

THIRD QUARTER 2021 UPDATE

# Georgia State Water Plan Suwannee-Satilla Regional Water Planning Council Newsletter

## Updates from EPD



**CLIFF  
LEWIS**

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 Suwannee-Satilla Council are anticipated before the end of 2021.

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.

### PURPOSE

The purpose of this newsletter is to inform Council Members of work that has already been completed and what is still to come to support the 2020-2022 Regional Water Plan (RWP) Update.

Good morning/afternoon, everyone!

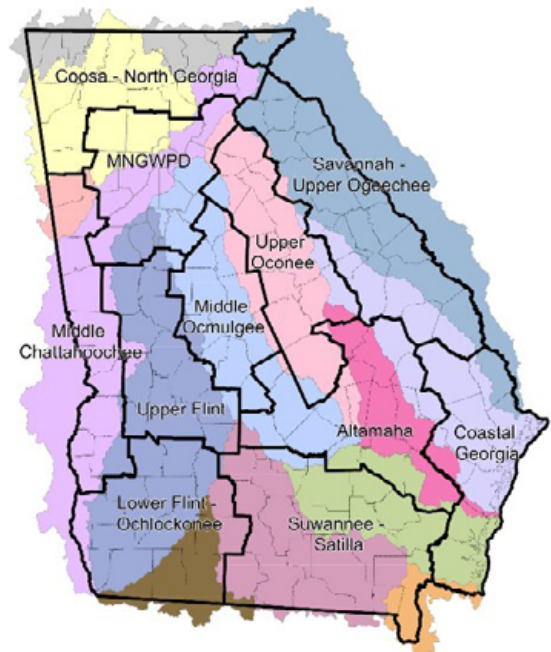
I hope this email finds you all healthy and prospering. Because it's been a while since we've been together, Shayne Wood with CDM Smith has put together this Council Update to keep you informed of water planning activities that relate to our Council. I hope this update will help keep you engaged and prepared for our next meeting!

If you have any questions about anything that's been happening, please feel free to contact me or Shayne.

I look forward to seeing you all soon,  
Scott

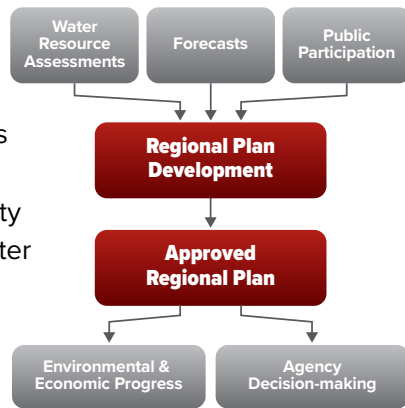


### Water Planning Regions



## 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 Suwannee-Satilla Regional Water Plan can be found [here](#).

## Water Resource Assessments

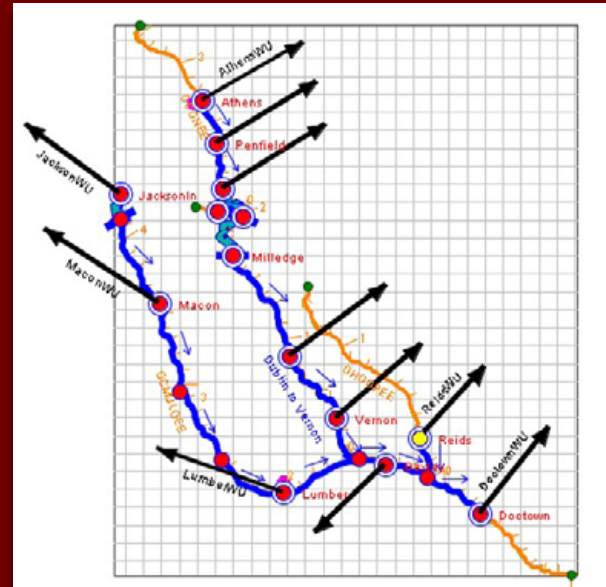
Georgia EPD has been working with a team at Hazen and Sawyer to develop a Basin Environmental Assessment Model (BEAM) to update the surface water availability resource assessment process. The Oconee-Ocmulgee-Altamaha (OOA) River system is the pilot watershed under this effort. The BEAM performs similar 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. The BEAM will be used for updating RWPs and also by EPD for future evaluations of proposed water use permits. Compared to the previous ResSim 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.

Surface and groundwater availability as well as surface water quality resource assessments relevant to the previous 2017 plan update can be found [here](#).

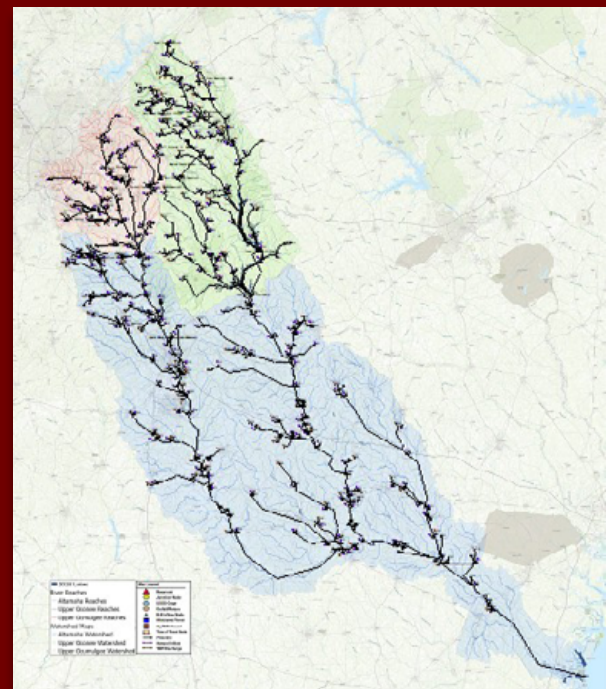
## OOA BEAM Model Development



## ReSim Model

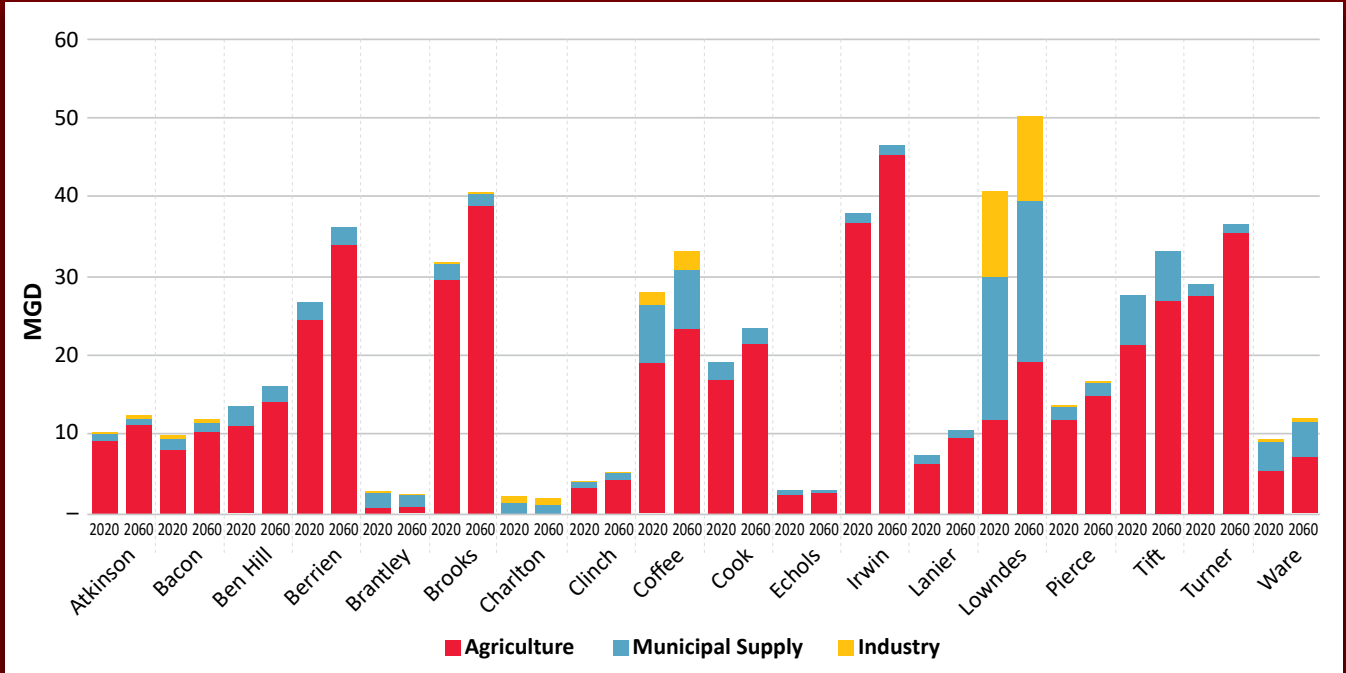


## BEAM Model



## INTRODUCTION

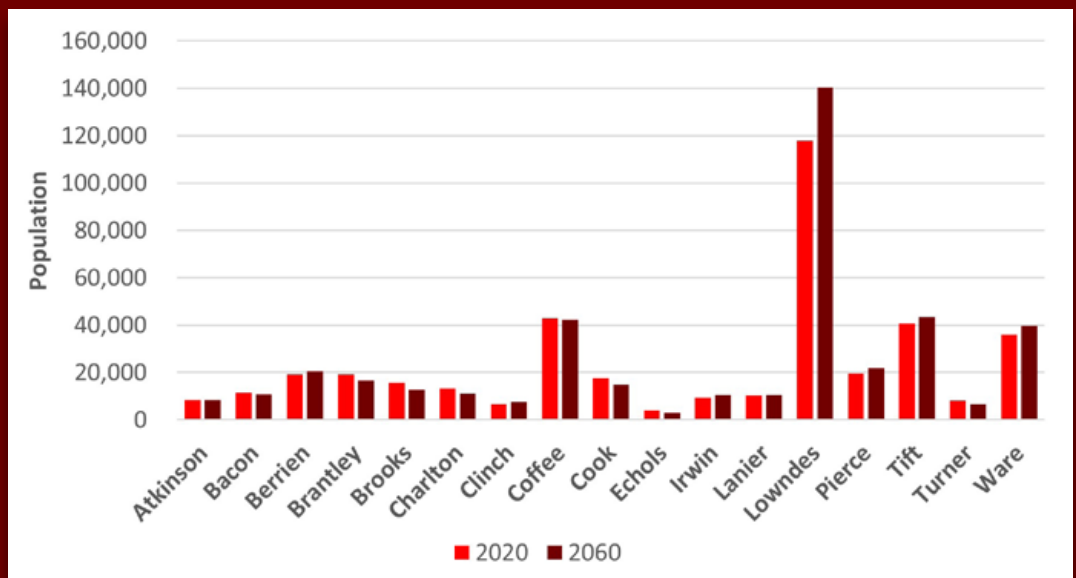
With the help of stakeholder groups and the planning contractor liaisons, the Municipal Water Demand Forecast has been finalized and is posted on the water planning website. The Energy and Industrial water demand forecasts have also been finalized and are posted to the website. The graphic below shows the results of the updated water demand forecasts for the Suwannee-Satilla region, for these three water use sectors. The Georgia Water Planning and Policy Center has developed the agricultural water demand forecast, and results will be shared at the next Council Meeting.



Suwannee-Satilla 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 to the right shows the population projections for each county at 2020 compared to 2060.



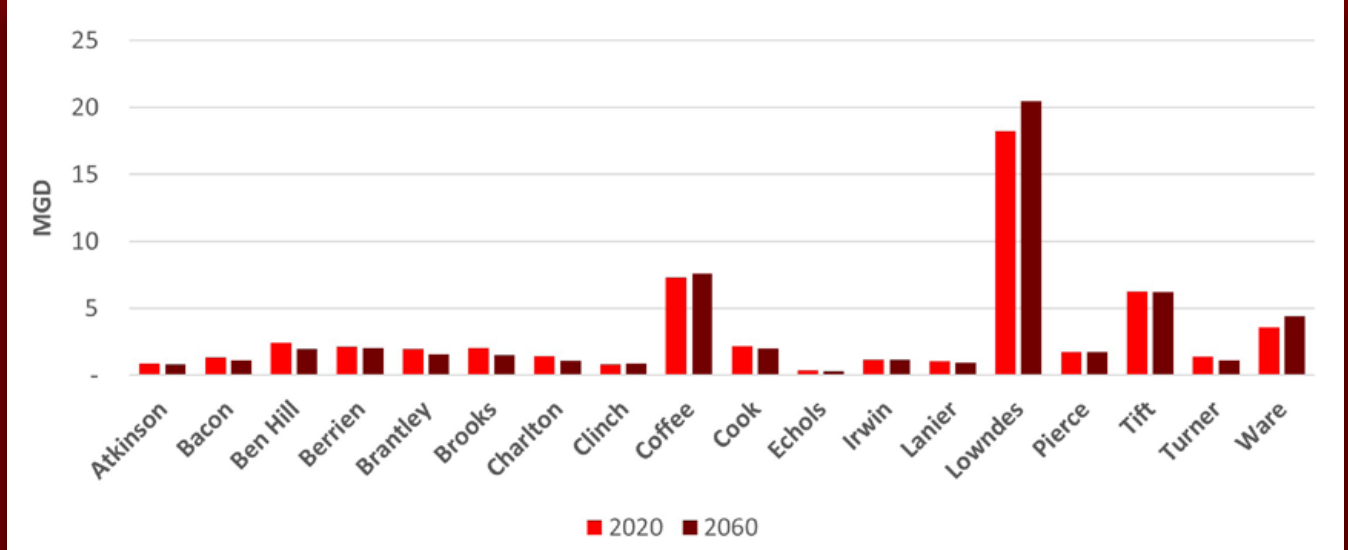
Suwannee-Satilla Population Projections (2019)





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. 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.



**Suwannee-Satilla Municipal Water Demand Forecast**

UPDATE OF THE  
**AGRICULTURAL WATER DEMAND FORECAST**

From 2020 to 2060, the agricultural water demand for the Suwannee-Satilla Region is projected to increase from 241 to 315 MGD. The Suwannee-Satilla region uses both ground and surface water for irrigation purposes; however, groundwater is used for over twice the volume of water for 2020. In addition, groundwater is projected to continue to be the main water source for irrigation into 2060. Animal farming makes up 4.1 MGD in the region with beef and dairy as the largest users. Container horticulture makes up most of the horticulture demand in the region at 0.99 MGD, with a combined total of container, field, and greenhouse horticulture water demand of 1.52 MGD. When finalized, more information on the Agricultural Water Demand Forecast can be found [here](#).

UPDATE OF THE  
**INDUSTRIAL WATER DEMAND FORECAST**

The 2020 update of the 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, reflects Georgia’s water needs for the industrial sector through 2060, and the results for this region are shown on the image below. An industrial sector advisory group, which was convened in June 2020, provided input and review on the methodology and results of the updated forecast. The advisory group was further subdivided into four subsector advisory groups representing food processing, paper and forest products, mining, and manufacturing. Each subsector group developed its own approach to estimating future water needs for these subsectors. Thus, the update of the industrial water demand forecast is based upon input and expert opinions by industry leaders from across the state.



The approach used in 2020 to estimate future industrial water demand differs from the approach previously used, which relied upon employment projections to inform the industrial water demand projections. There had been no update to the prior industrial water demand forecast since the 2011 Regional Water Plans. Since that time, industrial water use in Georgia has decreased, in part due to more efficient use of water. Based on those decreases, and the change in the approach for this forecast, the 2020 update of the industrial water demand forecast includes significantly lower projections than the prior forecast. Industrial water demands in Georgia will be re-evaluated every 5–10 years to adjust for changing conditions.

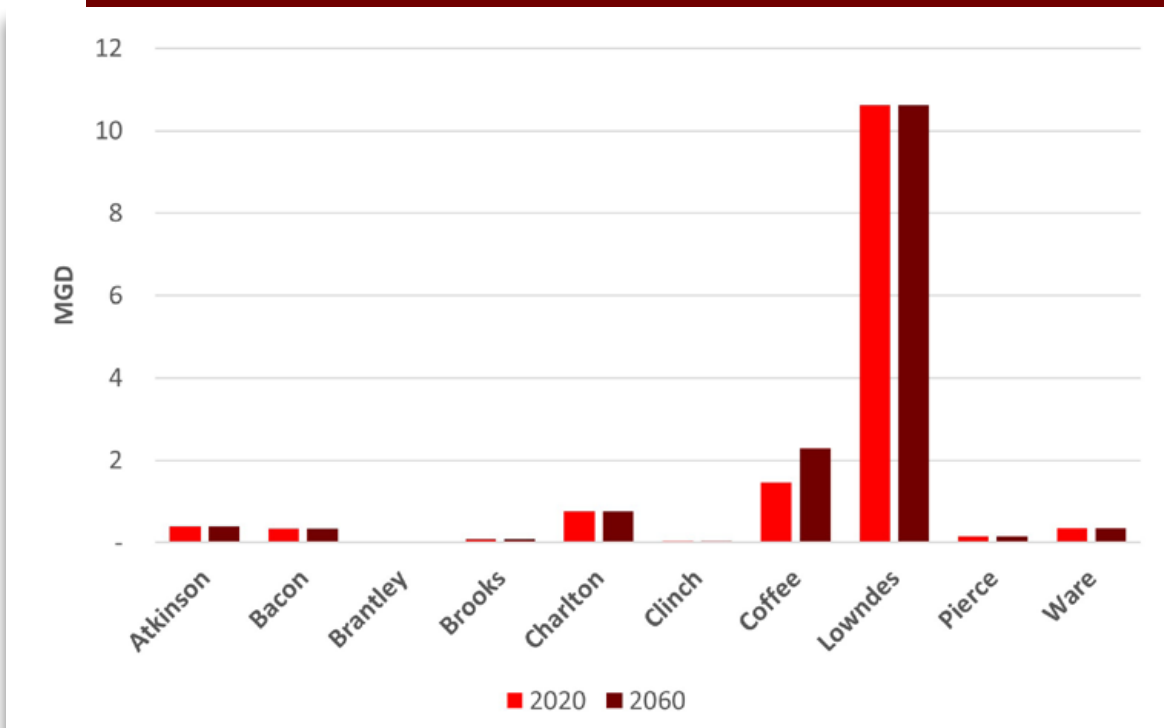
2060. The process used the 2019 population projections developed by the Governor’s Office of Planning and Budget (OPB) and average energy consumption per capita to project future energy needs in Georgia. Note that both population projections have shifted lower than before and average energy consumption per capita has declined. Therefore, the projected need for energy in Georgia is lower than in prior energy water demand forecasts. There are no thermoelectric demands in the Suwannee-Satilla Region.

An energy sector advisory group, which was convened in April 2020, provided input and review to EPD during the forecast update process.

Future energy production by type of generating facility is estimated statewide, from which the future water withdrawal and consumption by type of generating facility is estimated. The recent retirement of generating facilities and the expansion of nuclear power generation at Plant Vogtle are accounted for in this update. Assumptions are made regarding the gradual future

retirement of coal-fired generating facilities across the state. The need for additional energy generation in the future is assumed to be provided by natural gas and renewable energy sources.

The results of this forecast update provide region-specific forecasts of water needs for thermoelectric energy generation from existing and known planned facilities. Future addition of natural-gas generation is assumed to be co-located with existing natural gas facilities.



**Suwannee-Satilla Industrial Water Demand Forecast**

*NOTE: Demands for Brantley County are less than 0.1 MGD and are therefore not visible at current scale*

**UPDATE OF THE ENERGY WATER DEMAND FORECAST**

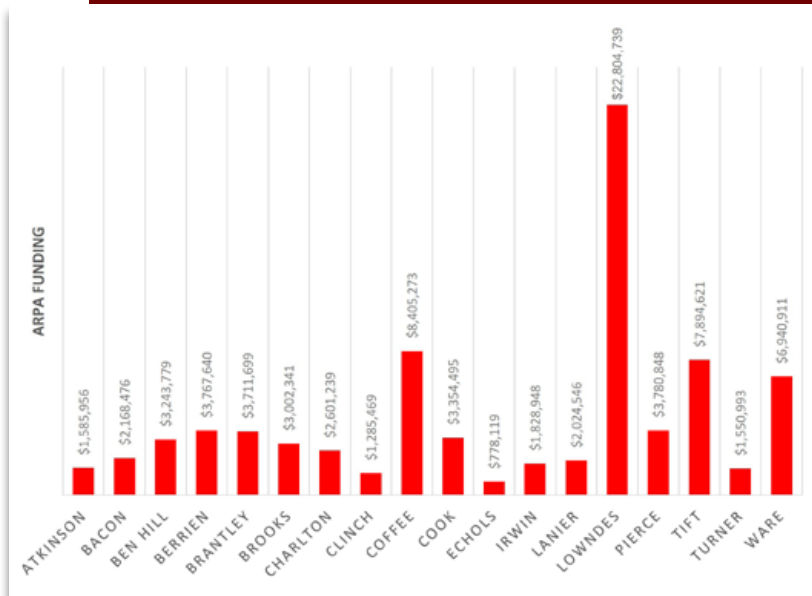
The updated water demand forecast for the energy sector has been finalized based on input from a stakeholder group comprised of representatives from Georgia’s major power companies. It will inform the next Regional Water Plan updates and is available on the [Georgia Water Planning website](#).

The 2020 updated forecast reflects Georgia’s water needs for thermoelectric energy generation through



## 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 **Suwannee-Satilla Region will receive approximately \$143M**. 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 Suwannee-Satilla 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)
- ▶ 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 2009, the Suwannee-Satilla vision is:

***The Vision of the Suwannee-Satilla Regional Council is to manage water resources in a sustainable manner under Georgia's regulated riparian and regulated reasonable use laws to support the state's and region's economy, to protect public health and natural resources, and to enhance the quality of life for all citizens; while preserving the private property rights of Georgia's landowners, and in consideration of the need to enhance resource augmentation and efficiency opportunities.***

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 Suwannee-Satilla 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 Suwannee-Satilla Council Meetings will highlight the forecasting results and updated resource assessments, and meetings in 2022 will be focused on plan revisions.

## GOALS

1 Manage and develop water resources to sustainably and reliably meet domestic, commercial, industrial water needs, and agricultural water needs including all agricultural sectors (this includes the agro forestry economy of the region).

2 Manage groundwater and surface water to encourage sustainable economic and population growth in the region.

3 Manage the region's and state's water resources in a manner that preserves and protects private property rights.

4 Ensure an adequate water supply of suitable quality to meet current and future human needs, while protecting environmental resources.

5 Identify opportunities to optimize existing and future supplies, and water and wastewater infrastructure.

6 Promote efficient use and management of surface and groundwater resources to allow for sufficient supplies for current and future generations.

7 Protect and manage surface and groundwater recharge areas to ensure sufficient long-term water supplies for the region.

8 Protect, maintain, and where appropriate and practicable, identify opportunities to enhance water quality and river base flows.

9 Protect and maintain regional water-dependent recreational opportunities.

10 Identify opportunities to manage stormwater to improve water quantity and quality.

11 Identify and implement cost-effective water management strategies.

12 Seek to provide economically affordable power and water resource service to all citizens of the region.

13 Identify and implement actions to better measure and share water use data and information.

### FOR MORE INFORMATION, CONTACT:

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