

ALTAMAHA REGION

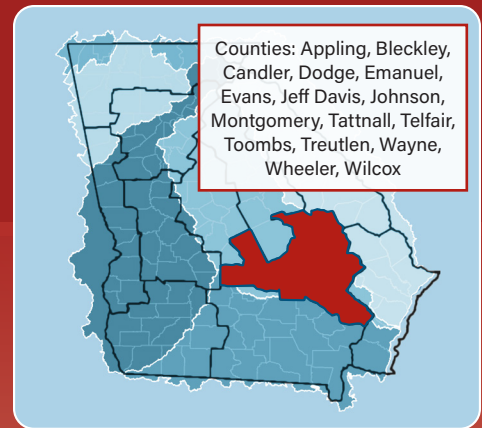
BACKGROUND

The Altamaha Regional Water Plan was initially completed in 2011 and subsequently updated in 2017 and 2023. The plan outlines near-term and long-term strategies to meet water needs through 2060. The Altamaha River, formed by the confluence of the Ocmulgee and Oconee Rivers, is the major surface water feature in the region. The Altamaha Region encompasses several major population centers including Vidalia, Jesup, Swainsboro, Eastman, and Glennville.

OVERVIEW OF ALTAMAHA REGION

The Altamaha Region includes 16 counties in the south central portion of Georgia. Over the next 40 years, the population of the region is projected to increase from approximately 251,500 to 252,600 residents. Key economic drivers in the region include agriculture, forestry, professional and business services, education, healthcare, manufacturing, public administration, fishing and hunting, and construction.

Groundwater (the majority from the Floridan aquifer) is forecasted to meet about 62% of the water supply needs in 2060, with agricultural and industrial uses being the dominant demand sectors. Surface water is expected to be utilized to meet about 38% of the 2060 water supply needs, with agriculture and energy as the dominant demand sectors. The energy sector is a major user of surface water from the Altamaha River.



KEY WATER RESOURCE ISSUES ADDRESSED BY THE COUNCIL

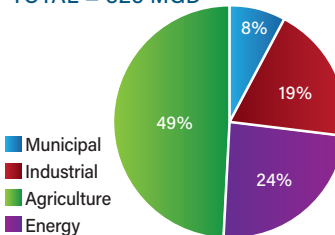
1. Current and future groundwater supplies for municipal/domestic, industrial and agricultural water use
2. Sufficient surface water quantity and quality to accommodate current and future surface water demands
3. Low dissolved oxygen and other water quality issues in streams during periods of low flow
4. Collaboration with other regions that share water resources to ensure that activities do not adversely impact water resources of either region
5. Climate and water supply variability and extremes



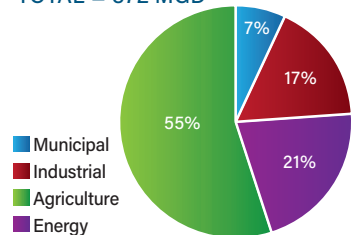
ALTAMAHA WATER PLANNING REGION

FORECASTED REGIONAL WATER DEMANDS

2020 WATER DEMAND
TOTAL = 325 MGD



2060 WATER DEMAND
TOTAL = 372 MGD



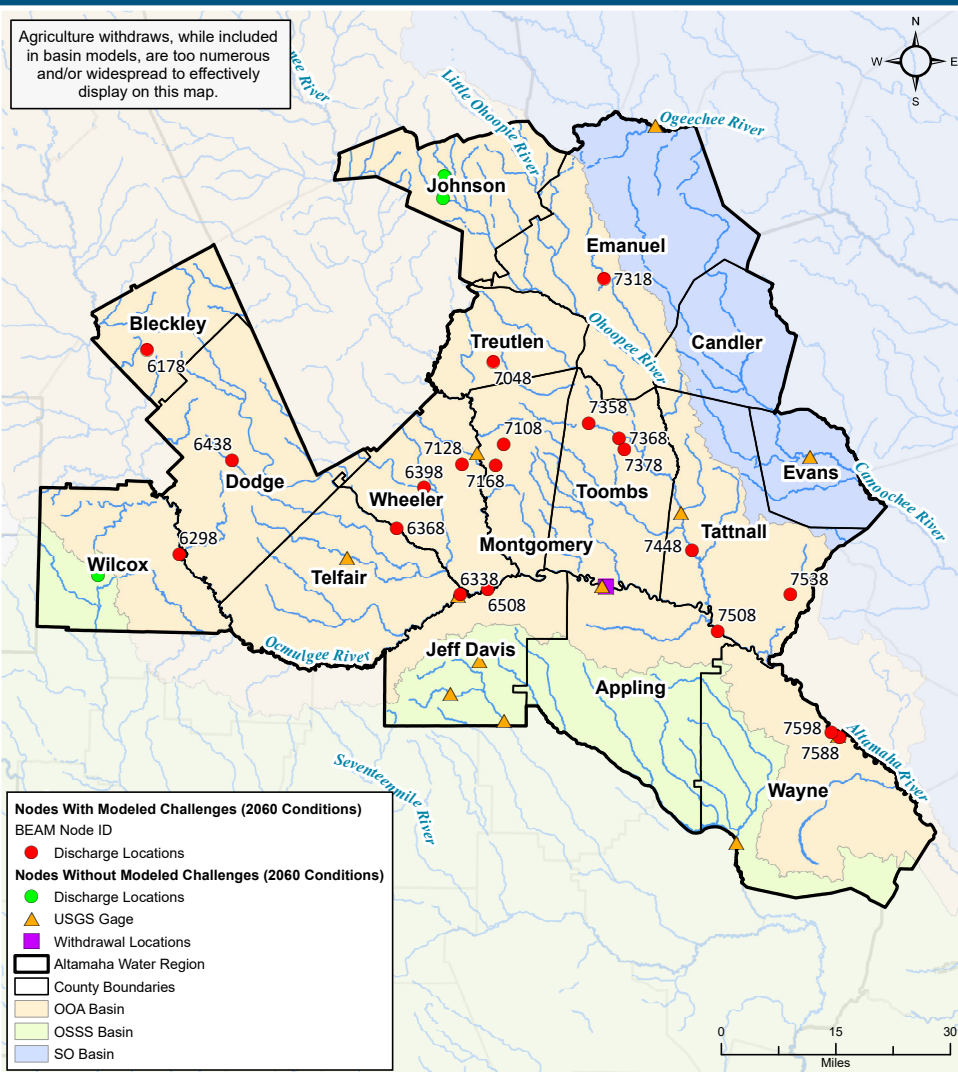
SUMMARY OF 2023 RESOURCE ASSESSMENT RESULTS

GROUNDWATER: At the regional level, for modeled aquifers, no groundwater resource challenges are expected to occur in the Altamaha Region over the planning horizon.

SURFACE WATER QUALITY: Assimilative capacity assessments indicate the need for improved wastewater treatment in some facilities within the Altamaha, Oconee, and Suwanee 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 40 years, the modeling analysis indicates that forecasted surface water demand within the Altamaha Region may create potential challenges along the Altamaha River, Ochopee River, Ocmulgee River, and Little Ocmulgee River. A map of the surface water availability model node locations with and without surface water quantity modeled challenges is provided below.

POTENTIAL 2060 SURFACE WATER CHALLENGES IN THE ALTAMAHA REGION



ALTAMAHA MANAGEMENT PRACTICES

The Altamaha Plan describes over 60 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:

Implement practices in Water Stewardship Act; evaluate practices for agricultural water use in areas with shortfalls in streamflow; promote conservation education programs.

WATER SUPPLY: Provide incentives for dry-year releases from farm ponds, groundwater development, wetland restoration, and increases in wastewater returns.

WASTEWATER & WATER QUALITY:

Increase permitted wastewater capacity; monitor nutrient pollution; implement nutrient management practices.

INFORMATION NEEDS: Study human impacts on water quality; refine agricultural consumption data; research groundwater potential to address surface water shortfalls; irrigation efficiency education and research; study impacts of wetland restoration on streamflow; monitor and evaluate estuaries.

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; continue monitoring to help conserve Georgia's natural, historic, and cultural resources.