

THIRD QUARTER 2021 UPDATE

# Georgia State Water Plan Middle Ocmulgee Regional Water Planning Council Newsletter

## Updates from EPD



**VERONICA  
CRAW**

### Appointments:

The Georgia Environmental Protection Division (EPD) has been actively working with state officials to ensure that Council appointments and re-appointments occur. New appointments for the Middle Ocmulgee Council are anticipated before the end of 2021.

### Funding Available for Plan Implementation:

EPD is once again making state funds available to support and incentivize local governments and other public entities to implement elements of their Regional Water Plan. The State Fiscal Year 2022 Regional Water Plan Seed Grant program will have funds available to implement management practices or other recommendations from one or more Regional Water Plans. Applications are due October 31, 2021, and eligible recipients include local, regional, and State units of government, local authorities, regional commissions, resource conservation and development councils, local school systems, State college and universities, and State agencies. Project applications must include a letter of endorsement from the Water Planning Council Chair or designated representative. Please reach out to me or Michelle Vincent if you have any interest in applying or have any questions.

### Plan Schedule:

EPD is currently wrapping up the forecasting efforts for this phase of planning and is ready to assist Councils with the next phase in the planning process: updating the plan itself. During this next phase, the Council will use forecasting and resource assessment results and information to make decisions about management practices for the regional plan. See sections below for more information on the municipal, industrial, energy and agricultural forecasting efforts. The MOC will meet approximately quarterly until the plan is final in December 2022.

*I hope this email finds you and your loved ones happy and healthy.*

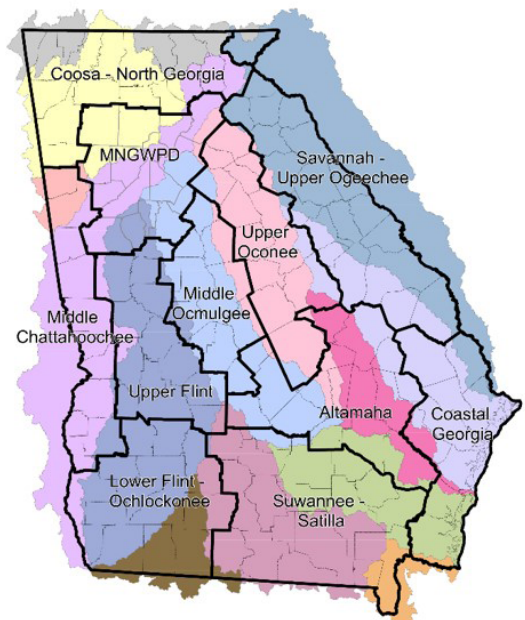


*Michelle Vincent (Jacobs) and I have put together this Council newsletter to keep you informed of recent water planning activities that relate to our Council. I hope this update will help keep you engaged and prepared for our next meeting in September as well as our future quarterly meetings.*

*If you have any questions about Council activities, please reach out to me ([elmoar@bellsouth.com](mailto:elmoar@bellsouth.com)) or Michelle ([michelle.vincent@jacobs.com](mailto:michelle.vincent@jacobs.com)).*

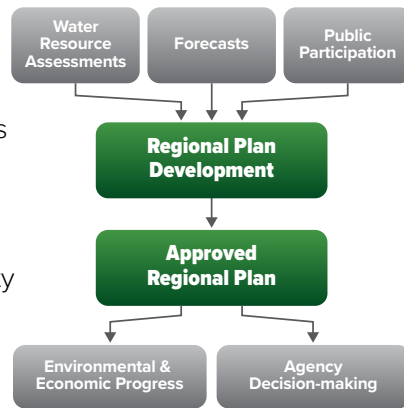
*I look forward to seeing you all again soon,  
Elmo Richardson*

### Water Planning Regions



## Planning Process Overview

As part of preparation for the 2020–2022 Regional Water Plan (RWP) update, work over the past year has included updates to the water demand forecasting, surface and groundwater availability resource assessments, surface water quality/assimilative availability resource assessments, and public participation through Council Meetings. These factors will go into the updates of the regional plan that the Council will prepare for public review and input and EPD adoption. RWPs play a role in the state’s water-related permitting and project funding decisions as well as environmental and economic progress of the state of Georgia. Activities related to the water planning cycle include EPD seed grant and 319(h) grant funding in each planning region, surface and groundwater availability studies, and surface water quality studies. The current Middle Ocmulgee Regional Water Plan can be found [here](#).



## Water Resource Assessments

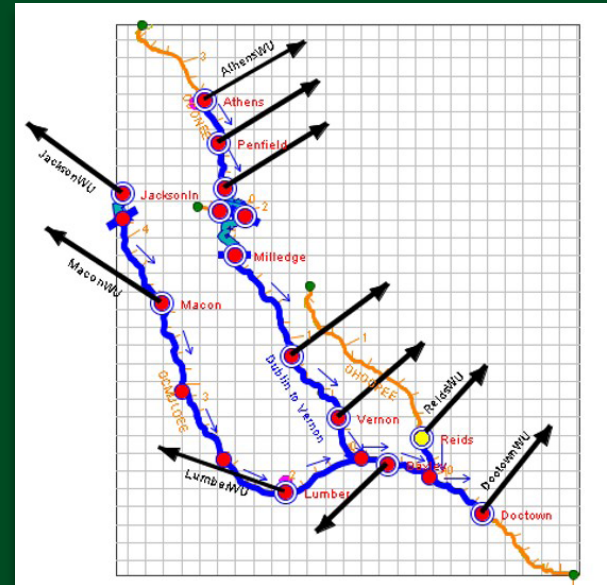
Georgia EPD has been working with consultants to develop a Basin Environmental Assessment Model (BEAM) to update the surface water availability resource assessment process. The Oconee-Ocmulgee-Altamaha (OOA) River system is the pilot watershed under this effort. The BEAM performs similar assessments as the HEC-ResSim models which were used in the previous planning efforts. However, the BEAM is being developed at a much finer scale using the OASIS modeling platform. MOC Chairman Elmo Richardson and MOC Member Tony Rojas participated in the OOA BEAM Model Focus Group, providing input regarding MOC performance metrics and modeling scenarios of interest. The BEAM will be used for updating RWPs and also by EPD for future evaluations of proposed water use permits. Compared to the previous Res-Sim model, the BEAM model has a much higher resolution and more accurately represents the tributaries that contribute to the main stems. The model also has a variety of metrics that can be considered including water supply, ecological and recreation. As scenarios change in the regions, the model can be re-visited to see where additional changes may be needed to meet regional goals or support stream conditions. The Middle Ocmulgee river basins BEAM model will be completed before the end of 2021, and results will be shared with the Council once they are available.

Surface and groundwater availability as well as surface water quality resource assessments relevant to the previous plan update can be found [here](#).

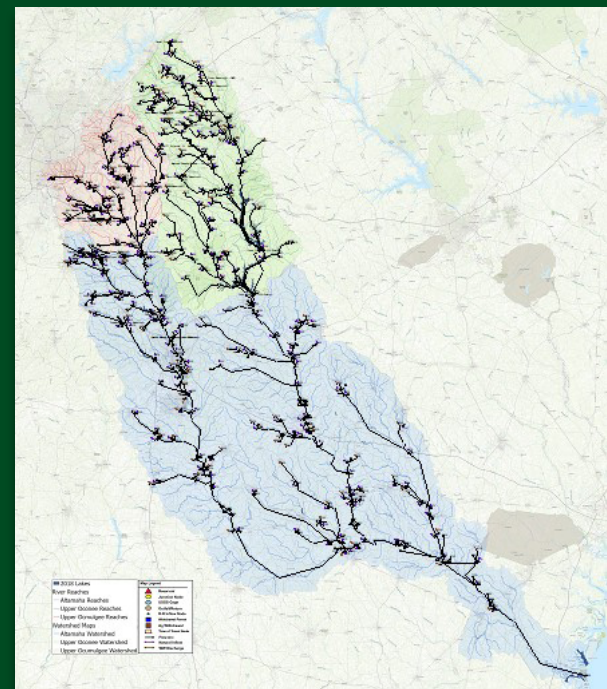
## OOA BEAM Model Development



## ReSim Model



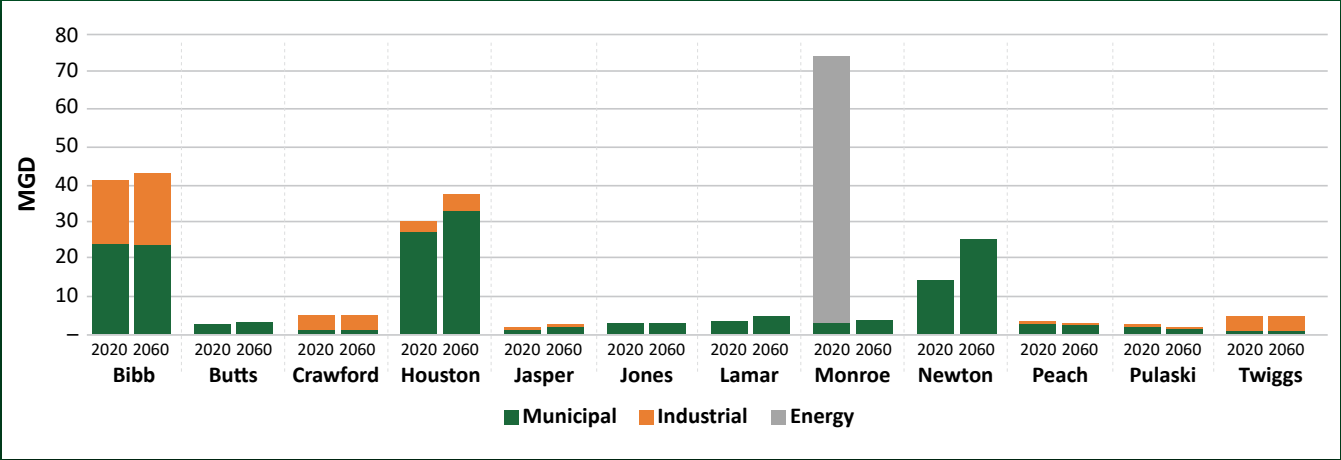
## BEAM Model





### INTRODUCTION

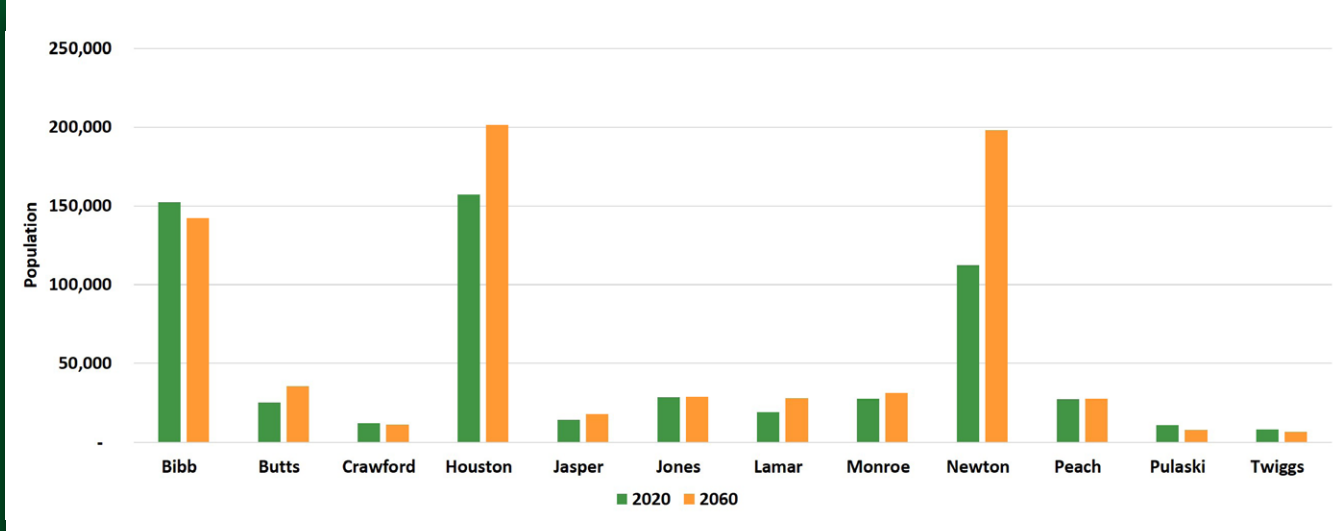
With the help of stakeholders, EPD and their consulting team has updated the demand forecasts. Council members and other interested parties from the Middle Ocmulgee region participated in stakeholder efforts to update municipal, industrial, energy, and agricultural forecasts. Forecasting results were presented to the Council during the April 2021 virtual meeting. Mark Masters with Albany State University has developed the agricultural water demand forecast, and results will be shared at the September Council Meeting. The graphic below shows the results of the updated water demand forecasts for the Middle Ocmulgee region, for these three water use sectors.



Middle Ocmulgee Water Demand Forecast

### POPULATION PROJECTIONS

State and County population projections are prepared by the Governor’s [Office of Planning and Budget](#) (OPB). These population projections are used consistently by all state agencies for multiple purposes. A Cohort-Component model is used to develop county level projections based upon age specific fertility and death rates, and migration rates. The OPB population projections released in October 2019 were used in the forecasting process and are based upon the fertility, mortality and migration rates from 2014–2018. The graph below shows the population projections for each county at 2020 compared to 2060.

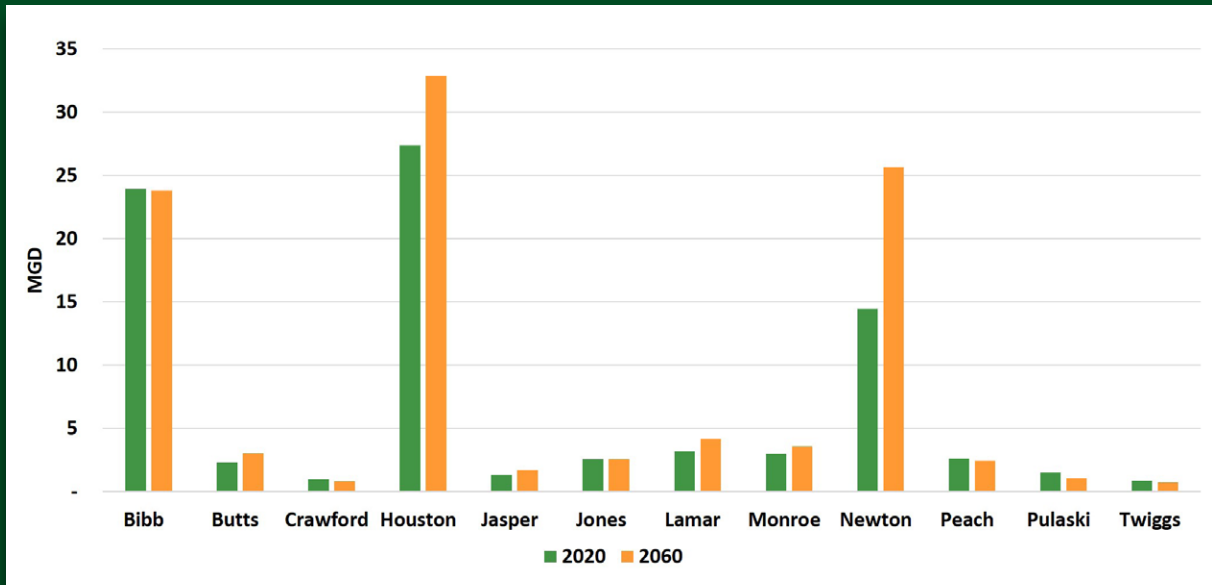


Middle Ocmulgee Population Projections (2019)



## UPDATE OF THE MUNICIPAL WATER DEMAND FORECAST

A final copy of the Municipal Water Demand and Wastewater Flow Forecasting Methods Report is available [here](#). This report outlines the updated data sources used for this update of statewide municipal water demand forecasts, the methodology for performing the forecasts, the stakeholder review process, input received to date, and draft forecast results by water planning region. Tony Rojas (MOC Member) and Mark Wyzalek (Macon Water Authority) participated in the municipal demands stakeholder group on behalf of the MOC. County-level details of permitted water withdrawals and wastewater facilities are included in the report. A visual of the municipal water demand forecast from 2020 into 2060 for each County is shown below.



**Middle Ocmulgee Municipal Water Demand Forecast**

## UPDATE OF THE ENERGY WATER DEMAND FORECAST

The 2020 updated water demand forecast for the energy sector is posted [here](#). This forecast reflects Georgia's water needs through 2060 for thermoelectric energy generation.

In April 2020, an energy sector advisory group of representatives from Georgia's major power companies convened to review and provide additional input to the forecasting process. Future energy production by type of generating facility was estimated statewide, which was used to estimate future water withdrawal and consumption by facility type.

The forecasts assumed the gradual future retirement of coal-fired generating facilities across the state, with natural gas and renewable energy sources eventually providing the additional energy needed. The Middle

Ocmulgee region's one major coal-fired thermoelectric generation facility is Plant Scherer in Monroe County. The owners of Unit 4 of the power plant (Jacksonville Electric Authority and Florida Power & Light) have announced plans to retire Unit 4; however, the timeline for that closure is not yet final so the latest forecast does not reflect that closure.

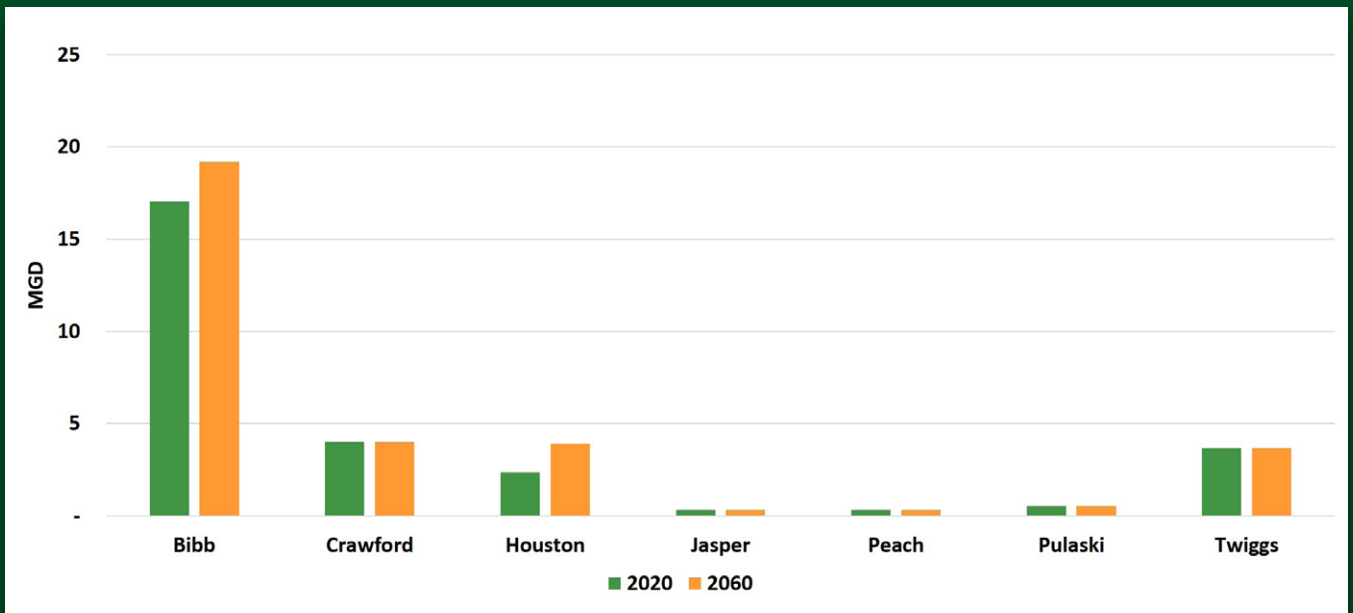
The forecast relies on the 2019 population projections produced by the Governor's Office of Planning and Budget (OPB) and average energy consumption per capita to calculate forecasts, both of which are lower than previous projections. The 2019 population projections show lower trajectories than previous projections, and average energy consumption per capita has declined. Therefore, the projected need for energy in Georgia is lower than in prior energy water demand forecasts.

## UPDATE OF THE INDUSTRIAL WATER DEMAND FORECAST

The 2020 updated water demand forecast for the industrial sector is posted [here](#). This updated forecast was prepared to inform the next updates to the Regional Water Plans and reflects Georgia's water needs for the industrial sector through 2060.

In June 2020, an advisory group of experts and industry leaders was convened to provide input and review the methodology and results of the updated forecast. The advisory group was subdivided into four subsectors, representing food processing, paper and forest products, mining, and manufacturing. Each subsector developed its own approach to estimating future water needs within its subsector.

Over time, industrial water use in Georgia has decreased, in part due to more efficient water use. Therefore, the 2020 updated industrial water demand forecast includes significantly lower projections than the prior forecast. Unlike earlier forecasting efforts, the 2020 industrial water demand forecasts do not rely on employment projections. Industrial water demands in Georgia will be re-evaluated every 5–10 years to adjust for changing conditions.



**Middle Ocmulgee Industrial Water Demand Forecast**



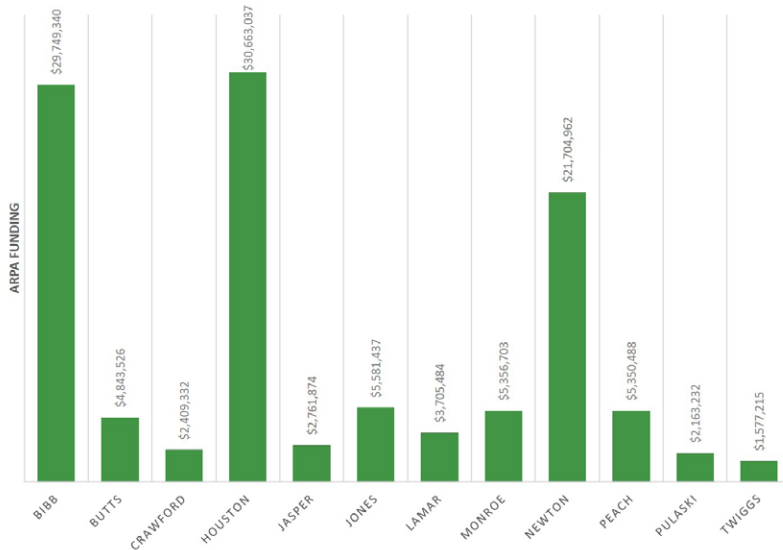
**Jackson Lake**



**Top of High Falls**

## AMERICAN RESCUE PLAN

The American Rescue Plan provides a total of \$350 billion in Coronavirus State and Local Fiscal Recovery Funds to help eligible state, local, territorial, and tribal governments. Funding has been allocated to States, Counties, Metropolitan Cities, and local governments typically serving populations of less than 50,000. Local governments (counties and cities) in the **Middle Ocmulgee Region will receive approximately \$212M**. It is important to note that one of the four eligible use categories specified in the American Rescue Plan Act (ARPA) as it relates to the Regional Water Plan includes provisions to make the necessary investments in water and sewer infrastructure. The eligible uses for infrastructure are described in more detail in the U.S. Department of Treasury's Interim Final Rule.



### Anticipated ARPA Funding for Counties in the Middle Ocmulgee Planning Council (does not include city funding)

The Interim Final Rule generally includes a wide range of categories of projects that would be eligible through the USEPA's Clean Water State Revolving Fund (CWSRF) or Drinking Water State Revolving Fund (DWSRF):

Under the CWSRF, categories of eligible projects include construction of publicly-owned treatment works, nonpoint source pollution management, national estuary program projects, decentralized wastewater treatment systems, stormwater systems, as well as water conservation, efficiency, and reuse measures. Other categories are watershed pilot projects, energy efficiency measures for publicly-owned treatment works, water reuse projects, security

measures at publicly-owned treatment works, and technical assistance to ensure compliance with the Clean Water Act.

Under the DWSRF, categories of eligible projects include: treatment, transmission and distribution (including lead service line replacement), source rehabilitation and decontamination, storage, consolidation, and new systems development.

It should be noted that it will be up to each local government how ARPA local fiscal recovery funding is allocated among eligible uses, and allocation is a policy and budgetary question that local staff and elected leadership will work through together. There are several other resources that can be accessed to learn more about the ARPA and funding allocated to the State of Georgia:

- ▶ Governor's Office of Planning and Budget: [American Rescue Plan | Governor's Office of Planning and Budget \(georgia.gov\)](https://georgia.gov/american-rescue-plan-governors-office-planning-and-budget)
- ▶ Georgia Municipal Association: [American Rescue Plan Act \(gacities.com\)](https://gacities.com/american-rescue-plan-act)
- ▶ U.S Treasury Department FAQs:
  - ▶ [Coronavirus State and Local Fiscal Recovery Funds](#)
  - ▶ [Distribution of Funds to Non-entitlement Units of Local Government](#)

## INFRASTRUCTURE

While not yet final, under the Infrastructure Investment and Jobs Act, based on the traditional state revolving fund formula, Georgia will expect to receive \$913 million over five years to improve water infrastructure across the state. The Bipartisan Infrastructure Deal is expected to make large investments in clean drinking water and wastewater infrastructure. This will include including dedicated funding to replace lead service lines and address the chemical PFAS (per- and polyfluoroalkyl). The Council will be updated once the act is final and more specifics are available. There are several other resources and jobs to learn more about the Infrastructure Investment Act:

- ▶ [White House Infrastructure Fact Sheet](#)
- ▶ [U.S. Chamber of Commerce Infrastructure Highlights](#)

## Visions & Goals

Adopted in 2010, the Middle Ocmulgee vision is:

***The Middle Ocmulgee Water Council will work so that our water resources, both surface and subsurface, are of exceptional quality and quantity for the well-being and prosperity of all that will follow. Our plan will consider the resource's natural integrity, wise conservation, and prudent management for continuing economic development and enhanced quality of life for all the region's citizens.***

Previously adopted goals pertain to water systems and supply sustainability, economic sustainability and development, and quality of life and public health enhancement. Similar to the last plan update cycle, visions and goals will be revisited for each region entering this upcoming plan update cycle. These will guide and frame the selection of management practices and will ensure resources are managed to meet the region's needs.

### Questions to consider when revisiting these visions and goals include:

- ▶ Are there any major water issues that have surfaced in the region?
- ▶ Has what you hoped to see for this region regarding water resource changed substantially over the past 5 years?
- ▶ Is there anything on the horizon that may influence the vision for the region?

Revisions to visions and goals are not necessary if the answers to the questions above are substantively no. More information about the visions and goals of the Middle Ocmulgee Region can be found [here](#).

## Anticipated Timeline

Similar to the last plan update cycle, quarterly Council Meetings may be held to facilitate the process. Meeting topics will include forecasting results, resource assessment/gap analysis results, and review and update of management practices. With the forecasting effort nearly wrapped up, the planning process has essentially begun. The next few Middle Ocmulgee Council Meetings will highlight the forecasting results and updated resource assessments, and meetings in 2022 will be focused on plan revisions.

## GOALS

- 1 Maximize existing water supply sources to the extent practicable.
- 2 Support the protection of natural stream integrity and the recreation it provides.
- 3 Promote sufficient water supply for the region.
- 4 Promote efficient use of water.
- 5 Promote properly managed wastewater discharges and beneficial reuse.
- 6 Support the reduction of non-point source pollution by advocating better land management practices.
- 7 Support planning and management of water resources to maintain a healthy economy, ensure a high quality of life, and protect our natural resources.

### FOR MORE INFORMATION, CONTACT:

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