



Georgia's
State Water Plan

Coastal Georgia Water Planning Council
April 18, 2018

waterplanning.georgia.gov

Council Meeting Agenda



Georgia's State Water Plan

Coastal Georgia Regional Water Council Meeting
Agenda - April 18, 2018

Objectives:

- 1) Review Regional Water Plan Outreach Materials
- 2) Review Council Survey Feedback
- 3) Review 2018 Grant Opportunities and Timelines
- 4) Share Information on Regional Activities since Adoption of RWP

10:00 - 10:30	Registration
10:30 - 10:45	Welcome and Introductions - Benjy Thompson Approve meeting minutes from June 12, 2017 Council Meeting Approve meeting agenda
10:45 - 11:15	Review of Regional Water Plan Outreach Materials - Shayne Wood - Coastal Georgia RWP Fact Sheet - Coastal Georgia RWP PowerPoint Presentation
11:15 - 11:45	Council Member Survey Results - Shayne Wood
11:45 - 12:15	Lunch
12:15 - 12:30	EPD Seed Grant Opportunity Review and Timelines - Shayne Wood
12:30 - 1:00	Seed Grant Project: Integrating UGA Extension with the Altamaha, Coastal Georgia and Suwanee-Satilla Regional Water Plans - Gary L. Hawkins, University of Georgia, Crop and Soil Science
1:00 - 1:40	Chatham County - Savannah Metropolitan Planning Commission (MPC) Dec. 2017 Red Zone Water Supply Management Plan - Courtney Reich and Rob Brown (Ecological Planning Group) and Jackie Jackson (Garden City)
1:40 - 1:50	Legislative Update and EPD Permitting Activity Updates - Reid Jackson (EPD)
1:50 - 2:00	Public Comments/Local Elected Official Comments Next Steps / Wrap Up
2:00	Adjourn



Council Business

Council Meeting Overview

- Welcome and Introductions
- Approve meeting minutes from June 12, 2017 Council Meeting
- Approve meeting agenda



Review of Regional Water Plan Outreach Materials

RWP Outreach Materials – Fact Sheet


- Fact Sheets (previously distributed)
- Highlights of Adopted RWP
 - Background
 - Overview
 - Key Issues
 - Forecasted Demands

2017 REGIONAL WATER PLAN

COASTAL GEORGIA REGION

BACKGROUND

The Coastal Georgia Regional Water Plan was initially completed in 2011 and subsequently updated in 2017. The plan outlines near-term and long-term strategies to meet water needs through 2050. The Coastal Region covers the lower portion of five major river basins, including Savannah, Ogeechee, Altamaha, Satilla, and St. Marys Rivers. The Coastal Region encompasses several major population centers, including Brunswick, Hinesville–Fort Stewart, and Savannah.



OVERVIEW OF COASTAL GEORGIA REGION


The Coastal Georgia Region includes nine counties in southeast Georgia. Over the next 35 years, the population of the region is projected to increase from approximately 680,000 to 1,000,000 residents. Key economic drivers in the region include port, industry, business, tourism, trade, government facilities, and transportation, especially associated with the Brunswick and Savannah Harbors and Interstate 95. Energy production, manufacturing and silviculture are also significant to the region.

Groundwater, mainly from the Floridan aquifer, is needed to meet about 62% of the municipal, industrial, and agricultural needs, with the municipal and industrial uses being the dominant demand sectors. Surface water is needed to meet about 38% of these needs, with industry as the dominant demand sector. Thermoelectric energy is a major user of surface water, but most of the water withdrawn is returned to the surface water source.

KEY WATER RESOURCE ISSUES ADDRESSED BY THE COUNCIL

1. Long-term sustainable water supplies for municipal and industrial growth in the region while protecting the unique coastal environment
2. Current and potential future groundwater withdrawals in and around Effingham, Chatham, Bryan and Liberty counties for future water supply
3. Integration with ongoing efforts including salt water intrusion, Savannah River 5R Process, demands for water upstream of the region, and interstate activities with South Carolina and Florida
4. Low dissolved oxygen in Savannah and Brunswick Harbors and other water quality issues

COASTAL GEORGIA WATER PLANNING REGION



FORECASTED REGIONAL WATER DEMANDS

2015 WATER DEMAND TOTAL = 275 MGD


Category	Percentage
Municipal	32%
Industrial	60%
Agriculture	5%
Energy	3%

2050 WATER DEMAND TOTAL = 346 MGD

Category	Percentage
Municipal	35%
Industrial	57%
Agriculture	4%
Energy	4%

Georgia's State Water Plan
COASTAL REGION

For more information, please go to:
waterplanning.georgia.gov/coastal-georgia-water-planning-region



RWP Outreach Materials

- Highlights of Adopted RWP (cont.)
 - Resource Assessment Results
 - Potential Gaps
 - Management Practices

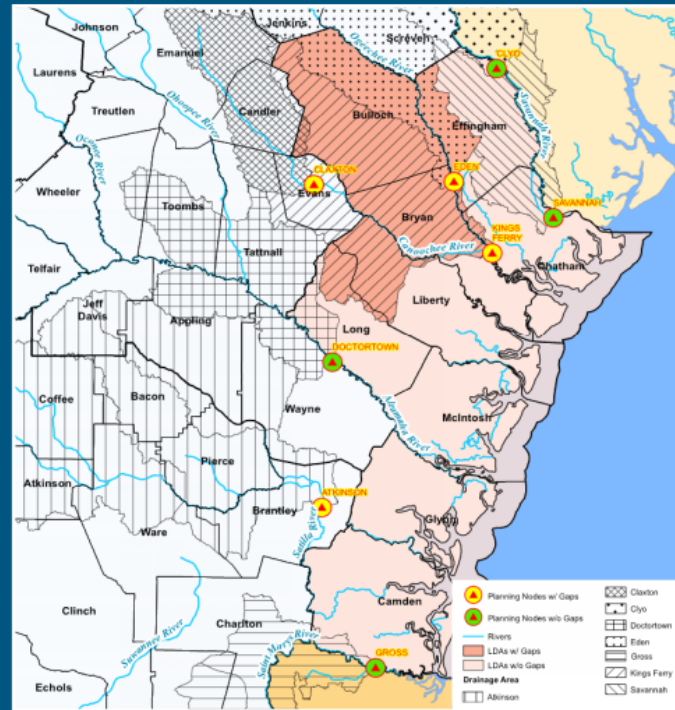
SUMMARY OF 2017 RESOURCE ASSESSMENT RESULTS

GROUNDWATER: At the regional level, for modeled aquifers, there is sufficient groundwater to meet forecasted needs over the planning horizon; however, meeting the increase in demands in areas where groundwater supplies may be limited due to salt water intrusion is a significant challenge. The outcomes from the Bi-state Stakeholder process regarding salt water intrusion will need to be considered in determining groundwater use in some portions of the region.

SURFACE WATER QUALITY: Assimilative capacity assessments indicate the potential need for improved wastewater treatment within the Ogeechee, Altamaha, and St. Marys river basins. Addressing non-point sources of pollution and existing water quality impairments will be a part of addressing the region's future needs.

SURFACE WATER AVAILABILITY: Over the next 35 years, the modeling analysis indicates that forecasted surface water demand within the Coastal Georgia Region is projected to cause stream flows in the Canoochee River (at the Claxton planning node) and Ogeechee River (at the Eden and Kings Ferry planning nodes) to fall below targets for support of instream uses (resulting in "potential gaps"). A map of the node locations, their drainage areas, and a summary of the potential gaps are provided below.

POTENTIAL 2050 SURFACE WATER GAPS IN THE COASTAL REGION



SUMMARY OF MODELED 2050 PROJECTED SURFACE WATER GAPS

Node	Duration of Gap (% of total days*)	Avg. Flow Deficit (MGD)	Long-term Avg. Flow (MGD)
Claxton	15	3	292
Eden	3.3	16	1,430
Kings Ferry	3	24	2,364

*Model simulation period is 1939 - 2013

COASTAL GEORGIA MANAGEMENT PRACTICES

The Coastal Georgia Plan describes over 80 management practices targeted toward current and future needs. Actions for surface and groundwater are grouped and listed by the water use sectors that will implement them. The Plan also includes practices for resources shared with other regions. Representative practices are summarized here.

WATER CONSERVATION: The Coastal Council supports the 25 water conservation goals contained in the 2010 Water Conservation Implementation Plan (WCIP), including adherence to Tier 1/Tier 2 measures. Other recommendations include use of reclaimed water, water audits, irrigation metering, and water loss control.

WATER SUPPLY: Multi-jurisdictional groundwater development outside red/yellow zones, surface water storage, use of additional regional and local aquifers and other additional/alternate sources.

WASTEWATER & WATER QUALITY: Increase permitted wastewater capacity; data collection on loadings; and construct new or expanded and/or replace/ upgrade existing treatment facilities.

INFORMATION NEEDS: Acquire additional data/information on agricultural consumptive use to confirm or refine if it is less than 100% consumptive; Refine surface water agricultural forecasts & Resource Assessments to improve data on source of supply and timing/ operation of farm ponds. Research to determine the feasibility and potential benefits and limitations of aquifer storage and recovery.

RECOMMENDATIONS TO STATE: Focus on education, incentives, collaboration, cooperation, and enabling and supporting plan implementers; institutionalize and fund water planning; focus funding and assistance on areas with shortfalls.

PRODUCED: AUGUST 2017

RWP Outreach Materials – Presentation

- PowerPoint slides summarizing the highlights of the RWP process
- Talking points provided
- To be used by Council Members to share information about the RWP process and to educate stakeholders in the region
- Can be tailored to meet specific needs
- Will work with Council to identify forums where knowledge can be shared

RWP Outreach Materials – Presentation

- [Switch to RWP Powerpoint]



Council Member Survey Results

Council Member Survey Results

- EPD requested the planning contractors to help think about improvements to make to the regional water planning process
- Contractors are basing recommendations on their expertise with the RWP process as well as engagement of outside experts



Council Member Survey Results

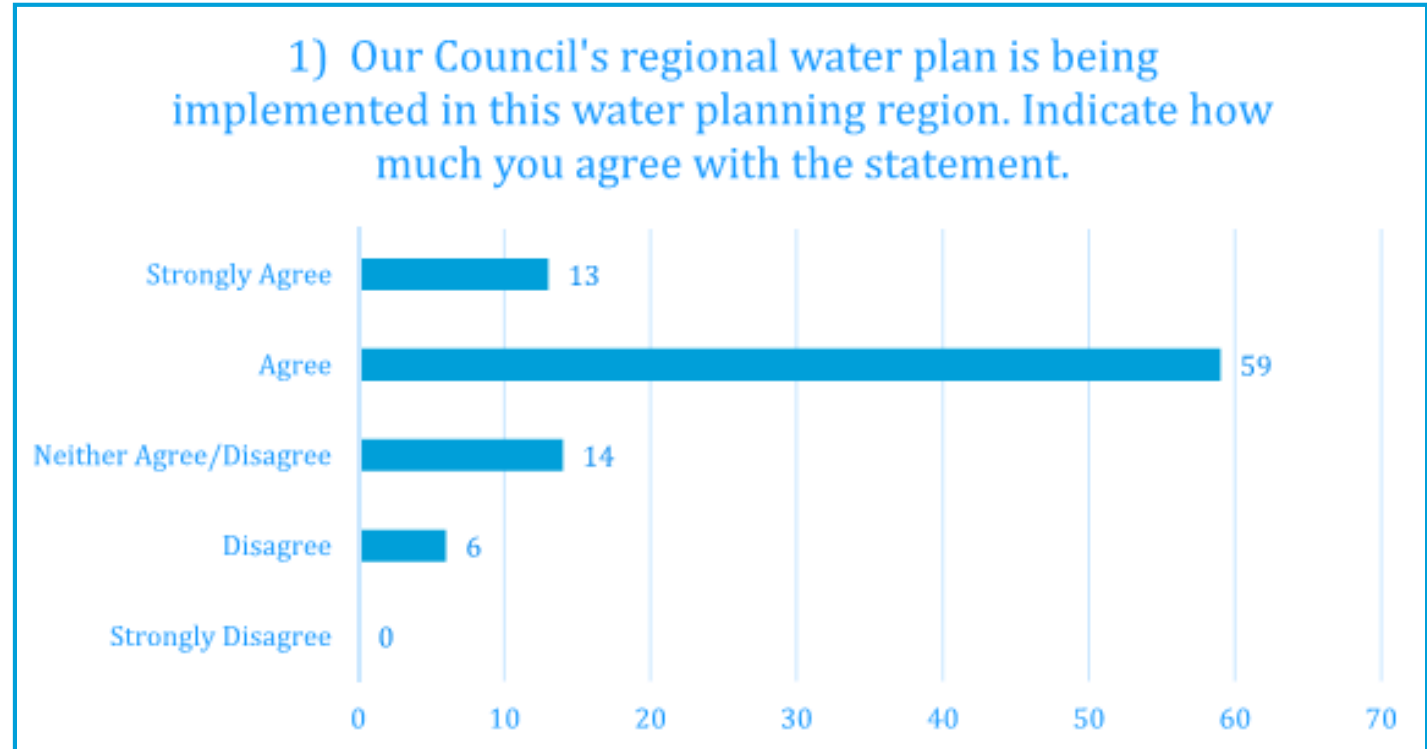
- Critical to forming recommendations is input from Council members
 - Surveys were sent out in late October and the contractors gathered input from Council members through early November
 - In-depth phone interviews with the Chairs of each Council were also conducted
- Currently, EPD is reviewing the contractor's recommendations
- Updates will be provided as this process moves forward

Council Member Survey Results

- Survey sent to all council members in the 10 regional councils
- Total of 91 survey responses were received / 36% response rate of all Council members
- 7 questions in total
 - 6 questions were how much you agree/multiple choice
 - 7th question was open-ended

Question 1 Response

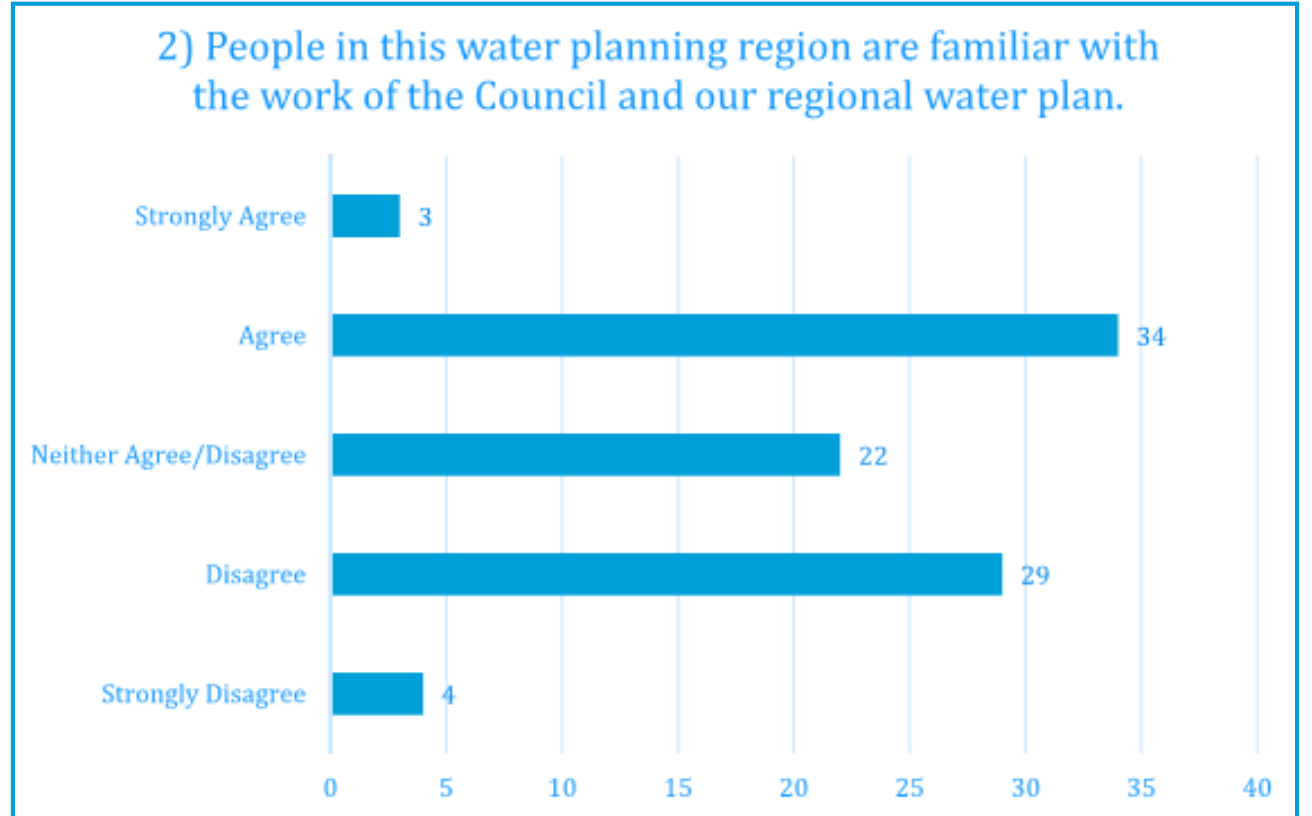
- Response: Agree with statement (78%)
 - 15% neither agree/disagree
 - <7% disagreed



Source: Back & Veatch, 2017

Question 2 Response

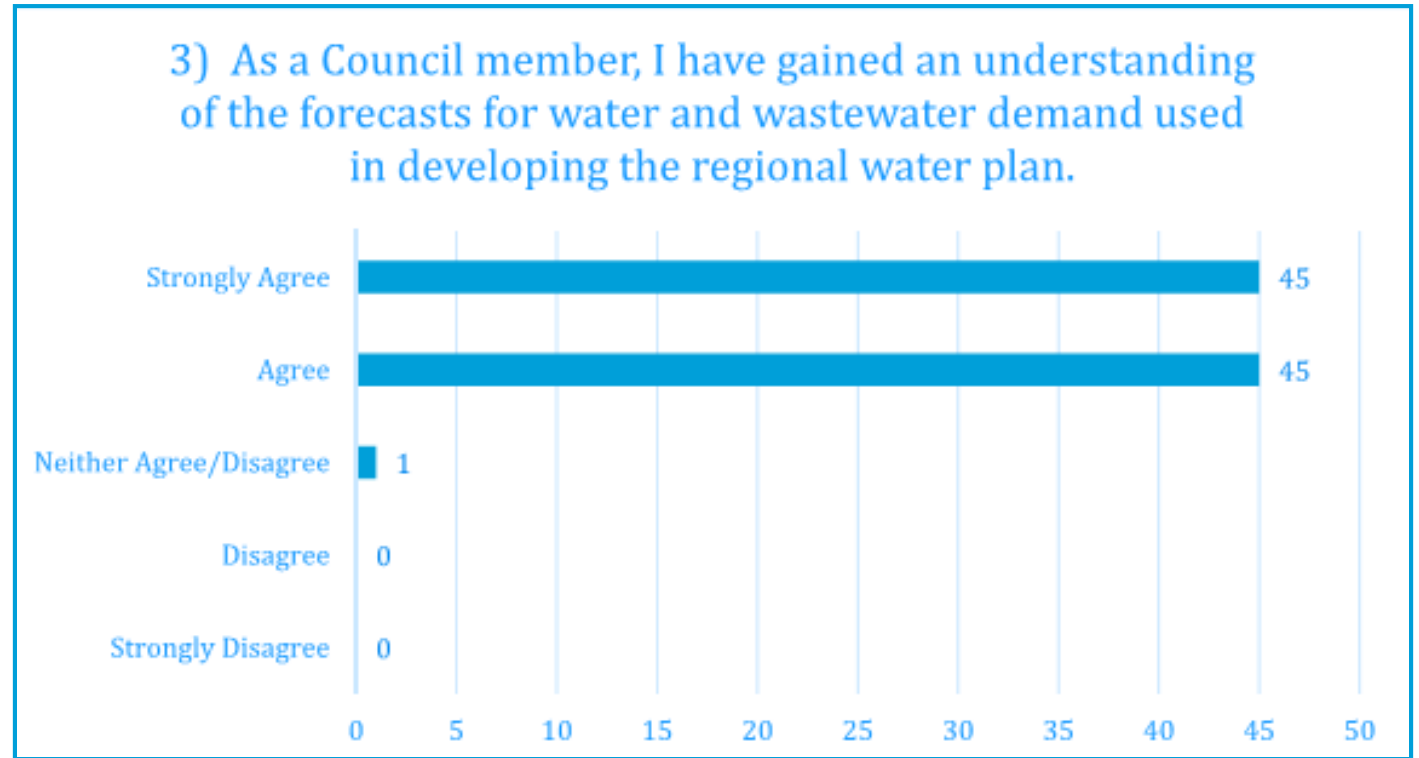
- Response: Varied
 - 40% agree or strongly agree
 - 32% disagreed
 - 24% neither agree/disagree



Source: Back & Veatch, 2017

Question 3 Response

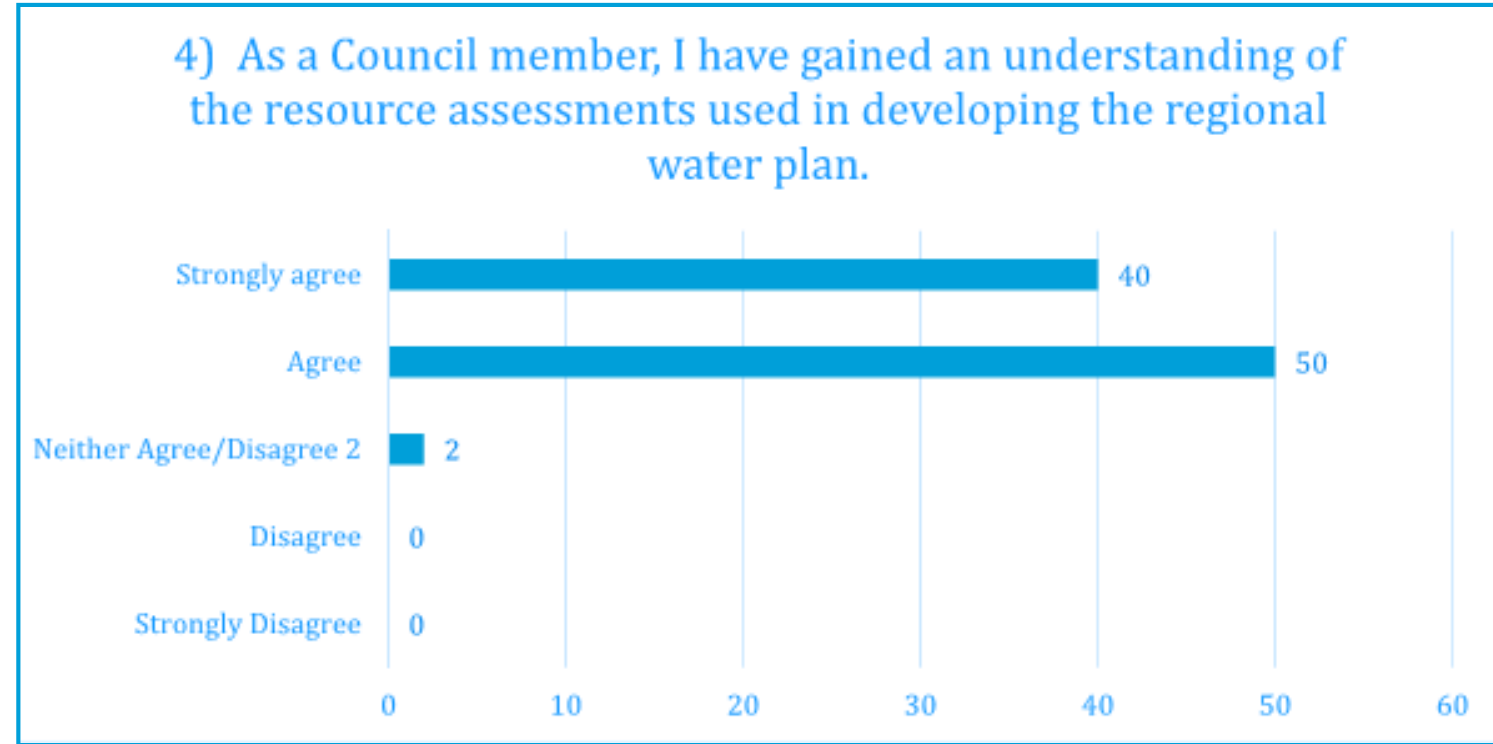
- Response: Agree with statement (90 %)
 - 1 respondent neither agrees/disagrees



Source: Back & Veatch, 2017

Question 4 Response

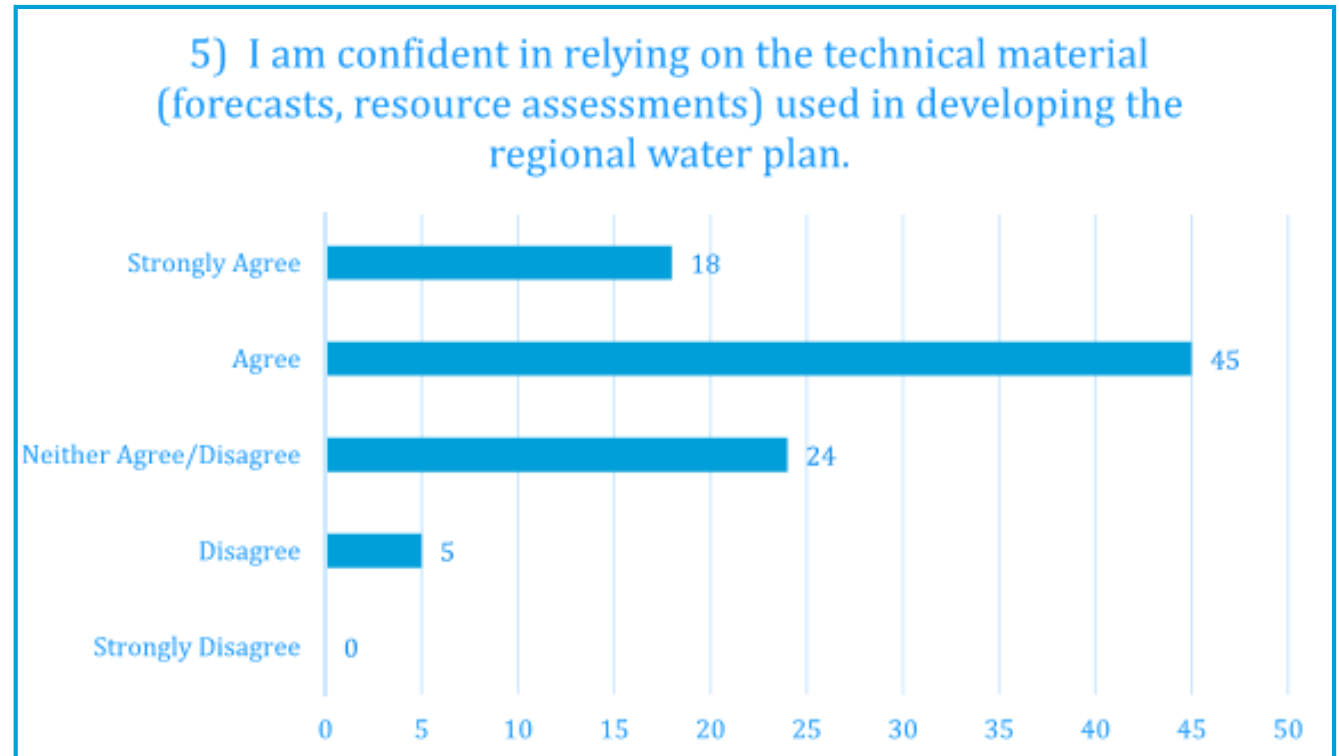
- Response: Agree with statement (98%)
 - 2% neither agree/disagree



Source: Back & Veatch, 2017

Question 5 Response

- Response: Varied
 - 68% agree or strongly agree
 - 5% disagreed
 - 26% neither agree/disagree



Source: Back & Veatch, 2017

Question 6 Response

- Multiple response question
 - “Building connections with those in the region who can implement the plan” received highest response
 - “Increase public awareness about the regional water plan” next most frequent response



Source: Back & Veatch, 2017

Question 7 Response

- Open response question to allow CMs to provide recommendations to improve the process
 - Common Themes:
 - Local government and regional actor participation, and involve more stakeholders
 - Public awareness of the plan
 - Increase understanding of the information
 - Implementation or enforcement of the plan
 - Council member involvement
 - Funding
 - Technical Recommendations

Council Chair Interviews

- 10 Council Chairs were interviewed and asked a series of 11 questions about the RWP process
- Interview questions included:
 - “What was your councils most important accomplishment?”
 - “What were the greatest obstacles in the water planning process?”
 - “How can the water planning process be improved?”

Council Chair Interviews

- Successes
 - Plan and Plan Update
 - Relationship Building
 - Awareness
- Challenges
 - Data
 - Member Participation
 - Building Connections with Those in the Region that Can Implement the Plan
 - Increasing Public Awareness of the Regional Water Plan



Grant Opportunities & Funding Updates

Regional Water Plan Seed Grant Funds

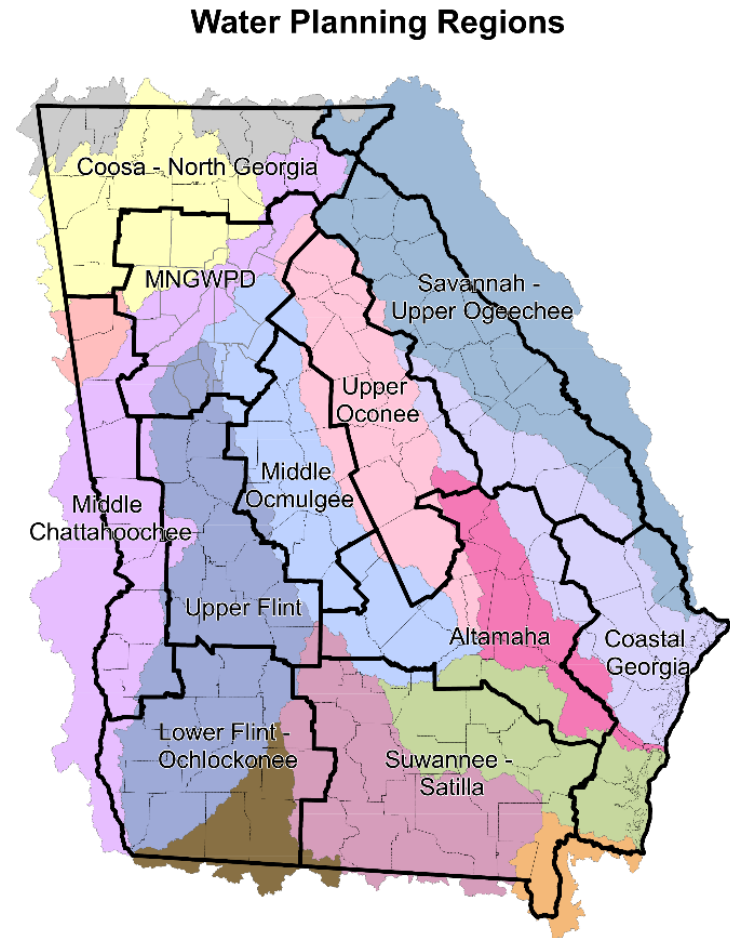
- In October 2017, EPD announced the availability of state fiscal year 2018 funds to support the continuation of the Regional Water Plan Seed Grant program
- A total of \$300,000 available for competitive grants
- Project proposals:
 - Had to address implementation of management practice(s) or other recommendation(s) from one or more Regional Water Plans
 - Required applicants seek and obtain a letter of endorsement from the Council Chair(s) or designee(s) of the relevant regional Water Planning Council(s).

Regional Water Plan Seed Grant Funds

- Maximum reimbursement amount for a RWP Seed Grant is capped at **\$75,000** and **limited to 60% of the total project cost**
- Award recipients must provide **a minimum match amount of 40%** of the total project cost
- Of the required 40% match, **a minimum of 10% of the total project cost must be in the form of a cash expenditure** with the remaining amount in the form of local or in-kind services/resources
- Proposals were due December 29, 2017

Regional Water Plan Seed Grant Funds

- Proposal was submitted by Dr. Gary Hawkins (Crop and Soil Science Department, University of Georgia)
- Notified of grant award in early March
- Includes 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 Altamaha and Suwannee-Satilla



Regional Water Plan Seed Grant Funds

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

Regional Water Plan Seed Grant Funds

- Team also proposes to develop a comprehensive document for each Council that will include those MPs that can be implemented by UGA Faculty and other Implementing Actors.
- Documents will be designed to see what practices can be done by citizens in promoting and protecting water resources within the region
- By developing these documents, the project team hopes to get increasing implementation involvement in the Regional Water Council Plans

Other Grant Funding Opportunities

Organization	Timelines for Applications
Georgia Environmental Finance Authority (GEFA)	Applications are received year round. Competitive, deadline specific programs may have a separate application.
USDA Rural Development	Applications are accepted on a rolling basis.
Economic Development Administration, Department of Commerce	Applications will be accepted on an ongoing basis until the publication of a new EDAP Federal Funding Opportunity .
National Rural Water Association	Applications and supporting documents can be sent by mail or email.
Rural Community Assistance Partnership (RCAP)	Applications are accepted on a rolling basis.
CoBank	Applications are accepted continuously.
Georgia Department of Community Affairs	Application period closes at the beginning of April each year (CDBG Program)

Other Grant Funding Opportunities

Organization	Timelines for Applications
Georgia Department of Community Affairs	Potential applicants should contact their state ARC program manager to request a pre-application package (ARC grant)
OneGeorgia Authority	Applications are received year round.
Georgia Department of Natural Resources, Environmental Protection Division	Applicants MUST meet or conference call with the GAEPD Grants Unit prior to application deadline (319h grants)
Georgia Department of Natural Resources, Coastal Resources Division	A Request for Proposal is issued annually every fall with applications due in January or February each year.
Water Well Trust	Applications are received year round.

Other Grant Funding Opportunities

- Georgia Municipal Association also maintains a website of Grants and Award Opportunities
- Watershed protection, habitat restoration, groundwater and streamflow monitoring opportunities have all previously been posted.
- Wetland protection opportunity currently on the list.



The screenshot shows the Georgia Municipal Association website. The header includes the logo and navigation links: HOME, MEMBER CITIES, SERVICES, ADVOCACY, TRAINING + EVENTS, NEWS + GRANTS, and ADVICE + KNOWLEDGE. The main content area is titled 'Grants & Award Opportunities' and features a table with the following data:

Title	Grantor	Posted	Due
Commercial Motor Vehicle Operator Safety Training Grant Program	U.S. Department of Transportation (DOT)	Mar. 23	May. 14
Region 4 Wetland Program Development Grants	U.S. Environmental Protection Agency (EPA)	Mar. 22	May. 7
Community Connect Grants	U.S. Department of Agriculture (USDA)	Mar. 22	May. 14
Local Food Promotion Program	U.S. Department of Agriculture (USDA)	Mar. 19	May. 7
Farmers Market Promotion Program	U.S. Department of Agriculture (USDA)	Mar. 19	May. 7
Firehouse Subs Public Safety Foundation Grants	Firehouse Subs Public Safety Foundation	Mar. 13	May. 24
Employment Incentive Program	Georgia Department of Community Affairs (DCA)	Mar. 13	Dec. 31
Community Pollution Prevention (P2) Grants	U.S. Environmental Protection Agency (EPA)	Mar. 13	Apr. 26
Rural Business Development Grants	U.S. Department of Agriculture (USDA)	Mar. 13	Apr. 30
Wells Fargo Corporate Giving	Wells Fargo	Mar. 7	Apr. 1
Accessible Golf Program Grants	National Alliance for Accessible Golf	Mar. 6	Dec. 31

Other elements on the page include a 'NEWS + GRANTS' section, social media icons (Facebook, Twitter, LinkedIn, Email, RSS), a 'NEWLETTER SUBSCRIPTION' form with fields for First Name, Last Name, and Email, and a 'CAPTCHA verification' section. The 'UPCOMING DEADLINES' section lists: Drug-Free Communities (DFC) Support Program (Due: March 29, 2018), Georgia Humanities Grants (Due: March 30, 2018), and FM Global Fire Prevention Grant Program (Due: March 31, 2018).

<https://www.gmanet.com/News-Grant-Opportunities/Grants-and-Award-Opportunities.aspx>

GEFA Funding Updates

- Georgia Environmental Finance Authority
 - Funds provided to various projects in the region through loans, or combination of loans/grants

GEFA Funding Updates *(cont.)*

- Clean Water loan/grant program
 - City of Hinesville, \$6.12M replacement of 6 miles of force main (Jan. '17)
 - City of Pooler, \$6.18M WWTP Expansion and upgrades (June '16)
 - City of Richmond Hill, \$10.5M final phase to construct a new 4 MGD WWTF (July '15)
 - City of Rincon, \$2.0M new headworks system at WWTF (May '17)

GEFA Funding Updates *(cont.)*

- Clean Water loan/grant program
 - City of Savannah, \$28.47M new anaerobic digestion system to produce Class A biosolids (Feb. '15)
 - City of St Marys, \$481k force main replacement (Jul. '16)
 - City of Tybee Island, \$720k Replacement of the UV disinfection system at the WWTP (Mar. '17)
 - City of Woodbine, \$431k waste water treatment solar system (Aug. '16)

GEFA Funding Updates *(cont.)*

- Drinking Water loan/grant program
 - City of Hinesville, \$1.06M SCADA installation and upgrades (Jul. '16)
 - City of Kingsland, \$1.6M water system replacement (Oct. '16)
 - City of Riceboro:
 - \$155k replacement of residential and commercial water meters (Oct. '15)
 - \$1.0M drilling of well, 9,500 linear feet of water transmission main from well site to a new 1.0 MG elevated water storage tank (Oct. '16)
 - City of Rincon, \$2.54M complete planning, permitting and construction of a new water wells previously drilled in 2007 (May '17)
 - City of Tybee Island, \$1.36M, water line replacement (Mar. '17)

GEFA Funding Updates *(cont.)*

- Georgia Fund loan program
 - Effingham County, \$2.5M extension of water main, force main, reuse water main and a sanitary sewerage pumping station (Aug. '16)
 - City of Garden City, \$500k WWTP emergency repairs (Jun. '17)
 - City of Ludowici, \$168k improvements to existing WWTF (Nov. '16)
 - City of Port Wentworth, \$2.02M new elevated water tank (Feb. '15)



Georgia's
State Water Plan

Integrating UGA Extension with the Altamaha, Coastal Georgia and Suwannee-Satilla RWPs



Georgia's
State Water Plan

Chatham County – Savannah MPC Red Zone Water Supply Management Plan



Georgia's
State Water Plan

Legislative Update and EPD Permitting Activity Updates

EPD Permitting Activity Updates and Legislative Updates

- Brunswick-Glenn Joint Water and Sewer Commission
- City Ludowici
- Red/Yellow Zone Permits
- City of Riceboro – McIntosh County Operations
- City of Pembroke – Bulloch County Operations



Public Comments/Local Elected Official Comments



Next Steps / Wrap Up

Next Steps During Interim Period

- Potential Action Items for Council to Consider:
 - Knowledge Sharing
 - Identifying forums to share the RWP/distribute fact sheets
 - Identifying implementing actors to invite to future meetings
 - Grant Opportunities
 - Review grant opportunities/timelines at each meeting
 - Identify potential project proposals/project champions/funding mechanisms

Next Steps During Interim Period *(cont.)*

- Potential Action Items for Council to Consider:
 - Projects/Activities in the Region
 - Identify ongoing/planned projects in region
 - Identify and invite speakers to future meetings
 - Shared Resources
 - Invite speakers from adjacent regions that impact Coastal Georgia to discuss local issues within their region so Council is more informed
 - Others?

Next Steps During Interim Period

- Schedule Quarterly Meetings
 - Target next meeting timeframe (Jul/Aug)
 - Discuss potential for scheduling a joint meeting with the Savannah Upper Ogeechee Water Planning Council

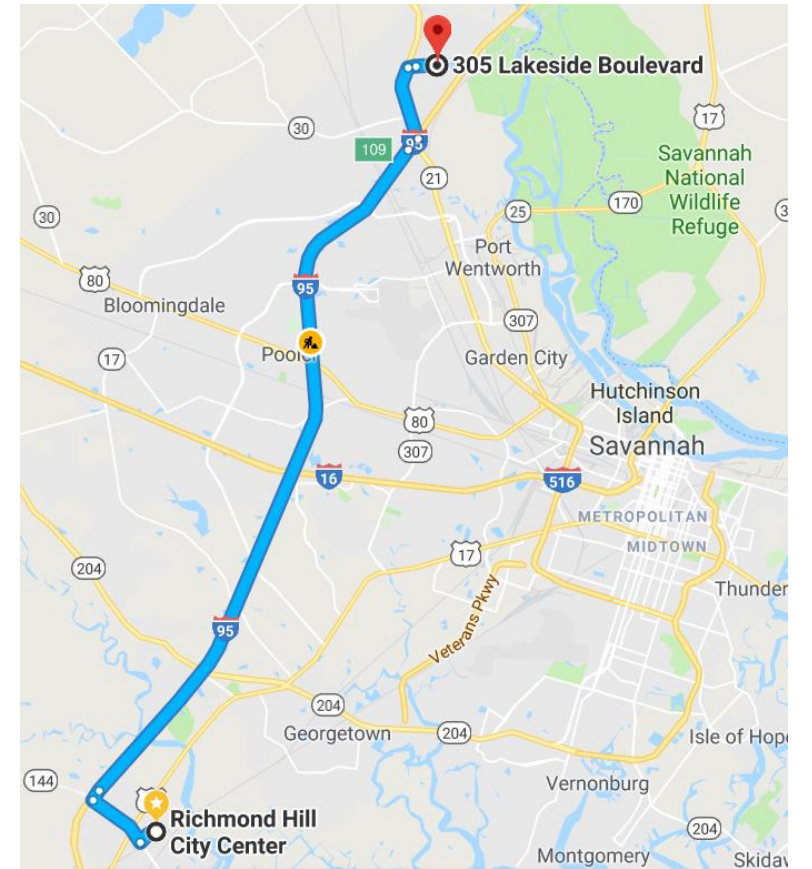
Thank You!

Questions? Comments? Need
More Information?

woodsh@cdmsmith.com

Reid.Jackson@dnr.ga.gov





Richmond Hill City Center

520 Cedar Street, JF Gregory Park, Richmond Hill, GA 31324

- > Get on I-95 N
7 min (2.4 mi)
- > Follow I-95 N to GA-21 N/Augusta Rd in Port Wentworth. Take exit 109 from I-95 N
16 min (18.4 mi)
- > Continue on GA-21 N/Augusta Rd. Drive to Lakeside Blvd
5 min (2.5 mi)

305 Lakeside Blvd

Savannah, GA 31407