



Meeting Summary

Upper Flint Regional Water Council Meeting

Flint Energies – Reynolds, GA

November 12, 2021

Welcome & Introductions

Upper Flint Chair Donald Chase welcomed the members and recognized the members who are veterans for their service. He commented on the importance of the Council members' connection to the resources in the region in planning for our future. He reflected on the Council's work over time and referred to the Council's commitment to try to make decisions by consensus. Mark Masters (GWPPC) reviewed the agenda and introduced the Council support team. Next, the members interviewed each other and then introduced each other to the group.

Orientation to Regional Water Planning

Steve Simpson (Black & Veatch) presented a member orientation that reviewed the regional water planning process and specific material related to this Council's planning work. See slides; note that slides for all presentations in this meeting are posted on the Council website.

Summary of discussion:

- A Council member commented that we have additional expertise related to agricultural water use for dairy production on the Council and that he looks forward to their input.
- In response to a question, Steve Simpson clarified which aquifers intersect with the Upper Flint region (Upper Floridan, Crystalline Rock, Cretaceous, and Claiborne).
- A member asked about the "end result" of the Council's work. Steve Simpson explained that the adopted regional water plans are used in permitting decisions by GAEPD and in water and wastewater loan decisions by GEFA. The Department of Community Affairs assesses the consistency of local comprehensive plans with the regional water plans.
- A Council member asked about the models used in regional water planning. Steve Simpson noted that each would be covered in detail in upcoming Council meetings. He

reviewed the three models briefly: groundwater availability, surface water availability, and surface water quality. Each of the models can be used to simulate and estimate water resource conditions under current conditions and future scenarios for the region.

- A Council member asked how much revision the GAEPD director can make in a submitted plan. Steve Simpson said it is at the Director's discretion to request revisions from the Council, but that given GAEPD's involvement in the planning process, GAEPD has to date approved all regional water plans as submitted by the planning Councils.
- In response to a Council member's question, Steve Simpson said the regional water plans are each their own separate plan. Each plan addresses the conditions in its region. GAEPD does monitor inter-regional planning to support coordination in planning.
- A Council member asked whether the Council has input into legislation related to the Councils. Steve Simpson explained that legislative and rule-making processes are outside of the plan's scope, but the Council may wish to monitor or submit input to those processes.
- A Council member emphasized that there should be a coordinated education effort to inform the general public and school age children about the importance of water resources and management.
- A Council member commented that the Council has had legislators who have been involved in Council meetings in the past. There are two legislators on each Council who are *ex officio* members of the Councils. The member further emphasized the importance of keeping local legislators and officials updated on the work of the Council.
- A Council member commented on the local comprehensive planning process. He said that as a vision for the region, comprehensive plans can influence policy, and regional water plans can do the same.
- In response to a question, Steve Simpson explained that the surface water availability assessment, in previous planning cycles, identified gaps based on low flow indicators at the planning nodes. The low flow indicator used was based on 7Q10 (a seven-day average flow over a 10-year period) and the state's instream flow policy.
- A Council member asked if the Council's models can show where a drop of water flows. Steve Simpson said that the resource assessments models cannot do that specifically, but that models from USGS or NOAA might be able to.

Chairman's Report

Chairman Chase reported that he had submitted a letter of support for a proposed project in the region. The project appeared to support the regional water plan. It was a Georgia Tech proposal to provide energy and water efficiency consulting to wastewater treatment plants in Georgia and in this region.

LUNCH BREAK

GAEPD Report: Planning Schedule and Resource Assessments

Johanna Smith (GAEPD) reviewed the water planning process and schedule. She explained the role of GAEPD in regional water planning, which includes administration of the process and development of technical materials that support planning. Johanna reviewed the recent and upcoming activities in the regional water plan review and revision process. All regional water plans are projected to go to public notice by September 30, 2022, and the regional water plans and Metro Water District plan are projected to be updated by December 2022. With four quarterly meetings in 2022, the Council will work toward approving a draft plan for public review by its third meeting next year. Johanna provided an overview of the forecasting and resource assessments that support regional water planning. (See slides.)

Discussion summary:

- In response to a Council member's question, Johanna Smith noted that in the Upper Flint, work to date has been focused on demand forecasting while the BEAM model is being calibrated and finalized for use in the resource assessments. Dr. Wei Zeng (GAEPD) clarified that the BEAM model is under development for other basins around the state. The goal is for the model to be ready by February 2022.
- Following a question, Wei Zeng indicated that the BEAM model could inform the state's drought response but that real-time actions on behalf of the state would likely not be based solely on the BEAM model.
- A Council member reported that Griffin used OASIS with Hazen & Sawyer to be able to guide drought response locally. He would like to share that work with GAEPD.
- In response to a question, Wei Zeng explained that the BEAM model will have the capacity to estimate the impacts of Upper Floridan water use and surface water flows using a related Jones-Torak model for groundwater-surface water interactions. He also suggested that Dr. Jim Kennedy (GAEPD) and the groundwater availability resource assessment could provide additional information concerning interactions between aquifers.

Water and Wastewater Forecasts Overview

Steve Simpson and Jake Dean (Black & Veatch) provided an overview of the updated water and wastewater forecasts for the region. (See slides.) Steve said that there will soon be a web-based dashboard available with the regional water planning forecast information. Council members will be notified when it is available.

Discussion summary:

- In response to a question from a Council member, Jennifer Welte (GAEPD) explained that the energy forecasts reflect the closure of coal-fired power plants in the state. These estimates are based on 2020 input from GA Power and other stakeholders, and the estimates assume that all of GA Power's coal-fired plants will be retired or converted by 2040. Recent announcements from GA Power may accelerate the timing of that shift, but it does not impact the 2060 energy forecast.
- Steve Simpson clarified that self-supplied residential water and wastewater (including septic systems) are addressed in the municipal water and wastewater forecasts.

Agricultural Water Demand Forecasts

Mark Masters presented the updated agricultural water demand forecasts. He noted that the forecasts are closely related to the irrigated acreage. Maps of irrigated acreage were updated by GWPPC in 2020. Mark explained that the agricultural forecasts depend also on crop projections (through 2060) and crop water needs (under wet, normal, and dry years). He reviewed the forecast results with the Council. (See slides.)

Discussion summary:

- A Council member explained how water is used in dairy operations; the main uses are for cooling milk and for drinking water for cows. There is water recycling in these operations.
- Mark Masters said that the animal operations water use estimates assume 111 gallons per head per day for dairy operations (includes estimates for drinking, cooling and washing). The Council member said that he thought that estimate was too high and suggested it be reviewed.
- In response to a question, Mark Masters said that the estimates try to capture double-cropped acreage to the extent that information is available. It can often be observed in the meter data.
- A Council member asked if hydroponic farming would be a factor in agricultural water use in the future. Mark Masters said that it might be and would need to be evaluated.
- Mark Masters said that over 6,000 acres in the Lower Flint-Ochlockonee Region have been removed from the wetted acreage database because they had been converted to solar farms.

Vision and Goals Discussion

Corinne Valentine (Black & Veatch) led a Council discussion to review the Council's vision and goals. The Council reviewed the statements. Members had the following comments:

- Several members commented on the work that went into developing the original vision and goals.

- A Council member requested more time to think about the vision and goals.
- A Council member suggested that the vision should simply be wise stewardship of water resources.
- A Council member commented on what might cause the Council to change the vision.
- A Council member raised the question of whether the Council should be proactive or reactive in its vision and goals.
- Another Council member responded that the Council should be proactive. Early on, it may have been in a more reactive posture, but we have moved to a more proactive stance. The Council should continue in that direction.
- The Council should consider opportunities for restoration of the Flint and its tributaries.

Chairman Chase suggested reviewing the existing Vision and Goals and bringing them back for amendment or affirmation at a future meeting. Mark Masters suggested a committee to work on this task. The following members volunteered: Brant Keller, Raines Jordan, Donald Chase, Adam Graft, and Gordon Rogers.

Report on the Upper Flint River Working Group

Ben Emanuel gave a report to the Council on the recent work of the Upper Flint River Working Group. Slides from this presentation will be shared with the Council after the meeting; they were not included in the slide set sent out prior to the meeting. They will be posted with the other slides from this meeting on the Council website. He pointed out that Council members Gordon Rogers and Brant Keller are active in the Working Group. He said that the Working Group wanted to offer recommendations to the Council for planning for drought resilience in the Upper Flint. He said that flow hydrology trends in the river since 1975 show increasing variability and lower overall water yield. The Working Group has developed some metrics related to resilience of river-related values during drought. He suggested the following metrics to the Council to consider evaluating in the surface water availability resource assessment:¹

- Recreational paddling: number of days below 600 cfs near Carsonville (April to October)
- Shoal habitat/aquatic life: number of days below 500 cfs near Carsonville (June to October)
- Exceptional Low Flows (“more rocks than water”): number of days below 100 cfs near Carsonville (June to October)
- Secure water supply: This metric is already incorporated into low flow assessments in water withdrawal permits.

¹ The Council did not respond to or endorse this suggestion during the meeting.

He noted that there have also been novel drought conditions, such as multi-years droughts and flash droughts, that also need to be considered in planning for drought resilience.

Public Comment

No public comments were offered.

Next Steps

Steve Simpson reviewed some next steps including a meeting summary and Council member review of the 2017 regional water plan, forecasts, and other materials. The planning support team will be in communication with Council members about the next meeting date and location soon. The committee formed at today's meeting will be convened to address the vision and goals as discussed in this meeting.

Adjournment

Chairman Chase thanked members for attending, and he adjourned the meeting.

Council Members Attending November 12, 2021 Meeting

Donald Chase (Chair)	Terrell Hudson
Raines Jordan (Vice Chair)	Brant Keller*
Michael Bowens*	Ken Murphy
Gene Brunson	Lamar Perlis
Brad Ellis	Gordon Rogers
Beth English	Marcus South
Steve Fry	Butch Turner
Adam Graft	Teel Warbington*
Jack Holbrook	Joel Wood

Other Attendees

Jake Dean (B&V)	Johanna Smith (GAEPD)
Bert Early (GA Forestry Commission)	Steve Simpson (B&V)
Ben Emanuel (American Rivers)	Corinne Valentine (B&V)
Mark Masters (GWPPC)	Jennifer Welte (GAEPD)**
Russell Ray (Fayette County Water)*	Wei Zeng (GAEPD)**
Kristin Rowles (GWPPC)*	
Laura Schneider (River Valley Regional Commission)*	

**By videoconference*

*** Present by video for only part of the meeting to address questions.*