Presentation Outline

• Background of State Water Planning
• Findings During the Recent Suwannee-Satilla Regional Water Plan Update
• Plan Recommendations and Next Steps
Drivers for Regional Water Planning

• Rapid population growth of Georgia
• Balance increasing and sometime conflicting demands
• Address water challenges in a more proactive and comprehensive manner
• Flexible and adaptive process utilizing a regional focus
- Georgia Water Council
- Stakeholder process
- State Water Plan (2008)

Regional Water Planning
- Councils appointed (2009)
- Initial plans adopted after 3-year planning process (2011)
- Updated plans adopted (2017)
- Plans reviewed, revised every five years
Statewide Water Planning Policy Statement

“Georgia manages water resources in a sustainable manner to support the state’s economy, to protect public health and natural systems, and to enhance the quality of life for all citizens.”

2004 Comprehensive Statewide Water Management Planning Act
Georgia’s Water Planning Regions

1. COOSA-NORTH GEORGIA
2. METRO WATER DISTRICT
3. SAVANNAH-UPPER OGEECHEE
4. UPPER OCONEE
5. MIDDLE OCMULGEE
6. MIDDLE CHATTAHOOCHEE
7. UPPER FLINT
8. ALTAMAHA
9. COASTAL
10. LOWER FLINT-OCLOCKONEE
11. SUWANEE-SATILLA
Suwannee-Satilla Region

- 18 counties with 416,000 residents
- Major cities include: Valdosta, Tifton, and Douglas
- The major surface water resources in the region include the Alapaha, Satilla, St. Marys, Suwannee, and Withlacoochee Rivers
Suwannee-Satilla Regional Water Planning Partners

• **Regional Water Planning (RWP) Councils**
  o Up to 30 members appointed by Governor, Lieutenant Governor, & House Speaker
  o Represent local governments, water users, & other water-related interests

• **Georgia Environmental Protection Division (EPD)**

• **Planning contractors**

• **Other agencies**

• **Stakeholders**

• **Implementing actors**
Suwannee-Satilla Regional Water Planning Process

Management practices to adjust demand and resource capacity

Are goals met and gaps addressed?

Recommended Regional Water Plan

Vision and Goals

Gap Analysis

Forecasts of Demand

Resource Assessments

Key
- Council Led Products
- Information Provided by GAEPD
- Joint GAEPD-Council evaluation
Suwannee-Satilla Regional Water Planning Update Timeline

Meeting 1
March 2016

Meeting 2
Joint Council Meeting
June 23, 2016

Meeting 3
Joint Council Meeting
November 17, 2016

Meeting 4 & 5
Jan. – Mar. 2017

Final Meeting
May/June 2017

Updated Forecasts
Updated Resource Assessments / Gap Analysis
Review & Updates to Management Practices / Revise Plans

Updated Regional Water Plan was adopted by EPD in June 2017
Components of the Suwannee-Satilla Regional Water Plan

- Vision & goals
- Current & future water supply, wastewater needs
- Resource assessments
- Management practices
- Recommendations to the State
Regional Water Plan Update Components

• Updated Water Demand Forecasts
  – Population Forecasts
  – Municipal and Industrial Water & Wastewater Needs
  – Agricultural Water Needs
  – Thermoelectric Power Needs and Returns

• Updated Resource Assessments
  – Groundwater Availability
  – Surface Water Availability
  – Surface Water Quality
Regional Water Plan Update Components

• Updated Management Practices
  – Identified actions necessary to meet the current and future water needs of the region
  – Management Practices focus on:
    • Water Conservation
    • Water Supply
    • Wastewater and Water Quality
    • Information Needs
    • Recommendations to the State
Suwannee-Satilla Adopted Vision

as adopted by the Council 9.23.09

“The Vision of the Suwannee-Satilla Regional Council is to manage water resources in a sustainable manner under Georgia’s regulated riparian and regulated reasonable use laws to support the state’s and region’s economy, to protect public health and natural resources, and to enhance the quality of life for all citizens; while preserving the private property rights of Georgia’s landowners, and in consideration of the need to enhance resource augmentation and efficiency opportunities.”
Suwannee-Satilla Region Forecast of Demands

2015 WATER DEMAND
TOTAL = 276.3 MGD

- Municipal: 18.2%
- Industrial: 5.6%
- Agriculture: 76.2%

2050 WATER DEMAND
TOTAL = 319.2 MGD

- Municipal: 17.6%
- Industrial: 6.9%
- Agriculture: 75.5%
Current & Future Conditions
• Groundwater availability
• Surface water availability
• Surface water quality

Gaps
• Determine if there are potential shortfalls in current or future water availability or water quality
Suwannee-Satilla Region Groundwater Availability Assessment

- Suwannee-Satilla groundwater usage comes largely from the Floridan aquifer
- The Floridan aquifer has adequate capacity to meet 2050 water demands in the region
- Some counties may need additional permitted capacity as future demand is projected to exceed current permitted withdrawal limits
Suwannee-Satilla Region Surface Water Availability Assessment

- Surface water availability was assessed at locations with long-term records of measurements.
- A potential gap occurs when streamflow is projected to fall below targets for instream uses.
- Potential gaps in streamflow identified on the Satilla River near Atkinson, on the Withlacoochee River near Pinetta, and on the Alapaha River near Jennings and Statenville.
Suwannee-Satilla Region Surface Water Quality Assessment

**Issue**
- Some stream segments may have limited ability to assimilate future pollutant loads, based on modeling
- Modeling focused on two primary indicators of water quality: dissolved oxygen and nutrients

**Recommendations**
- Improved wastewater treatment in some facilities
- Address non-point sources of pollution and existing water quality impairments
• The Suwannee-Satilla Region has 83 impaired stream reaches with a total length of 946 miles.
The Suwannee-Satilla Plan describes over 70 management practices targeted toward current and future needs.

Some representative practices include:
- **Water Conservation**: support the goals contained in the 2010 Water Conservation Implementation Plan
- **Water Supply**: provide incentives for dry-year releases from farm ponds
- **Water Quality**: monitor nutrient pollution
- **Information Needs**: confirm data on agricultural consumptive water use
Suwannee-Satilla Region Recommendations To The State

• Focus on education, incentives, collaboration, cooperation and enabling and supporting plan implementers

• Institutionalize and fund water planning with a focus on funding and assistance on areas with shortfalls.

• Continue monitoring to help conserve Georgia’s natural, historic, and cultural resources.

• Work to improve agricultural water use data collection and management.
• Council working to raise awareness of Plan
• Council identifying and coordinating with partners to facilitate implementation
• State providing funds to support Council activities, technical work
• Seed grants available to support Plan implementation
• Next review and revision of Plan in 2021 through 2022
Where To Find The Plan

https://epd.georgia.gov/suwannee-satilla-rwp-updates