2023 REGIONAL WATER PLAN

MIDDLE CHATTAHOOCHEE REGION

BACKGROUND

The Middle Chattahoochee Regional Water Plan (the Plan) was first adopted in 2011, and revised plans were adopted in 2017 and 2023. The Plan is the product of the work of the Middle Chattahoochee Regional Water Planning Council (the Council). The Regional Water Plan outlines strategies to meet water needs through 2060 and fulfill the Council's vision and goals for the water planning region. Major water resources in the water planning region include the Chattahoochee and Tallapoosa River Basins, Lakes West Point and Walter F. George, and the Cretaceous, Clayton, Claiborne, and Upper Floridan Aquifers.

KEY WATER FEATURES OF THE MIDDLE CHATTACHOOCHEE REGION





KEY WATER RESOURCE ISSUES ADDRESSED BY THE COUNCIL IN THE 2023 PLAN

- 1. Water demand and supply management to maintain streamflows and lake levels at desired levels
- 2. Evaluation of changes in the operation of Chattahoochee Basin reservoirs to support higher lake levels and improved instream flows
- 3. Coordination with neighboring water councils
- 4. Improved implementation of Best Management Practices for water quality
- 5. Targeted water quality concerns





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SUMMARY OF RESOURCE ASSESSMENT RESULTS

GROUNDWATER AVAILABILITY

A model-based assessment of groundwater availability in the region estimated that for the Claiborne and Crystalline Rock aquifers, sustainable yield is available in some locations in the region. Results for the Cretaceous Aquifer indicated potential drawdown impacts especially during the growing season.

SURFACE WATER AVAILABILITY

The surface water availability assessment model evaluated streamflows and lake levels under varying levels of water use. The results identified moderate water supply and wastewater assimilation challenges in Middle Chattahoochee region. The results indicated five facilities with potential water supply challenges and 14 facilities with potential wastewater assimilation challenges. Challenges at specific facilities will be addressed, as needed, in the Georgia Environmental Protection Division (GAEPD) permitting process. The results also evaluated surface water availability relative to Council-identified metrics for streamflows at Columbus and levels in West Point Lake. The Council considered these results relative to their preferred flows and lake levels in the Chattahoochee River Basin, as described in Table 6-2 of the Plan.

SURFACE WATER QUALITY

Modeling of dissolved oxygen indicated moderate to limited assimilative capacity in the Chattahoochee River downstream of Walter F. George Reservoir. Watershed modeling identified that point sources contribute more to total phosphorus nutrient loading than nonpoint sources in the Chattahoochee River below Lake Lanier. Nutrient modeling indicated chlorophyll-a exceedances in Lake Walter F. George.

MANAGEMENT PRACTICES AND RECOMMENDATIONS SUMMARY

The Plan outlines a set of nineteen management practices to address potential challenges in water availability and water quality, address Council-defined challenges in lake levels and instream flows, and fulfill the Council's vision and goals. The Council identified three high priority management practices in the Plan, and those are listed below. Section 6 of the plan provides a detailed description of all management practices and recommendations.

INSTREAM USE

Utilize and improve upon reservoir release quantity and timing in the Chattahoochee River to maintain and/ or improve water quality in the Chattahoochee River below the Columbus Planning Node.

Promote cooperation among recreational interests, Georgia Power, and the USACE to consider improvements to timing of flow releases to address recreational uses in the Chattahoochee River.

WATER QUALITY

Encourage increased/additional funding and attention on erosion and sediment control.



2020 WATER DEMAND TOTAL = 150 MGD



2060 WATER DEMAND TOTAL = 153 MGD

