## Review of River Basin Planning

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### A River Basin Plan answers four questions:

- What is the basin's current available water supply and demand?
- What are the current permitted and registered water uses?
- What will be the basin's water demand over the next 50 years, and will the water supply meet the demand?
- What water management strategies and policies can be employed to ensure the supply meets or exceeds the projected demand over the next 50 years?

### What We Will Do to Accomplish that Goal

#### Phase 1

- Learn about the basins water resources
- Become familiar with rules and laws governing water use
- Evaluate water demand projections
- Become familiar with the modeling tools

### Phase 2

- Evaluate current and future water availability issues
  - Identify and quantify shortages, select surface water conditions, reaches of interest and groundwater areas of concerns

### What We Will Do to Accomplish that Goal

### Phase 3

- Develop and evaluate water management strategies
- Recommend and prioritize strategies

### Phase 4

- Develop legislative, policy, technical and planning process recommendations
- Prepare the River Basin Plan that:
  - Includes an implementation plan
  - Identifies drought response initiatives
  - Considers **public input**

### Water Management Strategies

Water management strategies mitigate/eliminate water shortages or increase water supply

- Demand side (water conservation measures)
- Supply side (new water sources)

### Examples with potential for application in the Edisto Basin:

- Expanding municipal water conservation programs
- Reducing agricultural water use through water audits
- Optimizing conjunctive use of groundwater and surface water
- Developing or improving small impoundments in the higher order tributaries
- Coordinated drought/low-flow water use reductions to maintain instream flows

# RBCs will make Technical, Legislative and Process Recommendations as part of the River Basin Plan

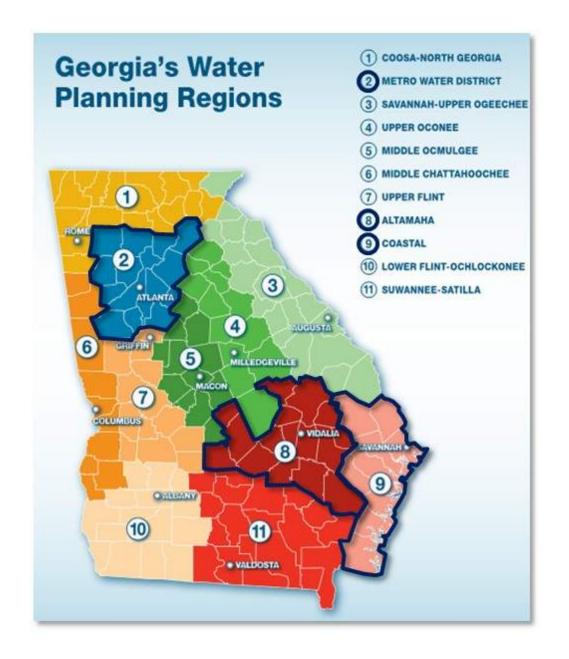
#### Technical

- Need for additional data, decision-making tools
- Need for studies on specific topics/issues
- Policy, Legislative, or Regulatory
  - Revisions to existing laws and regulations
  - New laws or regulations
  - Recurring funding

#### Process

Changes to RBC membership, bylaws, procedures, etc.

### Examples - Regional Water Plans in Georgia





### Georgia's Regional Water Plans

https://waterplanning.georgia.gov/regional-water-plans

2050 Total Water Supply Needed

- Replace groundwater with surface water and/or with groundwater outside red and yellow zones
- Evaluate aquifer storage and recovery (ASR)
- Water conservation
- Evaluate potential to use existing storage to address 7Q10 low flow concerns

- Implement ASR if deemed feasible
- Evaluate feasibility of a multi-purpose reservoir
- Implement infiltration improvements to address 7Q10 low flow concerns

- Determine feasibility of multi-purpose reservoir implementation
- Determine feasibility of regional inter-basin transfer implementation

Monitor Progress toward addressing gaps and implement additional management practices as needed

Short-term (1-10 yrs)

Mid-term (10-20 yrs)

Long-term (20-40 yrs)

Water Supply Needs

### **Upper-Flint**

### Regional Water Plan Recommendations (examples)

#### **Technical and Information Needs**

- Evaluate additional low-flow statistics for use in surface water availability resource assessment.
- Improve estimates and forecasts of water use by the energy sector to support regional water planning in Georgia.
- Complete a comprehensive assessment of baseline implementation of water conservation and water quality Best Management Practices by agricultural producers.

#### Policy, Legislative and Regulatory

- Irrigation suspension be used only through implementation of the Flint River Drought Protection Act, only by voluntary means, with notification to farmers before March 1 when possible, and only as a last resort to address severe flow depletions.
- The Council urges the General Assembly and state policymakers not to preclude interbasin transfer (IBT) as an option for future water management in the region.

#### **Technical and Process**

 Recognize the critical need for better use of existing storage and for more storage in the Apalachicola-Chattahoochee-Flint (ACF) System and develop a plan for additional storage working with other councils in the ACF basin.

### Suwannee-Satilla

### Regional Water Plan Recommendations (Examples)

#### **Technical and Information Needs**

- Work with EPD's Agricultural Water
   Metering Program and Partner Programs
   to improve agricultural water use data
   collection and management
- Support completion, maintenance and improvement of the Agricultural Water Use Measurement Program
- Research the percent loss and consumption of irrigation water applied to crops. Research varieties of crops that require less water and are more drought resistant.

#### **Policy and Funding**

- Support Georgia Agricultural
   Conservation Incentive program, which
   provides funding support to help
   implement conservation practices
- Focus funding support and permitting assistance to projects and programs aimed at addressing gap areas