



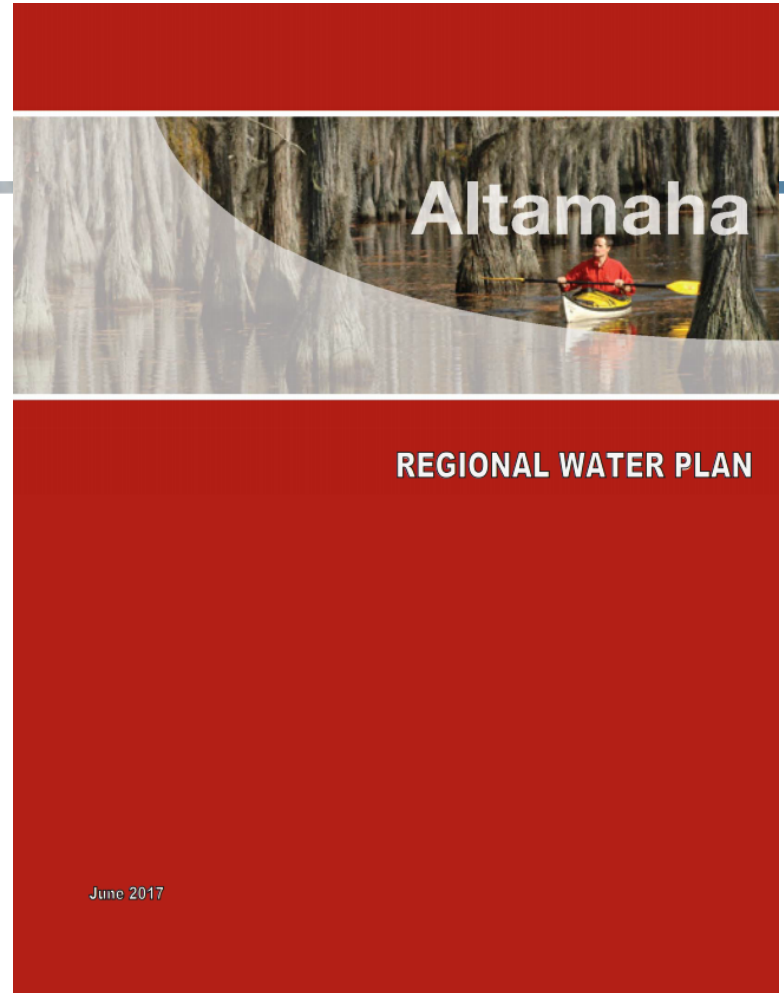
Georgia's
State Water Plan

Altamaha Regional Water Planning Council
March 21, 2019

waterplanning.georgia.gov

Presentation Outline

- Background of State Water Planning
- Findings During the Recent Altamaha Regional Water Plan Update
- Plan Recommendations and Next Steps



Drivers for Regional Water Planning

- Rapid population growth of Georgia
- Balance increasing and sometime conflicting demands
- Address water challenges in a more proactive and comprehensive manner
- Flexible and adaptive process utilizing a regional focus



Altamaha Region

- 16 counties with 256,000 residents
- Major cities include: Vidalia, Jesup, Swainsboro, Eastman, and Glennville.
- Includes the confluence of the Ocmulgee and Oconee rivers as they combine into the Altamaha River.
- Regional Water Planning Council appointed by Governor, Lt. Gov., or Speaker of the House



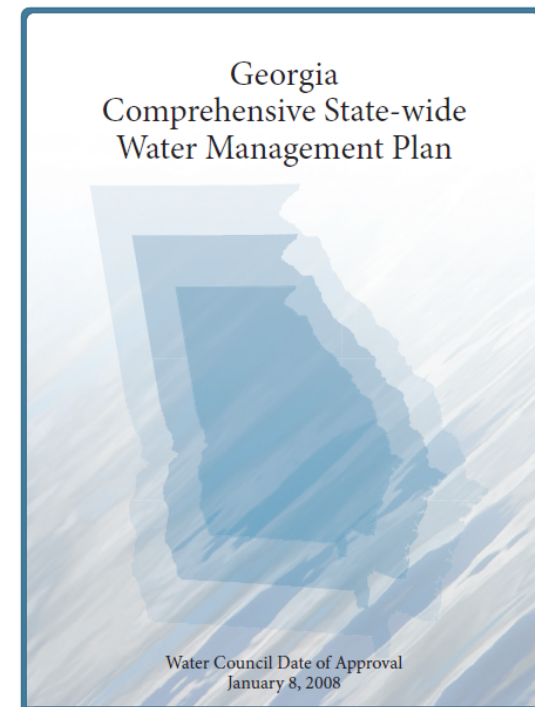
Altamaha Regional Water Council's Vision

Altamaha Adopted Vision *as adopted by the Council 10.28.10*

“The vision of the Altamaha Regional Water Planning Council is to wisely manage, develop, and protect the region’s water resources for current and future generations by ensuring that the Altamaha basin’s water resources are sustainably managed to enhance quality of life and public health, protect natural systems including fishing, wildlife and wildlife utilization activities, and support the basin’s economy.”

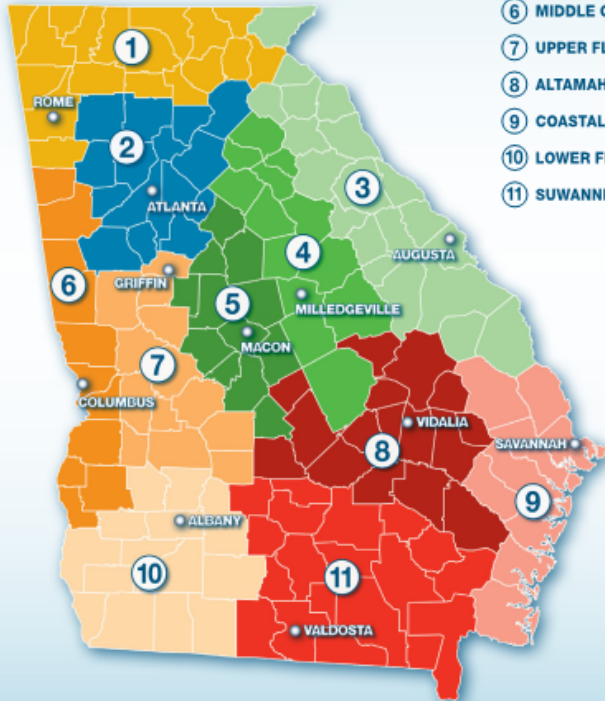
Regional Water Planning Efforts Statewide

- Comprehensive Statewide Water Management Planning Act (2004)
 - Georgia Water Council
 - Stakeholder process
 - State Water Plan (2008)
- Regional Water Planning
 - Councils appointed (2009)
 - Initial plans adopted after 3-year planning process (2011)
 - Updated plans adopted (2017)
 - Plans reviewed, revised every five years

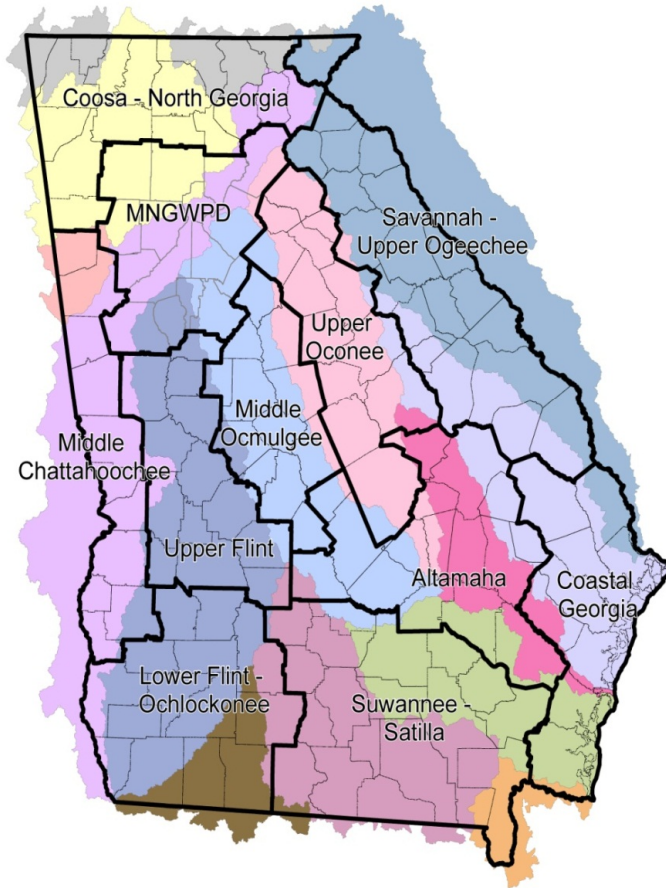


Georgia's Water Planning Regions

- ① COOSA-NORTH GEORGIA
- ② METRO WATER DISTRICT
- ③ SAVANNAH-UPPER OGEECHEE
- ④ UPPER OCONEE
- ⑤ MIDDLE OCMULGEE
- ⑥ MIDDLE CHATTAHOOCHEE
- ⑦ UPPER FLINT
- ⑧ ALTAMAHA
- ⑨ COASTAL
- ⑩ LOWER FLINT- OCHLOCKONEE
- ⑪ SUWANNEE-SATILLA



Water Planning Regions



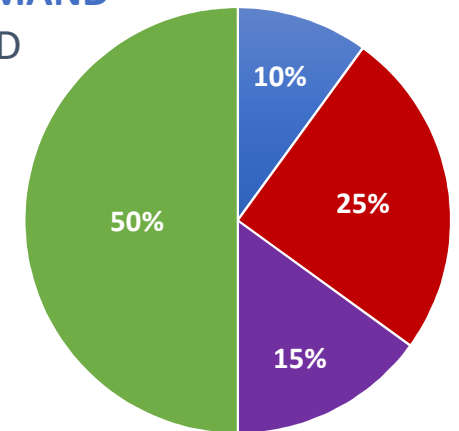
Water Demands and Findings in the Region

- The primary groundwater aquifer in the region (Floridan) has adequate capacity to meet water demands
- Flows on the Canoochee River during low flow periods are a concern
- Data has shown water quality concerns in the region
 - Some stream segments may have limited ability to accommodate future discharges

ALTAMAHA REGION 2050 WATER DEMAND

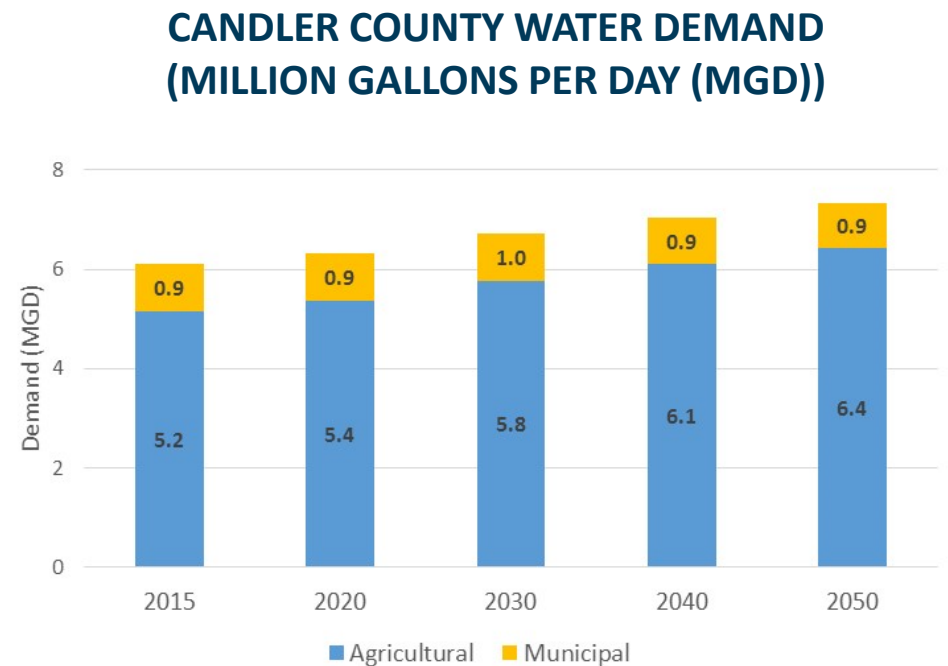
TOTAL = 287 MGD

- Municipal
- Industrial
- Energy
- Agriculture



Water Use in Candler County

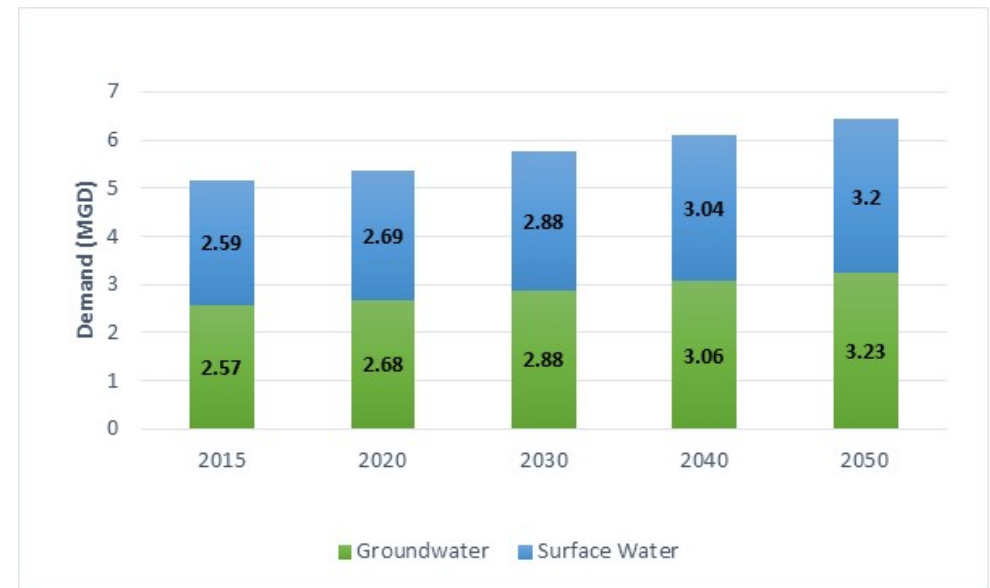
- Water demand forecasts are used to estimate demand for each major water use sector
 - Based on population, number of employees in a business, acres irrigated, etc.
- Major sectors of water use in Candler County include Agricultural and Municipal
- Groundwater usage accounts for ~57% of total demand



Agricultural Water Use Demand Forecasts

- Developed by Albany State University & UGA
- Projected irrigated areas for each crop type
- Projected types of crops grown in future
- Predicted monthly irrigation (in) need per each crop type
- Source of water was also considered

CANDLER COUNTY AGRICULTURAL DEMANDS BY SOURCE (MILLION GALLONS PER DAY (MGD))



Agricultural Water Use Demand Forecasts

COUNTY AGRICULTURAL DEMANDS (MILLION GALLONS PER DAY (MGD))

| County | 2015 | 2020 | 2030 | 2040 | 2050 | Percent Increase 2015 to 2050 |
|----------|------|------|------|------|------|----------------------------------|
| Candler | 5.2 | 5.4 | 5.8 | 6.1 | 6.4 | 25% |
| Emanuel | 4.7 | 4.7 | 4.9 | 5.0 | 5.1 | 9% |
| Tattnall | 16.5 | 17.1 | 18.1 | 19.0 | 20.0 | 21% |
| Toombs | 11.6 | 11.8 | 12.1 | 12.4 | 12.7 | 10% |

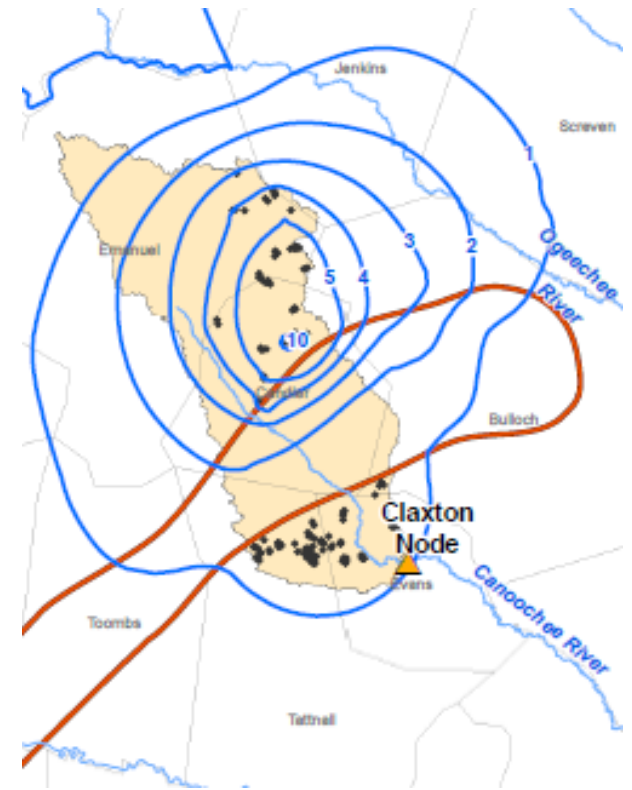
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Canoochee River Study

- During dry years, flows on the Canoochee River are a concern
- Groundwater modeling was conducted to determine whether groundwater from the Floridan aquifer could support those using surface water to switch over to groundwater
 - Finding: there is additional groundwater capacity to handle those users, but withdrawals should occur outside of area outlined in red (Gulf Trough)

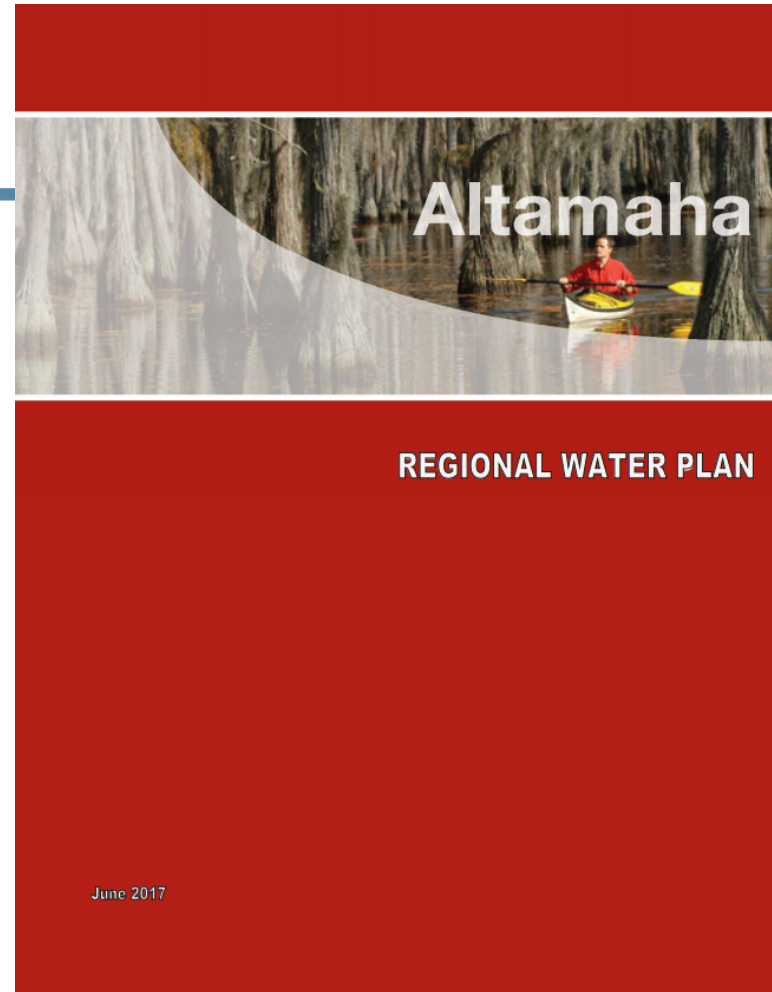


Example Agricultural Regional Water Plan Management Practices

- **Agricultural Best Management Practices for Crop and Pasture Lands (NPSA)** - Support and encourage implementation of GSWCC BMP and Education Programs
 - Soil Erosion Reduction Measures (Conservation Tillage)
 - Manure Control (storage and handling)
- **Water Conservation (WC)** - Meet current and future gaps and needs by efficient agricultural water use
 - Irrigation Audits
 - Application Efficiency Technologies (sensors)

Altamaha Region Water Plan Implementation

- Council working to raise awareness of Plan
- Council identifying and coordinating with partners to facilitate implementation
- State providing funds to support Council activities, technical work
- Seed grants available to support Plan implementation
- Next review and revision of Plan in 2020 through 2022



Funding to Support Water Projects in the Region

- Loans to the Conservation Fund for land acquisitions
 - Sansavilla Wildlife Management Area (19,577 acres)
 - Bullard WMA (11,000 acres)
- Georgia Environmental Finance Authority (GEFA) loans in the Region
 - Clean Water (\$12.8 M since 2015)
 - Drinking Water (\$8.7 M since 2014)
 - Georgia Fund (\$4 M since 2014)

Funding to Support Water Projects in the Region

- FY18 Regional Water Plan Seed Grant – University of Georgia (\$150,000) - Integrates Cooperative Extension county agents in the promotion and implementation of multiple management practices found in the Regional Water Plans
- NRCS provide technical assistance, financial incentives and cost share opportunities for conservation programs to farmers
 - FY2018, 217,000 acres of cover crops and 9,980 acres of conservation tillage were contracted
 - FY2018, Georgia received \$44M of federal funding through the Farm Bill (originally allocated \$28M)

For More Information

Altamaha Water Planning

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Altamaha Water Planning Region

Altamaha
REGIONAL WATER PLAN

Regional Highlights

Technical Information

Get Regional Email Updates

Counties Included

The following counties are considered part of the Altamaha Region:

- Appling

Counties: Appling, Bleckley, Candler, Dodge, Emanuel, Evans, Jeff Davis, Johnson, Montgomery, Tattnall, Telfair, Toombs, Treutlen, Wayne, Wheeler, Wilcox

Upcoming Meetings

There are currently **no meetings scheduled** for the Altamaha Regional Council. Subscribe to our email list for notifications.

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waterplanning.georgia.gov/altamaha-water-planning-region