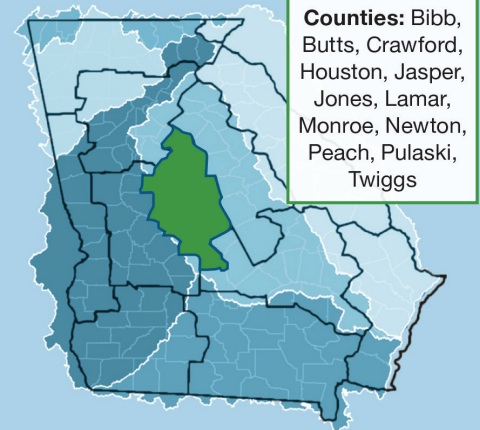


MIDDLE OCMULGEE REGION

BACKGROUND

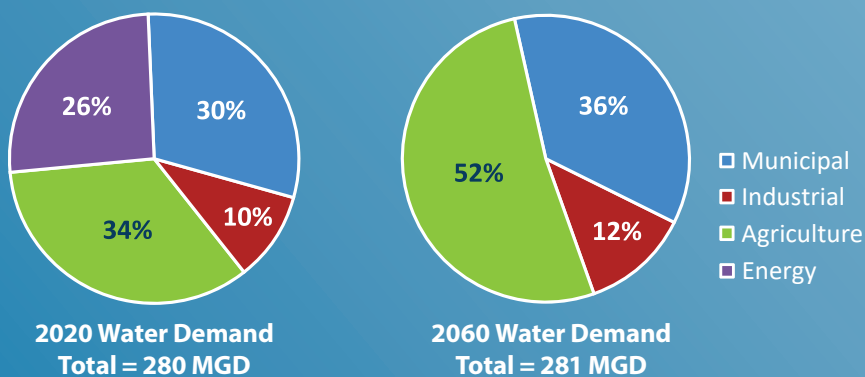
The Middle Ocmulgee Regional Water Plan (RWP) was first adopted by the Georgia Environmental Protection Division in September 2011, and as required, updated in 2017 and 2023. The RWP outlines strategies to meet water needs through 2060 and fulfills the Council's vision and goals for the Region. Major water resources include the Flint, Ocmulgee and Oconee River basins as well as the Crystalline rock, Cretaceous sand and Floridan aquifers; approximately 76% of the Region lies in the Ocmulgee River Basin.



OVERVIEW OF MIDDLE OCMULGEE REGION

The Region, which includes 12 counties in central Georgia, is forecast to grow from 607,240 to 737,000 people by 2060. The Region's major population centers include the cities of Covington, Macon and Warner Robins. The Region's leading economic sectors include agriculture, healthcare, data centers, warehouse/distribution and film/entertainment studios. Robins Air Force Base is located in Warner Robins.

FORECASTED REGIONAL WATER DEMANDS



KEY WATER RESOURCES ELEMENTS CONSIDERED BY THE COUNCIL:

1. The Region relies on both surface water and groundwater supplies.
2. Maintaining coordination with neighboring water councils supports effective water resources management by river basin.
3. The Middle Ocmulgee River basin receives water from the Upper Ocmulgee, located in Metro Atlanta. The impact of withdrawals and discharges from this area, as well as land use, on the water quality for Lake Jackson and its tributaries is an important aspect for the RWP.
4. A new management practice category provides focus on utility administration, including utility finance and asset management.
5. A wastewater management practice category was separated from water quality for clarity in the 2023 RWP.

SUMMARY OF 2023 RESOURCE ASSESSMENT RESULTS

Surface Water Availability: The Basin Environmental Assessment Model (BEAM), which enables river basin resource assessments at a finer scale than previously possible, models all facility water withdrawals and discharges. BEAM provides an assessment of water supply availability, against the context of an 80-year period of record (1939-2018), which is reflected in the number of challenge days and total water shortage for modeled facilities.

The BEAM tool assessed 24 water supply withdrawals and 29 wastewater discharges in the 12-county Region. Of these, 12% of withdrawals and 66% of discharges are predicted to have at least one challenge day over the simulation period for 2060 conditions, indicating a possibility of assimilative capacity constraints in the future.

Surface Water Quality: Most streams in the Region have available assimilative capacity with some localized exceptions. GA EPD has established total maximum daily loads (TMDLs) for Lake Jackson. Management of future nutrient loadings through non-point source management and wastewater treatment facilities will continue to be an important element to preserve water quality.

Groundwater Availability: The Crystalline Rock aquifer north of the Fall Line, and the Cretaceous aquifer both have sufficient yield to meet forecasted needs. Pulaski County and portions of Houston and Twiggs Counties have access to the Floridan aquifer; the combined 2060 demand for these areas is between the low and high sustainable yield, indicating a possible future challenge.

MIDDLE OCMULGEE MANAGEMENT PRACTICES

To promote stewardship of the Region's water resources, the 2023 RWP recommends 22 management practices, highlighted below:

Administrative: Supports utility management, including utility full cost accounting practices, asset management and local planning (utility master plans, biosolids management and environmental planning).

Water Conservation

(Demand Management): Supports implementation of practices such as conservation rate structures and billing systems to better communicate water usage to customers.

Water Supply Management:

Practices include consideration of additional water supply sources, maximizing reservoirs and investigating new groundwater sources, evaluating interconnections, promoting beneficial reuse, considering expansion of treatment capacity and investigating impacts of Metro Atlanta's water withdrawals and discharges on water quantity and quality.

Wastewater Management: Practices include considering expansion of treatment facilities, mitigating impacts of septic systems management, and considering the benefits of constructed wetlands.

Water Quality Management:

Practices include encouraging stormwater utilities, adopting ordinances to protect sensitive land, considering implementation of stormwater standards for rural areas, watershed protection, and water quality trading.

Recommendations to State:

Focus on funding options to support implementation of the Plan, continue support of the Seed Grant program, fund innovative research to address state-wide water resource challenges, such as detailed mapping and modeling of groundwater resources, as well as future policy considerations around in-stream flows.

