

Meeting Summary

Lower Flint Ochlockonee Regional Water Council Meeting Albany State University

Albany, GA April 14, 2022

Welcome & Introductions

Mark Masters (GWPPC) started the meeting by welcoming the Council, reviewing the agenda and introducing the new Council members. Meeting materials are posted on the Council website.

Chairman's Report

Chairman Royal thanked the Council for their participation and encouraged council members to join a committee. Next, he discussed how American Rescue Plan funding will benefit the Lower-Flint-Ochlockonee region. Chairman Royal expressed his sympathy for the passing of council member Larry Smith and asked the council members to bring forward new member recommendations to fill Mr. Smith's spot.

American Rescue Plan Act: Water & Infrastructure Awards

Mark Masters (GWPPC) presented the preliminary awards for Water and Infrastructure grants under the American Rescue Plan Act in the Lower Flint-Ochlockonee Region. A map with the awards was distributed to the Council. Next, he described one of the awards focused on agricultural source water conversion that will be implemented, in part, in this region. This \$49.8 million project will be implemented by the Georgia Water Planning and Policy Center at Albany State University in partnership with the Georgia Environmental Protection Division and Golden Triangle RC&D. The primary focus of the project will be the conversion of existing agricultural surface water withdrawals in the Lower Flint River Basin to deep aquifer sources (Claiborne, Cretaceous). The project aims to install 242 deep groundwater wells over a 5-year period. The project will also conduct conservation planning at each site, collect monitoring data on aquifer conditions and aquatic ecosystems, improve and expand flow augmentation

systems, and engage stakeholders in the region in water resources and endangered species management planning. The project implements recommendations in the Lower Flint-Ochlockonee, Middle Chattahoochee, and Upper Flint Regional Water Plans and builds on a Regional Water Plan Implementation Seed Grant focused on source water conversion in the Ichawaynochaway Creek Basin.

Discussion summary:

- A Council member asked how the application process works. Mark responded that
 interested farmers with active surface water withdrawals within the basin will be eligible
 to apply and each application will be considered on an individual basis. Applications will
 be approved based on the most cost-effective scenarios that bring the greatest benefit.
- A Council member asked how much funding will be covered per well. Mark replied that
 the process is still being developed, but there will be a 90% cost share for installing the
 wells, where the owner will only need to cover 10% of drilling costs.
- A Council member ask when will this program be implemented. Mark replied that we expect the first wells in the program wells to start appearing about a year from now.
- A Council member asked if additional federal funds can be leveraged. Mark said yesleveraging funding unlocks other federal funding, which ultimately contributes more resources towards sustainable agriculture.
- A Council member asked if there will be a limit as to how many wells one operation can have. Mark replied there is not an established number of wells or dollars limit yet. The presence of farm storage is a big component, so we do not have to replumb irrigation lines. Applications will be looked at on an individual basis and the most cost-effective method will be prioritized. The purpose is to keep water in the streams when it's dry.

Georgia Flow Incentive Trust

Mark Masters (GWPPC) presented the Georgia Flow Incentive Trust (GA-FIT) auction results. He explained that a survey was sent out to gage farmer's willingness to be paid in exchange for suspending irrigation for their crops based on the following scenarios:

- Scenario A: Paid to not irrigate at all
- Scenario B: Paid to only irrigate up to 6 inches
- Scenario C: Paid to be placed into a standby pool to suspend irrigation if creek levels drop below certain streamflow

The survey received 721 bids on 306 fields from 87 bidders. Standby scenario "C" was randomly selected and is in the process of contracting with selected farmers. Mark stated that we should have funding to run the auction next year as well. Results of the survey are posted in the meeting

materials on the Council website.

EPD Report

Jennifer Welte reported the Metro Water District draft plan updates are complete and encouraged council members to attend the review meeting hosted by Danny Johnson on April 19th at 5 P.M. Next, she informed the council on two Georgia Environmental Finance Authority (GEFA) studies including:

- Biosolids Assessments Study
 - Feasibility, recommendations, etc.
- Water supply redundancy study
 - Research backup water supply projects for public water systems

Next Steps in Plan Development

Corinne Valentine (Black & Veatch) presented the next steps in plan development. She noted that the plan was last updated in 2017. She stated that the next plan draft should be presented in August to allow time for GAEPD review, public notification and comment, and finalization by the end of 2022. She mentioned the current focus for plan updates includes:

- Section 1: Introduction
- Section 2: Planning region information
- Section 4: Water and Wastewater Forecasts

Other sections will be updated as resource assessments are finalized and based on the Council's discussion of the Management Practices and Recommendation to the State, and other edits as needed based on Council discussions. Council members were invited to join the Plan Review Committee to assist in reviewing revised plan documents and making recommendations to the Council on edits.

Next, Corinne asked Council Members to consider joining an Inter-Council Coordination Committee that will address planning across regions. In this case, the group will consider the Metro Water District plan, as well as the plans of the Upper Flint and Middle Chattahoochee Councils. The Council currently has a set of joint recommendations with those two Councils that will need to be considered for updates. The inter-council coordination committee members include:

- Jimmy Webb
- 2. Jay Smith

3. Hugh Dollar

Next, a plan update committee was established for the Lower Flint-Ochlocknee council. Members on this committee include:

- 1. Vincent Falcione
- 2. George McIntosh
- 3. David Dixon

Overview of Resource Assessments

Steve Simpson (Black and Veatch) provided an overview of the resource assessments and a short discussion of why and how the planning process uses models. He also reviewed the schedule for the presentation of resource assessment model results, with some at this Council meeting and some at the next meeting. He encouraged the Council members to consider whether the resource assessments point to areas they would like to discuss as a Council and consider how particular concerns are addressed in the regional water plan. He also asked them to think about the metrics that we use to evaluate resource conditions. He encouraged the Council members to ask questions throughout the discussion of the resource assessment models.

Groundwater Availability Assessment

Christine Voudy (GAEPD) provided an overview on the groundwater availability assessment and covered five metrics for sustainable yield. She reviewed the results for several aquifers in the region. Her slides are available in the meeting materials. The results generally compare groundwater withdrawals to high and low-end sustainable yield estimates.

Members had the following comments:

- A Council member asked what the variation of depth is as you approach the coast. Christine replied that depths vary as you approach the coast.
- A Council member asked if shallow wells dry up quicker. Christine replied that pumps set deeper into a drilled well tend to be less susceptible to fluctuations in groundwater levels.
- A Council member asked if the Floridan data is simulated in the model. Christine stated that yes, the models simulate groundwater pumping in the Floridan aquifer to determine the modeled sustainable yield ranges. One of the metrics that factor into the modeled sustainable yield ranges is no more than a 40% reduction of groundwater contribution to stream baseflow. She noted that the distance from a surface water feature does affect the groundwater/surface water interaction. Christine stated that they are working on adding additional permitted wells into the models and will look at

how the prioritized aquifers handle droughts.

Surface Water Quality Assessment

Steve Simpson (B&V) provided an introduction to the surface water quality assessment material for Dr. Liz Booth (GAEPD). A video presentation from Dr. Booth described the changes in standards from the Triennial Review process, the assessment of impaired waters, and the water quality resource assessment including modeling approaches and types of results. Her slides are available in the meeting materials. Jennifer Welte (GAEPD) presented the Surface Water Quality modeling results for the Middle Flint, Lower Flint, and Ochlocknee Basin.

Members had the following comments:

- A Council member asked what are the streams impaired with. Answer: It varies, with impairments being caused by:
 - Bacteria
 - o PH
 - o Biota
 - Dissolved Oxygen
- Why does the surface water quality assessment map missing segments of stream?
 - Map only reflects monitored segments. If there is a segment you want modeled, let EPD know. (Liz/Jennifer)
- What year are future and current conditions?
 - o Current- 2019
 - o Future- 2060
- A Council member stated that a potential change from exceeding dissolved oxygen to that of good available assimilative capacity could be driven by population and less from permitting.
- Liz commented that some red segments indicating exceeded assimilative capacity may correspond to wastewater discharge permits that may need ammonia criteria to protect mussels.

Surface Water Availability Assessment

Mark Masters introduced the Basin Environmental Assessment Model (BEAM), which is being developed to evaluate surface water availability in the region. He described how BEAM will

enhance the Council's ability to consider surface water availability at a much higher level of detail. He presented the schematic for BEAM for the ACF Basin and discussed the types of nodes at which results can be evaluated. He explained the water use and permit conditions that will be evaluated in the baseline model. His slides are available in the meeting materials.

Next, a video presentation by Dr. Wei Zeng (GAEPD) provided four examples of performance metrics that could be evaluated using BEAM: water supply, wastewater assimilation, recreation, and fish habitat. Dr. Zeng's slides are available in the meeting materials.

Resource Assessment Wrap-Up/Next Steps

Corinne Valentine (Black and Veatch) asked the Council, based on today's presentations, if there were specific topics they would like to discuss at the next meeting to consider in revisions for the regional water plan.

Members had the following comments:

- A Council member asked what the baseline aquifer level means and voiced concern about irrigation being cut off if streamflow becomes too low.
 - Christine responded that baseline levels are reported withdrawals from the regulated community (both non-farm permitted withdrawals and agricultural withdrawals) and observed water levels of the prioritized aquifers during periods of lower recharge (drought periods). She also explained that through the permitting process, Georgia puts measures in place to not exceed water resource availability. Implementations are used to prevent a scenario of "cut-off irrigation" and we need to keep modeling and forecasting worst case scenarios in order to know when to use caution.
- A Council member asked what types of "extremes" are used in the models. Christine answered that they use historical data with bad droughts and make hypothetical situations with droughts to simulate possibilities for the future.
- A Council member asked why the baseline level was established at 40% stream reduction.
 - Christine responded that 40% reduction of the groundwater contribution to stream baseflow was based on the impact to water quality such as: DO, wildlife, etc. Also, she stated that 40% is a widely accepted level of reduction in the groundwater contribution to stream flow.
- Christine clarified that ARPA focuses on switching surface water withdrawals to groundwater wells in confined aquifers. This helps protect the reduction of stream

baseflow.

- A Council member what types of wells were simulated because you can't put ag wells in the Floridan.
 - Christine stated that existing permitted wells set in the Floridan aquifer were modeled and are monitored by the State, so larger than a well for a home.
- The Council requested a map of aquifer recharge areas.
 - On EPD's website, there is a KML file (Google Earth) of aquifer recharge areas.
 - A follow-up email was sent out including the KML file of aquifer recharges in the state, higher resolution presentation slides, and a link to the significant recharge areas from the GA Geologic Survey Atlases.

The Council's next meeting will be held on May 12th. Plan updates are now completed on sections 1, 2 and 4. The Metro Water District's overview of their draft plan will be held on April 19th. MNG wants comments by May 11th.

Council members were asked if they are interested in the creation of a Water Quality/Quantity Committee to let us know.

Public Comment

Bert Early from Georgia Forestry Commission.

<u>Adjournment</u>

Steve noted that a summary of the meeting would be developed and the summary, presentations, and links to the video presentations would be posted on the Council website. Chairman Royal thanked members for attending and reiterated his excitement for the upcoming projects, and the meeting was adjourned.

Council Members Attending April 14, 2022 Meeting

Chris Addleton Fred Dent

Murray Campbell Hugh Dollar

Marc DeMott Vince Falcione

Lower Flint-Ochlockonee Regional Water Council April 14, 2022 Meeting Summary

John Heath Richard Royal

Connie Hobbs Jay Smith

Michael McCoy Mark Spooner

George McIntosh Steve Sykes

Mike Newberry Jimmy Webb

Other Attendees

Mark Masters (GWPPC)

Jake Dean (B&V)

Kristin Rowles (GWPPC) Elizabeth Booth (GAEPD)*

Meagan Szydzik (GWPPC) Wei Zeng (GAEPD)*

Courtney Cooper (GWPPC)* Christine Voudy (GAEPD)

Steve Simpson (B&V)

Jennifer Welte (GAEPD)

Corinne Valentine (B&V) Bert Early (GA. Forestry Commission)

^{*}By videoconference