

# MIDDLE OCMULGEE REGION

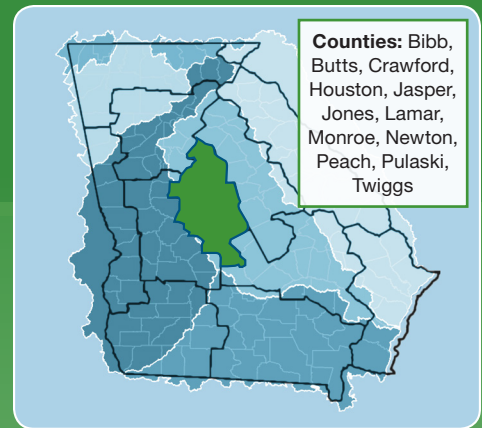
## BACKGROUND

The Middle Ocmulgee 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. Major water resources include the Flint, Ocmulgee and Oconee River basins and approximately 76 percent of the region lies in the Ocmulgee River Basin. Major population centers include the cities of Macon, Warner Robins, and Covington.

## OVERVIEW OF MIDDLE OCMULGEE REGION

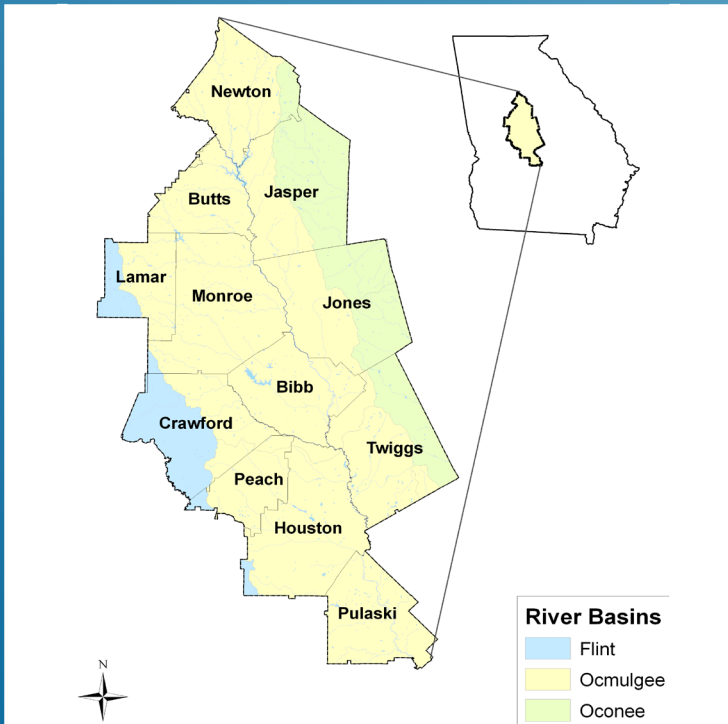
The Middle Ocmulgee Region encompasses 12 counties in central Georgia. Over the next 35 years, the population of the region is projected to increase from approximately 586,190 to 770,960 residents. The region's leading economic sectors include government, health care, service industries, and agriculture.

In 2015, the Middle Ocmulgee Region withdrew approximately 225 million gallons per day (MGD) for water supply for all sectors, with approximately 39 percent drawn from surface water. The region generated approximately 128 MGD of wastewater in 2015, with 79 percent treated and returned to streams and 21 percent managed by onsite sewage management systems (septic systems) or land application systems.



## KEY WATER RESOURCE ISSUES ADDRESSED BY THE COUNCIL

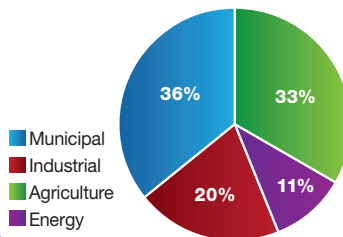
1. Effects of Metropolitan North Georgia Water Planning District withdrawals and discharges, as well as land use, on tributaries of Lake Jackson
2. Future water supply sources for areas above the Fall Line
3. Zones of possible low dissolved oxygen in the lower Ocmulgee River and tributaries
4. More efficient use of water in the region



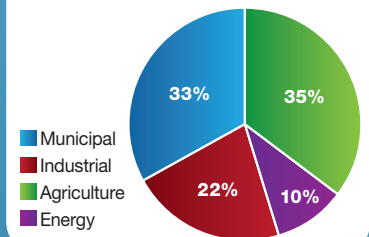
## MIDDLE OCMULGEE WATER PLANNING REGION

## FORECASTED REGIONAL WATER DEMANDS

**2015 WATER DEMAND**  
TOTAL = 225 MGD



**2050 WATER DEMAND**  
TOTAL = 306 MGD



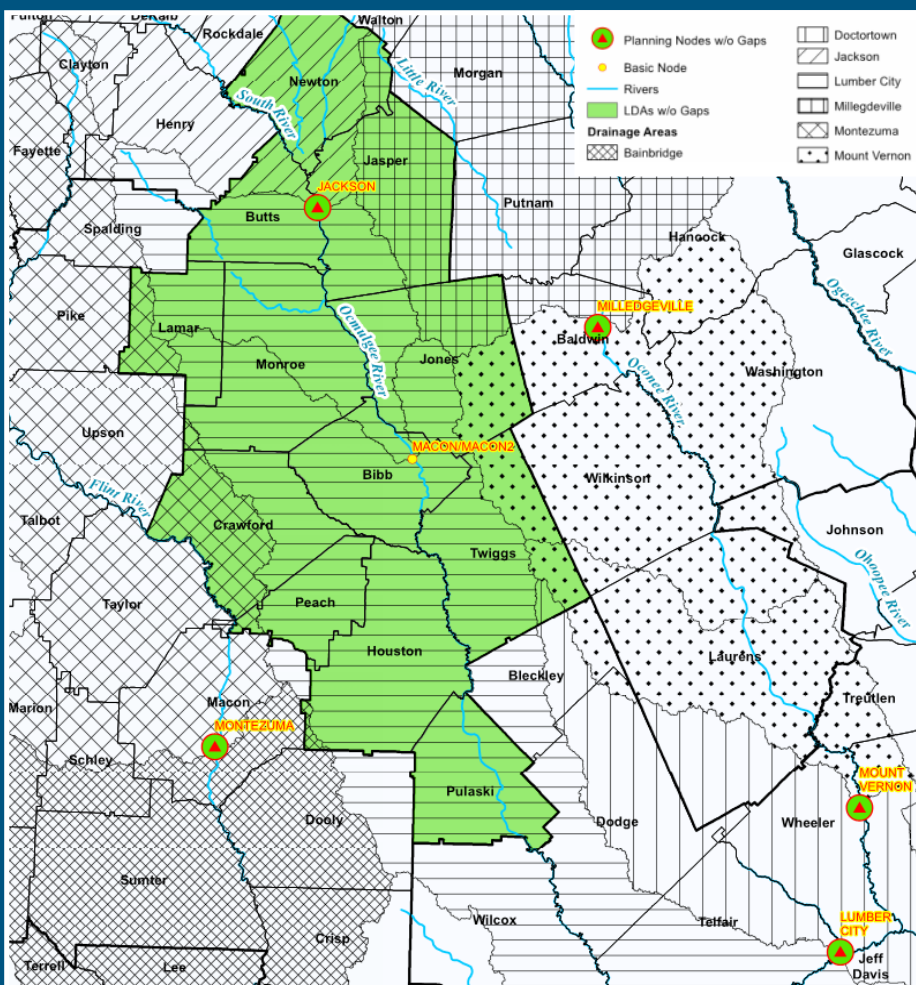
## SUMMARY OF 2017 RESOURCE ASSESSMENT RESULTS

**GROUNDWATER:** At the regional level, there will be adequate supplies to meet future water demands in the areas relying on groundwater sources (generally south of the Fall Line) over the planning horizon. Rapidly growing Houston County, which currently relies upon the Cretaceous aquifer for municipal use, is expected to have a need for additional water supply infrastructure to meet its projected 2050 needs.

**SURFACE WATER QUALITY:** Assimilative capacity assessments predicted that some stream segments (mostly south of the Fall Line) are predicted to have limited capacity for assimilating future pollutant loads based on modeled dissolved oxygen levels. Upgrade of existing wastewater treatment facilities or advanced treatment in new facilities may be required to assimilate future pollutant loads. 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 surface water resources in the region are generally adequate to meet future water demands. A map of planning node locations and their drainage areas are provided below.

### SURFACE WATER PLANNING NODE LOCATIONS IN THE MIDDLE OCMULGEE REGION



### MIDDLE OCMULGEE MANAGEMENT PRACTICES

The Middle Ocmulgee Water Planning Council recommends over 30 water management practices to help address the region's water resources issues and to meet the Council's vision and goals. Close to half are priority water management practices selected to address potential water resource shortages and existing regulations. These priority practices include:

**WATER CONSERVATION (demand management):** Includes practices to further manage and reduce municipal, industrial, energy, and agricultural demands in the entire region.

**WATER SUPPLY:** Management practices include development of local water master plans, and a coordinated regional effort evaluating the quantity and quality impacts of the metro Atlanta area's discharges into Lake Jackson.

**WATER QUALITY:** Management practices include development of local wastewater master plans, adoption and coordination of statewide regional and local water quality monitoring programs, upgrade of existing wastewater treatment facilities, construction of advanced treatment facilities, and promotion of coordinated environmental planning.

**WATER QUALITY (enhanced pollution - non-point source management):** Recommended practices for improving the existing impaired streams, including reduction of runoff from impervious surfaces, adoption of ordinances or incentive programs to protect sensitive lands, development/implementation of watershed assessment and protection plans, encouragement of total maximum daily load implementation and watershed improvement/restoration projects.

In addition to the priority practices, the plan also recommends close to 20 additional management practices to be considered by local governments and water users based on needs identified in detailed local master planning studies.

**RECOMMENDATIONS TO STATE:** Focus on additional data collection and modeling needs for improving future regional water planning efforts, evaluating current and future policy, funding and coordination.