



**Altamaha
Regional Water Planning Council Meeting
September 24, 2020**

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Council Meeting Agenda



Council Meeting Altamaha Regional Water Council Agenda – September 24, 2020

Objectives:

- 1) Receive updates on on-going technical work that will support the 2020-2021 Water Plan Update Cycle
- 2) Receive updates on the ongoing Municipal, Energy, Industrial and Agricultural Water Demand Forecasts
- 3) Receive updates on on-going Seed Grant Projects

- 11:30 – 11:40 a.m. Welcome and Introductions
Approve meeting minutes from February 13, 2020 Council Meeting
Approve meeting agenda
- 11:40 – 11:50 a.m. Updates from EPD (Jennifer Welte, Georgia EPD)
- 11:50 - 12:30 p.m. Updates on Technical Work supporting the 2020-2022 Regional Water Plan Update Cycle
- Municipal Water Demand Forecast (Bill Davis, CDM Smith)
 - Energy Water Demand Forecast (Bill Davis, CDM Smith)
 - Industrial Water Demand Forecast (Bill Davis, CDM Smith)
 - Agriculture Water Demand Forecast (Bill Davis, CDM Smith)
 - Technical Committee Members Report Out
- 12:30 - 12:40 p.m. Seed Grant Updates (Dr. Gary Hawkins, University of Georgia / Danielle Honour, CDM Smith)
- 12:40 - 1:00 p.m. Discussion
Next Steps / Public Comments / Local Elected Official Comments
Wrap Up
- 1:00 p.m. Adjourn



Council Business

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Council Business

- Welcome and Introductions
- Approve meeting summary from February 13, 2020 Council Meeting
- Approve meeting agenda



Updates from Georgia EPD

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Georgia's State Water Plan

Update of Technical Work for 2020-2022 Regional Water Plan Update Cycle

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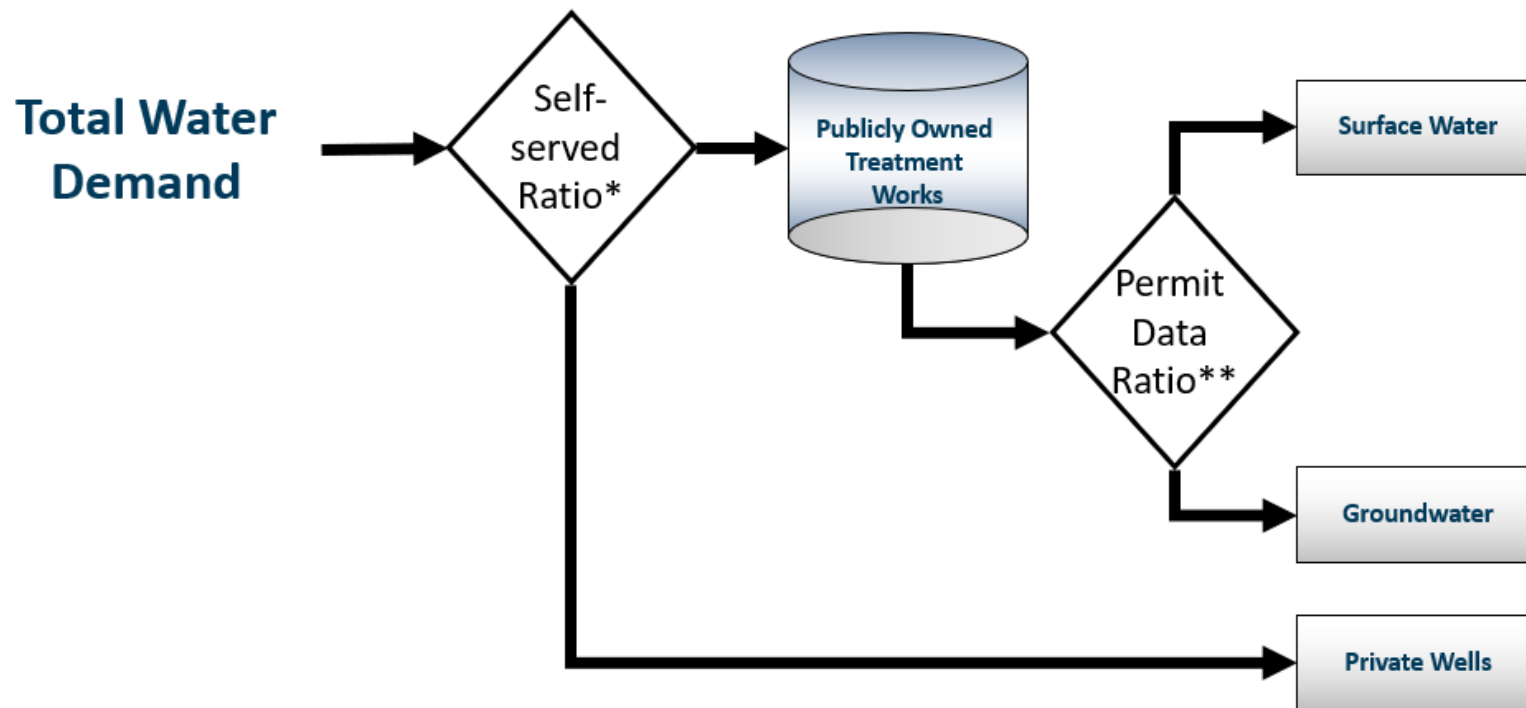
Municipal Water Demand Forecast

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Municipal Water Demand Forecasting

- Municipal Forecasting Stakeholder Group
 - Includes one representative from each Council & the Metro Water District (Cleve Edenfield represents Altamaha Council)
 - Stakeholder Meetings held on April 16 and June 3
 - Reviewed methodology and initial data collection
 - Reviewed draft forecast results
 - Next meeting to be held this fall (date TBD)
- Forecast being prepared by Black & Veatch team
- Information from Industrial forecasting efforts will inform this forecast (municipally-supplied industries)

Municipal Water Demands



*Based on previous USGS estimates

**Based on existing GA EPD permit data

Municipal Water Demands – Self Supplied

- County % population self-supplied water (groundwater wells)
- The % self supplied will remain constant into the future, unless County-specific information is received.

County	2017 Plan Percent Population Self Supplied	Self Supplied Per Capita	Updated Percent Population Self Supplied ¹
Appling	63%	75	67%
Bleckley	56%	75	58%
Candler	58%	75	39%
Dodge	63%	75	52%
Emanuel	46%	75	42%
Evans	49%	75	39%
Jeff Davis	52%	75	58%
Johnson	69%	75	56%
Montgomery	39%	75	57%
Tattnall	60%	75	62%
Telfair	31%	75	43%
Toombs	33%	75	32%
Treutlen	54%	75	64%
Wayne	57%	75	53%
Wheeler	67%	75	43%
Wilcox	43%	75	35%

¹ Ratios as shown in the Estimated Use of Water in Georgia for 2015 and Water Use Trends, 1985-2015 (USGS, 2019).

Municipal Water Demands – Public Supply

- Data collection was focused on 2019 average annual water withdrawals (as reported to EPD)
- Municipal water use:
 - 2019 Groundwater use: 15.8 mgd
- Forecast (through 2060) is based on updated per capita use estimates and population projections
 - 2060 Forecasted Groundwater use: 15.2 mgd

Municipal Water Demands – Per Capita

- Updated per capita demand values based on water audit submissions to EPD (forecasting team reviewing 2019 data)

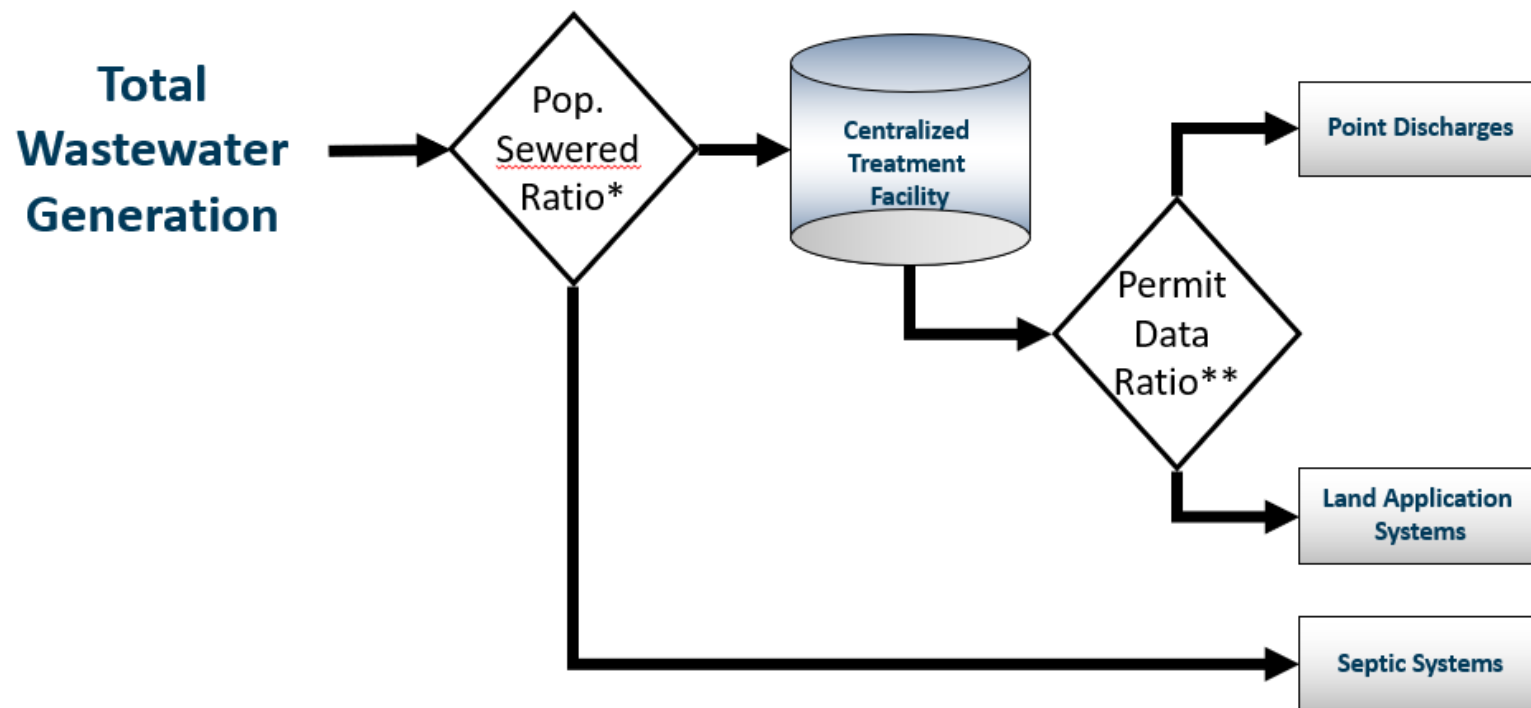
Altamaha Per Capita Water Demand (gpcd)			
County	2011 Plan Per Capita Demand	2017 Plan Per Capita Demand	Updated Per Capita Demand ¹
Appling	140	133	129
Bleckley	115	113	125
Candler	105	99	90
Dodge	174	176	136
Emanuel	169	161	132
Evans ²	95	92	101
Jeff Davis	195	193	160
Johnson ²	121	122	138
Montgomery ²	112	112	166
Tattnall	121	118	135
Telfair	140	141	115
Toombs	147	146	163
Treutlen ²	128	128	127
Wayne	171	164	120
Wheeler ²	141	143	81
Wilcox ²	139	133	147

NOTES:

¹ Weighted average per capita calculated using the available 2015-2018 Water Loss Audits.

² Per capita was calculated using the population stated in SDWIS and the recorded water demands.

Municipal Wastewater Demands



*Based on 1990 US Census Bureau data

**Based on existing GA EPD permit data

Municipal Wastewater – Septic

- County % population on septic systems
 - Will be held constant, unless specific input received
- Values shown in unshaded cells are from Georgia Dept. of Public Health data (through 2018)
- Values shown in shaded cells are from the 1990 Census housing characteristics for Georgia (used where DPH data was deemed inappropriate for use by forecasting team)

County	% Septic Users in 2020
Appling County	71%
Bleckley County	79%
Candler County	59%
Dodge County	67%
Emanuel County	59%
Evans County	87%
Jeff Davis County	82%
Johnson County	74%
Montgomery County	59%
Tattnall County	77%
Telfair County	58%
Toombs County	71%
Treutlen County	57%
Wayne County	59%
Wheeler County	84%
Wilcox County	75%

Municipal Wastewater – Municipally Treated

- Data collection was focused on 2019 average annual wastewater discharges (as reported to EPD)
- Municipal wastewater flows in Altamaha region:
 - Point source discharges: 11.0 mgd
 - Land application system (LAS): 3.2 mgd
- Wastewater Forecast (through 2060) is based on population projections
 - 2060 Forecasted Wastewater flow: 14.2 MGD



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Energy Water Demand Forecast

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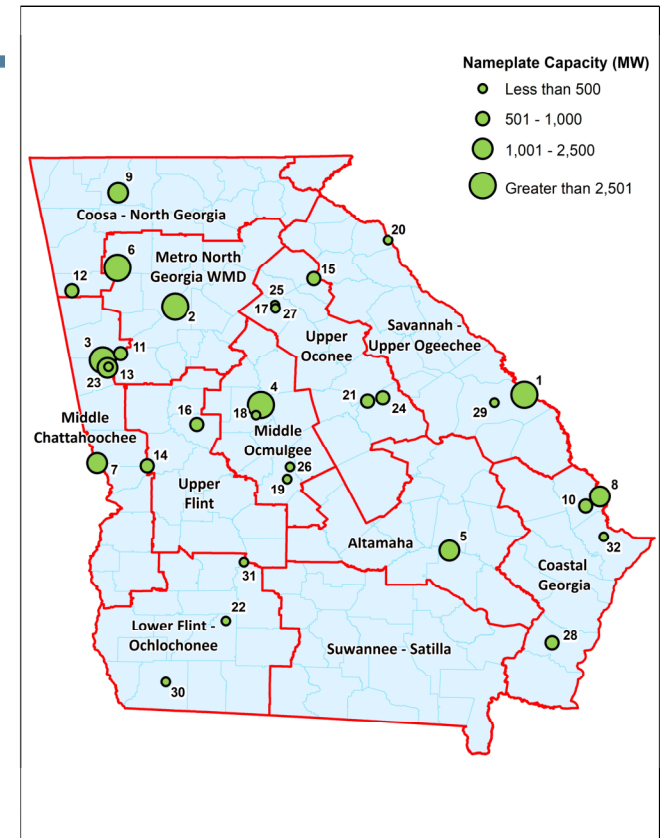
Energy Water Demand Forecasting Stakeholder Group

Participating Representatives from:

- Georgia Power / Southern Company
- Municipal Electric Authority of Georgia (MEAG)
- Oglethorpe Power Corporation
- Dalton Utilities
- Georgia Public Service Commission
- Georgia Environmental Finance Authority

Purpose of Energy Stakeholder Group

- Provide input on the methodology used to estimate future water demand for thermoelectric power generation
- Review and provide input on:
 - Available data
 - Updated list of thermoelectric facilities
 - Method for statewide energy generation estimate
 - Estimation of water withdrawal and consumption forecast by facility



Where We Are in the Process

EPD & Planning Contractor

- ✓ • Refined estimate of statewide need for energy
- ✓ • Estimated future generation by configuration type to meet future need
- ✓ • Estimated need for additional capacity if necessary
- ✓ • Estimated future withdrawal & consumption by location

Stakeholders

- ✓ • Provided feedback on materials presented at April 29th kickoff meeting
- ✓ • Reviewed draft forecast technical memorandum (TM)
- ✓ • Participated in follow-up meeting on August 14th to discuss draft forecast and provided feedback
- ✓ • We addressed stakeholder comments to finalize forecast TM



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Industrial Water Demand Forecast

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Introductory Kickoff Meeting held June 3, 2020

Participating Industrial Stakeholders:

BASF	International Paper
Covia	Irving Consumer Products
Georgia Association of Manufacturers	Kamin
Georgia Chemistry Council	KIA
Georgia Department of Economic Development	Milliken and Company
Georgia Mining Association	Mohawk Industries
Georgia Pacific	Office of Planning and Budget
Georgia Paper and Forest Products Association	Packaging Corporation of America
Georgia Poultry Federation	Rayonier Performance Fibers
Georgia Tech Research Institute	SAFT, Inc.
Gerdau Steel	Southwire
Gulfstream	Toyo Tire

Industrial Water Demand Forecasting

- Industrial Forecasting Stakeholder Group
 - Initial stakeholder meeting held on June 3
 - Developed subgroups by major sectors to further inform data and methodology:
 - Poultry & Food Processing
 - Mining
 - Paper and Forest Products
 - Manufacturing
 - Includes several representatives that are also Council members (Brian Mooney represents Altamaha Council)
- Expected completion of forecast by October

Industrial Water Demand Forecast Sub-Groups

Poultry & Food Processing

- Georgia Poultry Federation survey of membership with assistance from the Georgia Tech Research Institute
- Draft summary report to EPD early October

Mining

- Georgia Mining Association survey of membership
- Draft summary report to EPD late September

Survey Questions:

- Average Water Use
- Water Sources
- Municipal Customer
- Average Discharge
- Receiving Bodies
- Municipal WW Customer
- Anticipated changes in next 5 – 10 years

Industrial Water Demand Forecast Sub-Groups (*cont.*)

Paper & Forest Products

- Representatives have discussed reasonable growth for industry
- Draft summary report submitted to Georgia EPD for review

Manufacturing

- Georgia Association of Manufacturers survey of membership
- Representatives have discussed reasonable growth for industry
- Draft summary report to EPD late September

Industrial Water Demand Forecast Coordination

Coordination with Municipal Water Demand Forecast

- Sharing information with municipal forecast team where municipal water use is identified and greater than 0.2 MGD

Georgia Department of Economic Development (GDED)

- Want to be sure water is not a limiting factor in attracting new businesses to regions
- Coordination with GDED on industry trends and available data to inform the forecast
- In the absence of specific information about the location/amount of water needs from new industries, each planning region may choose to run a management scenario during the Resource Assessment process



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Agricultural Water Demand Forecast

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Water Demand Forecasting – Agricultural

- Georgia Water Planning & Policy Center at Albany State University, along with modeling support from UGA, will be updating this sector forecast
- Forecast includes irrigated land and other agricultural uses
 - Nurseries, animal operations, golf course irrigation
- Estimates of irrigation water use informed by estimates of wetted acreage and irrigation use
 - Wetted acreage informed by aerial surveys and site visits
 - Irrigation use informed by meters and crop types
- Forecasts informed by economic models that look at crop projections



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Technical Committee Reports

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Seed Grant Updates

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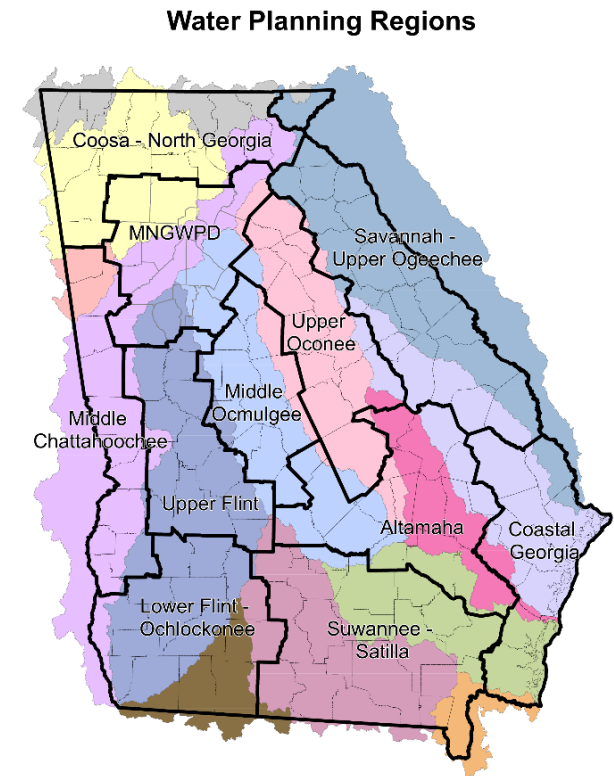
Upcoming Regional Water Plan Seed Grant Fiscal Year 2021 Grant Period

- Announcement released in July 2020
- Eligible recipients of Seed Grant funds can include local, regional and State government, regional commissions, resource conservation and development councils, local schools, State college and universities, and State agencies
- Must attend a pre-application meeting by **October 16, 2020**
- Applications must be postmarked by **October 31, 2020**.

<https://epd.georgia.gov/outreach/grants/regional-water-plan-seed-grant-funds>

Ongoing EPD Regional Water Plan Seed Grant Funded Project Updates

- Seed Grant was awarded to Dr. Gary Hawkins (Crop and Soil Science Department, University of Georgia)
- Included three of the RWP Councils: Altamaha, Coastal and Suwannee-Satilla
- Implements two of the management practices common to all the RWPs and one management practice specific to our region
- Anticipated completion date is December 2020



Ongoing EPD Regional Water Plan Seed Grant Funded Project Updates

Water Plan Region	Management Practice	Description	Area Addressed
Coastal Altamaha Suwannee-Satilla	NPS-2 Research and Address Impairment Issues	Monitor and determine sources of nutrient-pollutant loading. Develop management programs to mitigate impairments.	Urban
Coastal Altamaha Suwannee-Satilla	NPSA-1 Soil Erosion Reduction Measures	Encourage implementation of conservation tillage and cover crops to reduce soil erosion.	Agriculture
Altamaha Suwannee-Satilla	WC-12 Application Efficiency Technologies	Encourage and improve use of crop water management technologies and techniques.	Agriculture

Section 319(h) Georgia's Nonpoint Source Implementation Grant

- Pine Country RC&D in collaboration with University of Georgia (Dr. Hawkins) prepared an application to address Erosion and Nutrient Management Practices in the region
- Addresses multiple nonpoint source management practices in the RWP (NPSR-1, NPSA-2, NPSA-3 and NPSA-4)
- Project was recommended for funding during the last seed grant cycle using 319(h) grant funds – currently in the contracting process



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Public Comments/Local Elected Official Comments

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Next Steps

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Thank You!

Questions? Comments? Need
More Information?

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