# **UPPER FLINT REGION**

# BACKGROUND

The Upper Flint 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 Upper Flint 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 Flint River Basin and the Cretaceous, Clayton, Claiborne, and Floridan Aquifers.



# **KEY WATER FEATURES OF THE UPPER FLINT REGION**



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

- 1. Water demand and supply management to address potential challenges in water availability
- 2. Water returns management and better data to support streamflows and water quality
- 3. Coordination with neighboring water planning councils
- 4. Targeted water quality concerns





### SUMMARY OF RESOURCE ASSESSMENT RESULTS

#### **GROUNDWATER AVAILABILITY**

A model-based assessment of groundwater availability in the region estimated that groundwater use is below or within the sustainable yield range for the Claiborne and Cretaceous Aquifers and above the sustainable yield range for the Floridan Aquifer in the Dougherty Plain. Aquifer use above the estimated sustainable yield range indicates that management practices may be needed to meet long-term demands.

#### SURFACE WATER AVAILABILITY

A model-based assessment of surface water availability in the region identified water and wastewater treatment facilities where water availability may not meet current or future needs for water supply or wastewater assimilation. These challenges will be addressed, as needed, through the Georgia Environmental Protection Division (GAEPD) permitting process. The model also evaluated surface water availability relative to Councilidentified metrics for streamflow at Carsonville on the Flint River. The Council considered these results to inform their assessment of water availability and streamflow conditions, especially during drought periods.

#### SURFACE WATER QUALITY

Water quality model results indicated increasing availability of assimilative capacity in streams in the Flint River Basin as treated wastewater discharge permit requirements become more stringent in the future. In other areas, model results indicate limited availability of assimilative capacity under future conditions. In these areas, more non-point source management practices may be needed to improve future assimilative capacity.

#### MANAGEMENT PRACTICES AND RECOMMENDATIONS SUMMARY

The Plan outlines a set of eighteen management practices and recommendations to address potential challenges in water availability and water quality and to fulfill the Council's vision and goals. The Council identified three high priority management practices, which are listed below (see Plan Section 6 for a detailed description of all management practices and recommendations).

#### **DEMAND MANAGEMENT**

Maintain the agricultural water withdrawal metering program.

# SUPPLY MANAGEMENT AND FLOW AUGMENTATION

Evaluate storage options in the Upper Flint River basin that can provide for supply and flow augmentation in dry periods.

#### WATER QUALITY

Improve water quality monitoring and assessment.

