

Memorandum

To: Upper Oconee Regional Water Planning Council

From: Laura Hartt and Michelle Vincent, Jacobs

Date: April 21, 2021

Subject: Upper Oconee Council (UOC) Meeting (subject to Council review and approval)

This memorandum provides the meeting summary of the Upper Oconee Regional Water Planning Council Meeting held virtually on April 21, 2021 on the Zoom meeting platform. This memorandum provides a summary of the items discussed at the Council Meeting that was held from approximately 10:00 AM to 12:00 PM.

1) Welcome and Council Business – Chairman Melvin Davis

Council Chairman Melvin Davis called the meeting to order and welcomed the Council and other attendees. Chairman Davis asked all present (virtually) to introduce themselves. The Council approved the September 30, 2020 UOC meeting minutes and the April 21, 2021 draft agenda unanimously.

2) EPD Updates

Appointments – Jennifer Welte (EPD)

Jennifer Welte (EPD) gave the Council a brief update on the status of new appointments across the state, noting there were no updates for Upper Oconee Council and that many of the other Councils were also waiting for new appointments. Ms. Welte indicated that current UOC members may be contacted by the Governor's office and asked to fill out a form to gauge interest in continuing to serve. Once appointments have been made, EPD will work with the Planning Contractors to provide an orientation for the new Council members.

Current Efforts/Plan Timeline – Dr. Anna Truszczynski (EPD)

Dr. Anna Truszczynski (EPD) gave the Council an update on the next steps in the regional water planning process as follows:

- Draft plans will be ready for public notice and comment by September 2022 and finalized by December 2022.
- Council meetings will occur on a quarterly basis, with two meetings anticipated for the remainder of the 2021 calendar year.
- Technical work began in 2020 to support planning efforts, including population projections, forecasting, and resource assessments.
- Preliminary projections as well as forecasts for the municipal, industrial, energy, and agricultural sectors have been provided to the Council.

- During the current meeting, EPD will provide an update on the resource assessments for surface water availability and groundwater availability.
- During a future meeting, EPD will update Council on resource assessments for surface water quality.

3) Metro North GA Water Planning District Update – Danny Johnson (Metro District)

Due to time constraints, the regular Metro North Georgia Water Planning District update was postponed for the next UOC meeting.

4) Forecasting Updates

Municipal – Brian Skeens (Jacobs)

Brian Skeens (Jacobs) gave the Council an update on the Municipal Forecasting efforts. He presented information on the methodology used to calculate water demands and compared the current demand forecasts with those from prior planning periods.

Mr. Skeens explained that the results incorporate county-to-county transfers and accounts for industrial use that relies on municipal water supplies. For each county, per capita estimates of municipal water use were derived from EPD's annual water audits. Mr. Skeens noted that the expectation is that overall per capita use will decline over time as plumbing codes are revised to reflect more efficient standards.

Results of the municipal forecasting effort may be viewed here:
<https://waterplanning.georgia.gov/forecasting/municipal-water-use>.

Industrial and Energy – Bill Davis (CDM Smith)

Bill Davis (CDM Smith) gave an update on the Industrial and Energy Forecasting efforts.

Industrial

An advisory group comprised of stakeholders from a broad array of industries helped inform the forecasting effort. Stakeholders determined that industrial demands should remain constant over time because of improved efficiencies and automation; however, stakeholders also noted the need for the forecasts to account for additional water demands whenever new, large facilities came online.

Results of the industrial forecasting effort may be viewed here:
<https://waterplanning.georgia.gov/forecasting/industrial-water-use>

Energy

A stakeholder group was convened to inform the energy forecasting effort. The process involved a top-down approach, where energy demand was determined at a state level and then allocated regionally according to forecasted need. The list of energy facilities was updated and assumes that Plant Scherer will be retired by 2040.

Mr. Davis noted that overall energy demands for the state are lower than they were during prior planning iterations. He also noted that although the demand for nuclear energy is expected to increase over time, the demand for coal-based energy is expected to decrease as coal-fired power plants are likely to be phased out sometime around 2030. Meanwhile, production of natural gas and renewable energy is likely to increase, helping to offset any unmet demands. The composition of energy supplies will determine future water demands because some supplies (e.g., nuclear and coal plants) consume more water during power generation than others (e.g., hydro, gas, renewables).

Results of the energy forecasting effort may be viewed here:

<https://waterplanning.georgia.gov/forecasting/energy-water-use>

Agriculture – Mark Masters (GA Water Planning and Policy Center)

Mark Masters (Georgia Water Planning and Policy Center) gave an update on the Agricultural forecasting efforts. Mr. Masters noted that the University of Georgia updated the state's wetted acreage database in 2020 and has modeled crop projections through 2060. He further noted the availability of field observation data to help with ground truthing.

Mr. Masters indicated that the Upper Oconee basin has experienced a slight increase in water use for nurseries. He showed that the bulk of irrigated acres are in Laurens and Washington counties, displaying an increase of 9% in irrigated acreage from 2015 to 2020. Otherwise, acres irrigated by surface water have decreased substantially. This trend is due in part to the shift from traveler systems and solid set systems to center pivot irrigation, which is more efficient.

Final results for the agriculture forecasts are still pending and will be posted here when available:

<https://waterplanning.georgia.gov/forecasting/agricultural-water-use>.

Chairman Davis thanked the presenters for the forecasting updates.

5) FERC Relicensing for Tallassee Shoals Hydroelectric Project—Laura Hartt (Jacobs)

Laura Hartt (Jacobs) gave a brief update on the Tallassee Shoals Hydroelectric Project FERC relicensing process. The Tallassee hydroelectric project is a run of the river project on the Oconee near Athens and is considered a low impact project. Public comments on the relicensing are due June 21, 2021. The final application will be filed September 30, 2021, with a new license expected to be issued by September 30, 2023.

6) EPD Modeling Updates—Dr. Wei Zeng (EPD)

Dr. Wei Zeng (EPD) presented an overview of a new model, the Basin Environmental Assessment Model (BEAM). Dr. Zeng noted that prior models were essentially big basin-wide models encompassing the few nodes that have hydrologic information available (i.e., USGS gage data). BEAM adds more nodes by incorporating information relating to permitted entities (e.g., withdrawals and discharges).

To demonstrate BEAM, Dr. Zeng presented a hypothetical scenario involving the addition of a new industrial demand to the Oconee Basin. In doing so, he was able to demonstrate the hypothetical impact the addition of a new industrial facility would have on lake levels and downstream flows. BEAM also allows for the evaluation of other metrics, including boating performance and fish habitat.

See Meeting Presentation slides for more details about BEAM.

7) Seed Grant Updates—Dr. Gail Cowie (GA Water Planning and Policy Center)

Dr. Gail Cowie (Georgia Water Planning and Policy Center) provided an update of her 2020 Seed Grant project, “Flow Dependent Benefits and Values of Water Resources in the Upper Oconee Region.” Her project is a stakeholder driven one, designed to explore both benefits and values associated with different flows and lake levels. Her project will also examine the trade-offs inherent in managing water resources to support various benefits/values.

The project will involve the use of an interactive map and will allow for the online submittal of information. Dr. Cowie asked interested Council members to contact her about participating. Jacobs also offered to forward any invitation to join the stakeholder group.

Question from virtual meeting chat: Is this information being used for the proposed designated use changes under the Triennial Review?

Answer (via EPD): No, at least for the current Triennial Review process. That's due both to timing, as well as the focus of the seed grant project.

Post-meeting update: 140 people were invited to participate. 42 people registered to provide input. Input can be provided via an interactive map, phone interview, or email. Three online meetings were convened to orient participants and start the input process. 23 people attended the orientation meetings. Currently, Dr. Cowie is following up with those have registered but not yet provided input.

Additional Seed Grant Updates—Jennifer Welte (EPD):

Ms. Welte provided an update for the next round of Seed Grant awards. She noted that the application timeline will be the same as last year, i.e. Seed Grant application solicitation will be announced in July with an application deadline of October 31, 2021.

8) Public Comment

Chairman Davis asked if there were any comments from members of the public or local officials.

Vice Chair Pat Graham thanked the team for putting together the meeting and said she was looking forward to meeting in person as well as the Council getting new appointments.

Chairman Davis thanked the Vice Chair for her comments.

Cassidy Lord (Coordinator, Upper Oconee Watershed Association) commented on the importance of the basin as a source of drinking water. Ms. Lord noted that regional growth was driving land cover changes leading to the loss of significant acres of forestland. Ms. Lord emphasized that conservation and sustainable management of forests can help protect drinking water supplies. She encouraged the Council to add literature to the next regional plan stressing the importance of protecting forests in order to protect source water. Ms. Lord noted that the USDA's Natural Resource Conservation Service provides funding for the protection of source water watersheds, thereby recognizing the link between forest protection and water quality and quantity.

9) Next Steps/Wrap Up/Adjourn

The Chairman thanked the meeting organizers, speakers, and other participants for joining the virtual meeting. He then noted that the next meeting would probably occur in July or August, hopefully in-person. The Chairman suggested Greensboro/Lake Oconee or Milledgeville as a potential location for the next meeting. He also stated that he hoped the Council would have new appointees and elect a new Chair and Vice Chair at the next meetings. The Chairman asked Council members to send any suggestions they might have for speakers or topics to the Jacobs team.

Chairman Davis adjourned the meeting at 12:08PM

Meeting Attendance

Council Members

- Melvin Davis, Chairman
- Pat Graham, Vice-Chair
- Charles Armentrout
- Danny Hogan
- Hunger Bicknell
- Keith Hill (proxy for Linda S. Gantt)
- Rabun Neal
- Stuart Coffey

Georgia EPD Staff

- Anna Truszczynski
- Jennifer Welte
- Wei Zeng

Public Attendees and Agency Partners

- Gail Cowie, GA Water Planning and Policy Center
- Mark Masters, GA Water Planning and Policy Center
- Cassidy Lord, Upper Oconee Watershed Association
- Christine McKay, USEPA
- Lee Smith, Woolpert, Inc.
- Jimmy Davis, City of Monroe
- Scott Thackston, Georgia Forestry Commission
- Yul Anderson

Planning Contractors

- Laura Hartt, Jacobs
- Michelle Vincent, Jacobs
- Brian Skeens, Jacobs
- Ashley Reid, CDM Smith
- Bill Davis, CDM Smith