Tonya Bonitatibus (Savannah Riverkeeper)
- Greg Klett (GA Forestry)
- Frank Carl (Savannah Riverkeeper)
- Sam Booher (Savannah Riverkeeper/Sierra Club)
- Oscar Flite (City of Augusta)
- Brendan Thompson (Rabun County Water & Sewer Authority)