



Georgia's State Water Plan

Savannah-Upper Ogeechee Water Planning Council
July 25, 2019

waterplanning.georgia.gov



Welcome and Introductions

waterplanning.georgia.gov



New Leadership

waterplanning.georgia.gov



Council Business

waterplanning.georgia.gov

Council Business

- Approve meeting minutes from November 8, 2018 Joint Meeting with Coastal Georgia Council
 - CGA/SUO Joint meeting summary
 - SUO Council meeting summary
- Approve today's meeting agenda

Council Meeting Agenda



Savannah-Upper Ogeechee Regional Water Council Meeting Agenda - July 25, 2019

Meeting Objectives:

- 1) Communicate Useful Council Administrative Information
- 2) Highlight Grant Opportunities
- 3) Raise Awareness of Other Water Planning Efforts in the Region
- 4) Update Topics of Regional Interest
- 5) Plan Topics for Future Meetings

9:30 a.m. – 10:00 a.m.	Registration
10:00 a.m. – 10:15 a.m.	Welcome and Introductions - Ron Cross <ul style="list-style-type: none">• <i>New leadership</i>
10:15 a.m. – 10:30 a.m.	Council Business <ul style="list-style-type: none">• <i>Approve minutes - Nov 8, 2018 Joint Meeting w/Coastal GA Council</i>• <i>Approve today's meeting agenda</i>• <i>Discuss Council membership</i>
10:30 a.m. – 11:15 a.m.	Seed Grant Implementation Case Study (Tom Wiedmeier, City of Augusta & Tonya Bonitatibus, Savannah Riverkeeper)
11:15 a.m. – 11:45 a.m.	Council Updates - GEPD and Planning Consultant <ul style="list-style-type: none">• <i>Website Improvements</i>• <i>Stevens Creek FERC Relicensing</i>• <i>Seed Grant applications</i>• <i>Council Outreach Opportunities</i>
11:45 a.m. – 12:00 p.m.	Augusta Canal FERC Relicensing Update (Tom Wiedmeier)
12:00 p.m. – 12:45 p.m.	Lunch/Speaker: South Carolina Planning Process (Scott Harder, SCDNR)
12:45 p.m. – 1:00 p.m.	Oxbow Restoration Update (Tonya Bonitatibus)
1:00 p.m. – 1:30 p.m.	Update on One Hundred Miles Industrial Use Study (Alice Keyes, OHM)
1:30 p.m. – 2:00 p.m.	Wrap-up and Adjourn <ul style="list-style-type: none">• <i>Public Comments</i>• <i>Next meeting date & topics</i>• <i>Adjourn</i>

Council Business

- Discuss Council membership



Seed Grant Implementation Case Study

waterplanning.georgia.gov



Council Updates

waterplanning.georgia.gov

Council Updates

- Website Improvements
- Stevens Creek FERC Relicensing Update
- Seed Grant Applications
- Public Outreach



Council Updates: Website Improvements

waterplanning.georgia.gov

Website Improvements

- Current Home Page



Website Improvements

- Region-Specific Enhancements and Updates
 - **Regional Water Plan**
 - Regional Highlights
 - Technical Information
 - Implementation

The screenshot displays the Georgia Water Planning website. At the top, the header includes the 'GEORGIA.GOV' logo, a map of Georgia, and the text 'Georgia Water Planning'. Navigation links for 'Contact Us', 'Get Email Updates', and 'Translate' are in the top right. A search bar is also present. Below the header is a dark blue navigation bar with links: 'Water Planning', 'Water Planning Regions', 'Forecasting', 'Resource Assessments', and 'More Information'. The main content area features a sidebar titled 'Water Planning Regions' with a list of regions: Altamaha, Coastal Georgia, Coosa-North Georgia, Lower Flint-Ochlockonee, Metro Water District, Middle Chattahoochee, Middle Ocmulgee, Savannah-Upper Ogeechee Region (selected), Suwannee-Satilla, Upper Flint, and Upper Oconee. The main content area displays the 'Savannah-Upper Ogeechee: Regional Water Plan' page, including a breadcrumb trail, the title, and a link to the 'Savannah-Upper Ogeechee RWP Final 2017.pdf' (26.48 MB). The footer contains links to 'Georgia Department of Natural Resources', 'Environmental Protection Division', 'Disclaimer', 'Site Map', 'Accessibility', and 'Privacy/Security'. It also features the Georgia logo and three columns of links: 'AT YOUR SERVICE' (GeorgiaGov, Agencies, Cities & Counties, Popular Topics), 'ELECTED OFFICIALS' (Governor, More Officials), and 'NEED HELP?' (1-800-436-7442, Contact us, Human Trafficking Notice).

Website Improvements

- Region-Specific Enhancements and Updates
 - **Regional Water Plan**
 - Regional Highlights
 - Technical Information
 - Implementation

The screenshot displays the Georgia Water Planning website. At the top, the header includes the GeorgiaGov logo, the title "Georgia Water Planning", and links for "Contact Us", "Get Email Updates", and "Translate". A search bar is located on the right. Below the header is a navigation menu with categories: "Water Planning", "Water Planning Regions", "Forecasting", "Resource Assessments", and "More Information". The main content area is titled "Savannah-Upper Ogeechee Regional Water Plan". It features a left sidebar with a "Water Planning Regions" menu, where "Savannah-Upper Ogeechee Region" is selected. The main content includes a "Background" section with text about the plan's history and purpose, and a "Related Files" section with links to the "2017 Savannah-Upper Ogeechee Regional Water Plan - Full Report (1.04 MB)" and the "2017 Savannah-Upper Ogeechee Regional Water Plan - Factsheet (871 KB)". The footer contains the Georgia Department of Natural Resources logo and links for "AT YOUR SERVICE", "ELECTED OFFICIALS", and "NEED HELP?".

GEORGIA.GOV

Contact Us | Get Email Updates | Translate

Search within this site

Water Planning | Water Planning Regions | Forecasting | Resource Assessments | More Information

Home » Water Planning Regions » Savannah-Upper Ogeechee » Savannah-Upper Ogeechee Regional Water Plan

Savannah-Upper Ogeechee Regional Water Plan

The Savannah-Upper Ogeechee Regional Water Plan was initially completed in 2011 and subsequently updated in 2017. The plan outlines near-term and long-term strategies to meet water needs through 2050.

Background

The Savannah-Upper Ogeechee Region encompasses 20 counties in the northeast portion of Georgia. Over the next 35 years, the population of the region is projected to increase from approximately 629,700 to 784,000 residents. Some key economic drivers in the region include government facilities, health care services, manufacturing, retail and construction sectors. Water supplies, wastewater treatment, and related infrastructure will need to be developed and maintained to support these economic drivers.

While much of the region's water comes from surface water and regulated reservoirs (about 85%), portions of the region rely significantly on groundwater aquifers. Water resource challenges in the region include: low dissolved oxygen levels in the Savannah River and Harbor and the sharing of substantial load reductions between Georgia and South Carolina dischargers, potential gaps in surface water availability in the Ogeechee Basin, a to progress towards more efficient use of water in the region.

Management practices needed to address these challenges include: water conservation, development of local water and wastewater plans, and coordinated interstate planning.

Related Files

- [2017 Savannah-Upper Ogeechee Regional Water Plan - Full Report \(1.04 MB\)](#)
- [2017 Savannah-Upper Ogeechee Regional Water Plan - Factsheet \(871 KB\)](#)

Georgia Department of Natural Resources | Environmental Protection Division | Disclaimer | Site Map | Accessibility | Privacy/Security

AT YOUR SERVICE
GeorgiaGov
Agencies
Cities & Counties
Popular Topics

ELECTED OFFICIALS
Governor
More Officials

NEED HELP?
1-800-436-7442
Contact us
Human Trafficking Notice

Website Improvements

- Region-Specific Enhancements and Updates
 - Regional Water Plan
 - **Regional Highlights**
 - Technical Information
 - Implementation

The screenshot displays the Georgia Water Planning website. At the top, the header includes the GeorgiaGov logo, the text "Georgia Water Planning", and links for "Contact Us", "Get Email Updates", and "Translate". A search bar is located on the right. Below the header is a navigation menu with tabs for "Water Planning", "Water Planning Regions", "Forecasting", "Resource Assessments", and "More Information". The main content area is titled "Savannah-Upper Ogeechee Regional Highlights" and includes a breadcrumb trail: "Home » Water Planning Regions » Savannah-Upper Ogeechee Region » Savannah-Upper Ogeechee Regional Highlights". The page content states "This page is currently under development." and lists "Related Pages" with links to "Main Page: Savannah-Upper Ogeechee Region", "Savannah-Upper Ogeechee Region at a Glance", and "Get Regional Updates". A section titled "Download the Regional Water Plan" provides a link to "Savannah-Upper Ogeechee Regional Water Plan (26.48 MB)". On the left side, there is a sidebar menu under "Water Planning Regions" listing various regions, with "Savannah-Upper Ogeechee Region" selected. The footer contains the Georgia Department of Natural Resources logo and links for "Environmental Protection Division", "Disclaimer", "Site Map", "Accessibility", and "Privacy/Security". It also includes sections for "AT YOUR SERVICE" (GeorgiaGov, Agencies, Cities & Counties, Popular Topics), "ELECTED OFFICIALS" (Governor, More Officials), and "NEED HELP?" (1-800-436-7442, Contact us, Human Trafficking Notice).

Website Improvements

- Region-Specific Enhancements and Updates
 - Regional Water Plan
 - **Regional Highlights**
 - Technical Information
 - Implementation

GEORGIA.GOV

Georgia Water Planning

Contact Us | Get Email Updates | Translate

Search within this site

Water Planning | Water Planning Regions | Forecasting | Resource Assessments | More Information

Home » Water Planning Regions » Savannah-Upper Ogeechee » Savannah-Upper Ogeechee Regional Highlights

Savannah-Upper Ogeechee Regional Highlights

The Savannah River Basin includes three major lakes owned and operated by the U.S. Army Corps of Engineers: Lake Hartwell, Lake Richard B. Russell, and Lake Thurmond. In addition to water supply, power generation, flood prevention, and drought management, the streams and lakes in the region support significant recreational uses and important biological resources.

The region covers portions of the Savannah, Ogeechee, Oconee and Tennessee River basins. The lower portions of the Savannah, Ogeechee and Oconee basins lie within other regions, and the Savannah basin is shared with South Carolina.

The Savannah-Upper Ogeechee Regional Water Planning Council meets regularly between plan updates to discuss ongoing implementation of the plan, outreach to interested stakeholders, and hear the latest on water issues affecting the Region. Below is a summary of ongoing activities.

Regional Water Plan Seed Grants

Regional Water Plan Seed Grants provide competitive funding annually to support and incentivize local governments and other water users as they undertake implementation of the Regional Water Plan. The Grants require cash and in-kind match, and have a maximum project amount. Additional information about Seed Grants may be found at EPD's website, <https://epd.georgia.gov/regional-water-plan-seed-grant-funds>.

Outreach Activities

Members of the Regional Council participate in outreach activities to increase knowledge and understanding of the Regional Plan. An example outreach presentation providing an overview of the Regional Plan and process is available for download below.

Water Planning Regions

- ▶ Altamaha
- ▶ Coastal Georgia
- ▶ Coosa-North Georgia
- ▶ Lower Flint-Ochlockonee
- ▶ Metro Water District
- ▶ Middle Chattahoochee
- ▶ Middle Ocmulgee
- ▼ **Savannah-Upper Ogeechee Region**
 - Regional Water Plan
 - Regional Highlights**
 - Implementation
 - Technical Information
 - Council
 - Vision and Goals
- ▶ Suwannee-Satilla
- ▶ Upper Flint
- ▶ Upper Oconee

SAVANNAH UPPER-OGEECHEE WATER PLANNING REGION

RIVER BASINS

- Oconee
- Ogeechee
- Savannah
- Tennessee

Georgia Department of Natural Resources | Environmental Protection Division | Disclaimer | Site Map | Accessibility | Privacy/Security

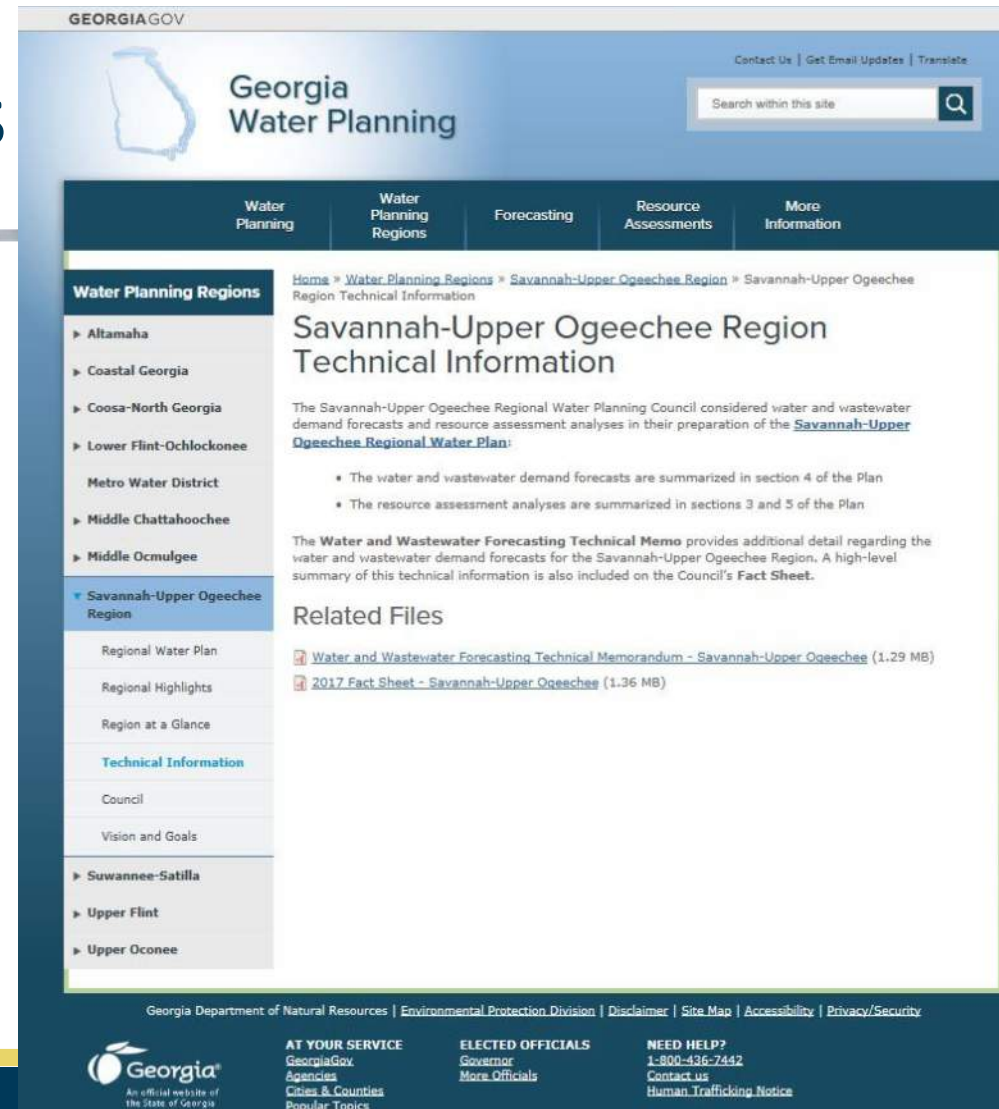
AT YOUR SERVICE
GeorgiaGov
Agencies
Cities & Counties
Popular Topics

ELECTED OFFICIALS
Governor
More Officials

NEED HELP?
1-800-436-7442
Contact us
Human Trafficking Notice

Website Improvements

- Region-Specific Enhancements and Updates
 - Regional Water Plan
 - Regional Highlights
 - **Technical Information**
 - Implementation



Website Improvements

- Region-Specific Enhancements and Updates
 - Regional Water Plan
 - Regional Highlights
 - **Technical Information**
 - Implementation

GEORGIA.GOV

Georgia Water Planning

Contact Us | Get Email Updates | Translate

Search within this site

Water Planning | Water Planning Regions | Forecasting | Resource Assessments | More Information

Home » Water Planning Regions » Savannah-Upper Ogeechee » Savannah-Upper Ogeechee Technical Information

Savannah-Upper Ogeechee Region Technical Information

In support of the Regional Plan Update, separate technical memoranda were developed on water and wastewater forecasting as well as a resource gap analysis.

Water and Wastewater Forecasting

Water and wastewater demand forecasts form the foundation for water planning in the Savannah-Upper Ogeechee Region and serve as the basis for the selection of water management practices. Forecasts are summarized within Section 4 of the Regional Water Plan, but additional detail can be found in the Water and Wastewater Forecasting Technical Memorandum.

Over the next 35 years, the population in the Savannah-Upper Ogeechee Region is projected to grow by nearly 25%, increasing the demands for surface water and groundwater and increasing the quantity of wastewater generated. Total water withdrawals by municipal, industrial, agricultural, and energy sectors are projected to increase by 35% (109 million gallons per day (MGD)) from 2015 to 2050. Total wastewater flows are projected to increase by 15% (26 MGD) over the same period.

2050 WATER DEMAND TOTAL = 425 MGD

Sector	Percentage
Municipal	26%
Industrial	25%
Agriculture	22%
Energy	27%

Gap Analysis

The Gap Analysis Technical Memorandum compares the water and wastewater demand forecasts to the available resources. This material is also summarized within Section 5 of the Regional Water Plan. Areas where future demands exceed the estimated capacity of the source have a potential gap that may be addressed through water management practices. Potential water resource issues identified for the Savannah-Upper Ogeechee Region include:

- Over the planning horizon, there are no potential gaps in surface water availability predicted directly within the Savannah-Upper Ogeechee Region. However, increased demands in the region may add to potential surface water gaps downstream of the region on the Ogeechee River.
- Assimilative capacity assessments indicate the need for improved wastewater treatment in some facilities within the Savannah and Ogeechee river basins. For fast growing counties, additional wastewater treatment capacity may be needed.
- Addressing non-point sources of pollution and existing water quality impairments should be a part of addressing the region's future needs. Significant organic load reductions may be required for the Savannah River and Harbor to address both Georgia and South Carolina discharges.

Related Files

- [Savannah-Upper Ogeechee Water and Wastewater Forecasting Technical Memorandum \(3.64 MB\)](#)
- [Savannah-Upper Ogeechee Gap Analysis Technical Memorandum \(844 KB\)](#)

Georgia Department of Natural Resources | Environmental Protection Division | Disclaimer | Site Map | Accessibility | Privacy/Security

Georgia
An official website of the State of Georgia

AT YOUR SERVICE
[Geographic Agencies](#)
[Cities & Counties](#)
[Popular Topics](#)

ELECTED OFFICIALS
[Governor](#)
[More Officials](#)

NEED HELP?
[1-800-436-7442](#)
[Contact us](#)
[Human Trafficking Notice](#)

Website Improvements

- Region-Specific Enhancements and Updates
 - Regional Water Plan
 - Regional Highlights
 - Technical Information
 - **Implementation**

Website Improvements

- Region-Specific Enhancements and Updates
 - Regional Water Plan
 - Regional Highlights
 - Technical Information
 - **Implementation**

The screenshot displays the Georgia Water Planning website. The header includes the Georgia Department of Natural Resources logo, the text "Georgia Water Planning", and a search bar. A navigation menu at the top lists "Water Planning", "Water Planning Regions", "Forecasting", "Resource Assessments", and "More Information". The main content area is titled "Altamaha Implementation" and includes a sidebar with a "Water Planning Regions" menu. The sidebar lists various regions, with "Altamaha" selected. The main content area provides information about the implementation of the Altamaha Regional Water Plan, including details on GEFA Funding Projects, 319(h) Grant Funding, Conservation Funds, Jaycee Landing Project, and Seed Grants. The footer contains contact information for the Georgia Department of Natural Resources, including links to the Environmental Protection Division, Disclaimer, Site Map, Accessibility, and Privacy/Security pages. It also lists "AT YOUR SERVICE" resources like GeorgiaGov, Agencies, Cities & Counties, and Popular Topics, as well as "ELECTED OFFICIALS" and "NEED HELP?" contact information.

Georgia Department of Natural Resources | Environmental Protection Division | Disclaimer | Site Map | Accessibility | Privacy/Security

AT YOUR SERVICE
GeorgiaGov
Agencies
Cities & Counties
Popular Topics

ELECTED OFFICIALS
Governor
More Officials

NEED HELP?
1-800-436-7442
Contact us
Human Trafficking Notice



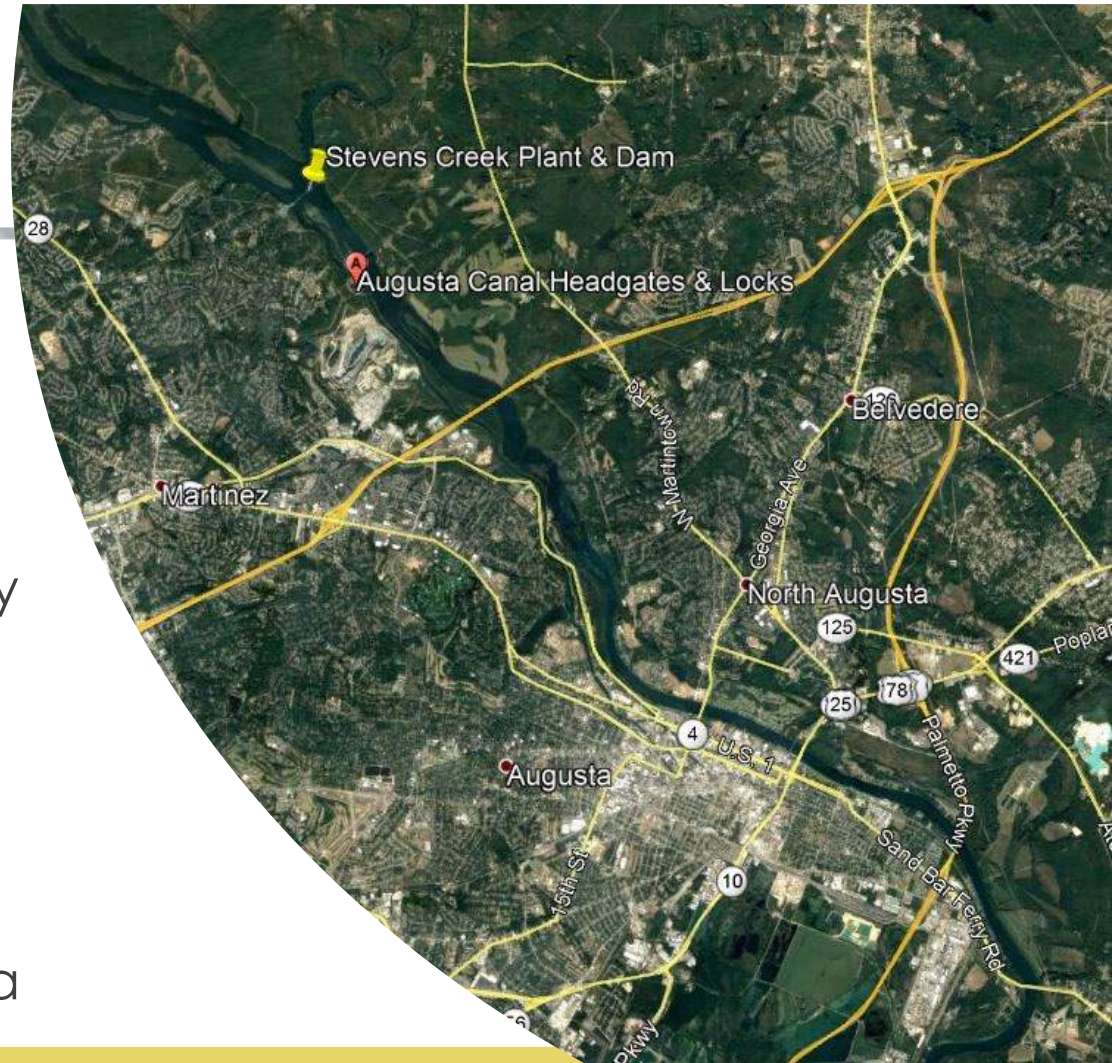
Georgia's State Water Plan

Council Updates: Stevens Creek FERC Relicensing

waterplanning.georgia.gov

Stevens Creek Dam

- Location – 1 mile upstream of the Augusta Canal Headgates
- Steady-release Dominion Energy “base load” plant
- 8 generating units
- 9,000-cfs maximum hydraulic capacity
- 2,220-acre impoundment
- 7,180-square mile drainage area



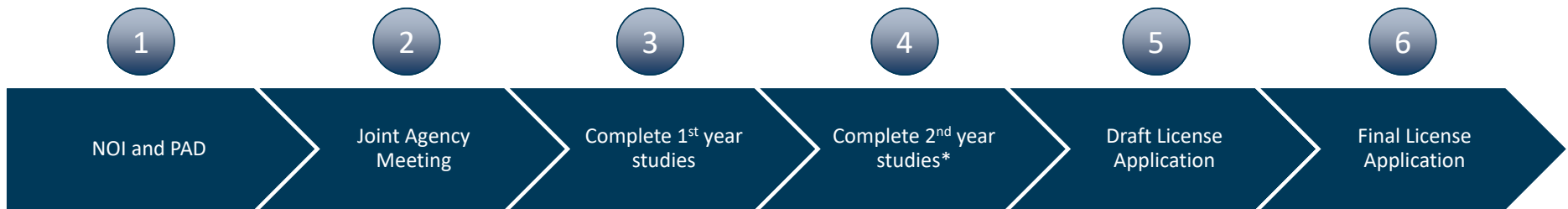
FERC Relicensing

- FERC = Federal Energy Regulatory Commission
- Relicensing:
 - Non-federal hydropower facilities are licensed to operate by FERC
 - 40 to 50-year permit life is typical
 - Relicensing process must start at least 5 years prior to expiration
 - Multi-agency process with public input
- Stevens Creek facility license expires October 31, 2025
- Public meetings to review Pre-Application Document (PAD) begin later this summer
- Final PAD filing due May 2020

FERC Relicensing – More Acronyms

- TLP = Traditional Licensing Process
- PAD = Pre-Application Document
- NOI = Notice of Intent
- DLA = Draft License Application

Stevens Creek FERC Relicensing – Deadlines



- Overall schedule – FERC deadlines:
 1. May-Oct 2020 – File NOI and PAD
 2. 30-60 days after TLP approval – Hold Joint Agency Meeting
 3. Late 2020-2021 – Complete 1st year studies
 4. 2022 – Complete 2nd year studies
 5. Nov 2022 – Issue Draft License Application
 6. Oct 2023 – File Final License Application

Stevens Creek FERC Relicensing (cont'd)

- Next meeting:
 - August 22nd from 9:30 to 4:00 at the Misty Lake Clubhouse
 - 1280 Ascauga Lake Rd, North Augusta, SC
 - Agenda will include:
 - Discussion of the Draft PAD
 - Information gaps
 - Resource Conservation Group formation
 - A link to the draft PAD should be available before this meeting
- Contact:
 - Kelly Kirven, Project Licensing Coordinator
 - Kelly.Kirven@KleinschmidtGroup.com



Georgia's State Water Plan

Council Updates: Seed Grant Applications

waterplanning.georgia.gov

Regional Water Plan Seed Grants

- State funds have been committed for the last 6 fiscal years to providing seed grant funding to support the Regional Water Plans
 - EPD is shifting this year's seed grant application schedule
 - Announcement by July 31
 - Applications due by October 31
 - Project proposals:
 - Must address implementation of **management practice(s)** or **other recommendation(s)** from one or more Regional Water Plans
 - Required endorsement from the Council Chair(s) or designee(s) of the relevant regional Water Planning Council(s).
-

Seed Grants in the Region

- 2015: Columbia County Board of Commissioners, “Filling needed water quantity and quality data gaps for the Savannah River Basin to facilitate implementation of future management practices”

Table 7-3: Recommendations to the State

Additional Data
(Surface Water)

Additional Data
(Water Quality)

The Savannah-Upper Ogeechee Council recommends the following actions by the EPD to support implementation of the Regional Water Plan (Table 7-3). These recommendations include additional funding, data collection, policy, coordination and public education and outreach necessary for improving future regional water planning efforts.



Seed Grants in the Region

- 2017: Brier Creek Soil & Water Conservation District, “Variable Rate Irrigation Initiative in the Savannah-Upper Ogeechee Region”



Table 6-1A: Priority Water Management Practices Selected for the Savannah-Upper Ogeechee Planning Region		
Action(s) Needed	Applicable Area	Description/Definition of Action
WD3 – Evaluate/Encourage Tier 3 and Tier 4 Agricultural Water Conservation Practices	Ogeechee River Basin	<p>Review and implement applicable agricultural water efficiency and demand management practices that are “beyond basic” to reduce surface water demand and in the Ogeechee River Basin. Some recommended management practices for agricultural permittees may include</p> <ul style="list-style-type: none"> • Using rain sensors on irrigation systems • Irrigating during time of day with low evaporation rate <p><i>Note for WD1 to WD3: The full list of specific conservation goals and tiered conservation practices recommended by the Savannah-Upper Ogeechee Council can be found in Technical Memorandum – Demand Management Practices (August 2011), available on the Council’s website.</i></p>

Seed Grants in the Region

- 2017: Northwest Georgia Regional Commission, “Alternative Nutrient Permitting Strategy Development for the Coosa-North Georgia and Savannah-Upper Ogeechee Water Planning Regions”

Table 6-1B: Additional Recommended Management Practices For Water Resource Management <i>(Select based on needs identified in local master plans)</i>		
Action(s) Needed	Issues to be Addressed	Description/Definition of Action
WQ14 - Evaluate Water Quality Trading	Improved assimilative capacity	<ul style="list-style-type: none">• Water quality trading is a market based approach that can complement water-quality regulation.• It allows facilities to buy pollutant reduction credits from other facilities in the same watershed (or non-point sources like agriculture)• Non-point source pollutant reductions are frequently less expensive than treatment-plant upgrades. Trading programs can cost-effectively improve water quality.

Regional Water Plan Seed Grant Funding

- Cost-Share: 60% state funds/40% project match
 - State funds limit of \$75,000 may be increased this year
 - 10% of total project costs must be in the form of cash match
 - Letter of Endorsement from Council Chair or designee
-

Regional Water Plan Seed Grants

Open Discussion of seed grant ideas for
Savannah-Upper Ogeechee Region



Council Updates: Outreach Opportunities

waterplanning.georgia.gov



Council Outreach

- Benefits
 - Increase awareness, understanding and participation
 - Support implementation
- Opportunities
 - Local government meetings
 - Industry groups
 - Environmental groups
 - Service organizations

SAVANNAH-UPPER OGEECHEE REGION

BACKGROUND

The Savannah-Upper Ogeechee Regional Water Plan was initially completed in 2011 and subsequently updated in 2017. The plan outlines near-term and long-term strategies to meet water needs through 2050. Major water resources include portions of the Savannah, Ogeechee, Oconee and Tennessee River basins.

OVERVIEW OF SAVANNAH-UPPER OGEECHEE REGION

The Savannah-Upper Ogeechee Region encompasses 20 counties in the northeast portion of Georgia. Over the next 35 years, the population of the region is projected to increase from approximately 629,700 to 784,000 residents. While much of the region's water comes from surface water and regulated reservoirs, portions of the region rely significantly on groundwater aquifers.

In 2015, the Savannah-Upper Ogeechee Region withdrew approximately 316 million gallons per day (MGD) for water supply, with approximately 67 percent drawn from surface water. The region returned approximately 178 MGD of wastewater in 2015, with 52 percent from industrial and 48 percent from municipal sources.



KEY WATER RESOURCE ISSUES ADDRESSED BY THE COUNCIL

1. Low dissolved oxygen levels and other water quality concerns in the Savannah River and Harbor and the sharing of substantial load reductions between Georgia and South Carolina dischargers
2. Coordination with South Carolina on shared water resources in the Savannah Basin
3. Potential gaps in surface water availability in the Ogeechee Basin
4. Concerns about interbasin transfers of water out of the Savannah Basin
5. Long-term operating procedures at the USACE reservoirs and the use of adaptive management to maintain conservation pools at the highest possible levels
6. More efficient use of water in the region

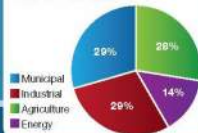
SAVANNAH-UPPER OGEECHEE WATER PLANNING REGION



FORECASTED REGIONAL WATER DEMANDS

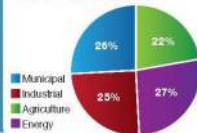
2015 WATER DEMAND

TOTAL = 316 MGD



2050 WATER DEMAND

TOTAL = 425 MGD



Georgia's
State Water Plan
SAVANNAH-UPPER OGEECHEE REGION

For more information, please go to:
waterplanning.georgia.gov/savannah-upper-ogeechee-water-planning-region

Council Outreach

- Resources
 - Council Fact Sheet
 - Slide Presentation
 - Planning Consultant



Georgia's State Water Plan

2017 Regional Water Plan Update
Savannah-Upper Ogeechee Water Planning Council
Month, Day, 2019

www.georgiawaterplanning.org

Council Outreach Opportunities

- Recent Examples
 - City and County government
 - Regulated parties
 - Industry groups
 - Environmental groups

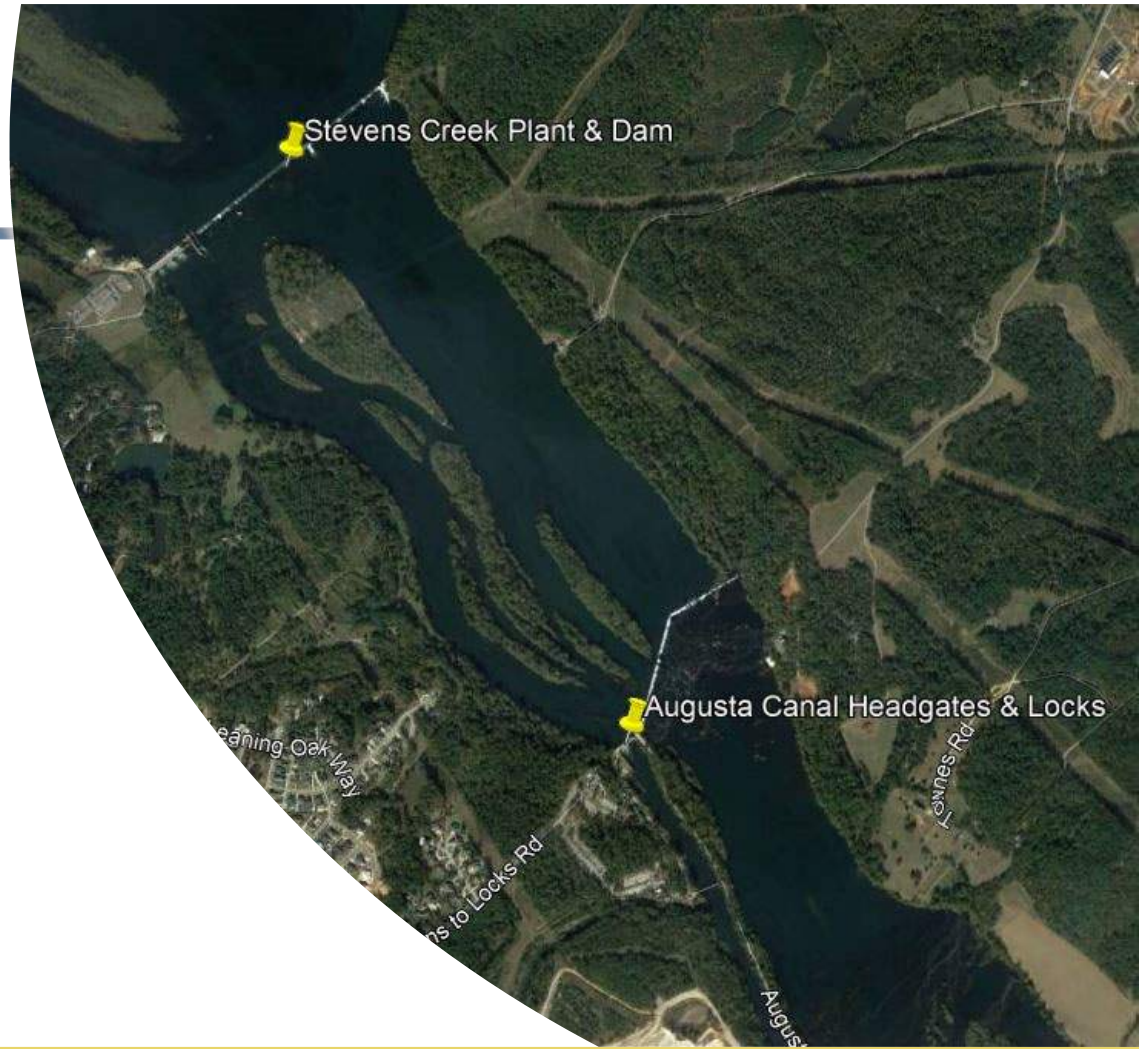


Georgia's State Water Plan

Augusta Canal FERC Relicensing Update

waterplanning.georgia.gov

Augusta Canal Headgates & Locks





LUNCH

waterplanning.georgia.gov



Overview of South Carolina Planning Process

waterplanning.georgia.gov

South Carolina Water Plan Update

Scott Harder

Hydrology Section Chief

Land, Water and Conservation Division

S.C. Department of Natural Resources



Savannah-Upper Ogeechee Regional Water Council Meeting

Augusta, Ga

July 25th, 2019

Water Resources Planning and Coordination Act (1967)

Created the S.C. Water Resources Commission in 1969

The Commission..

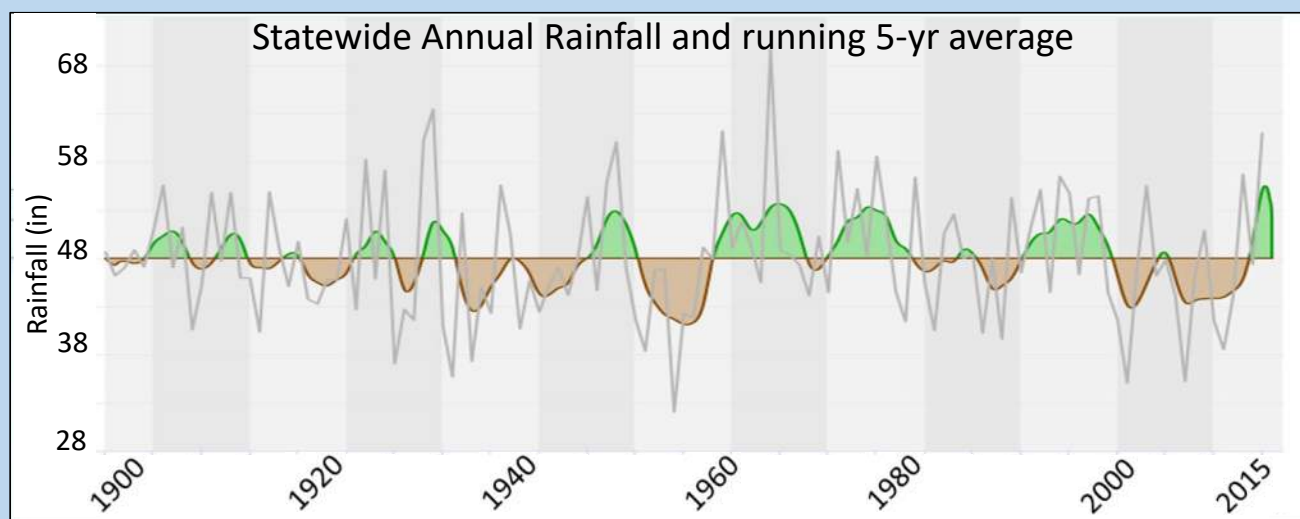
1) “shall advise and assist the Governor and the General Assembly in formulating and establishing a comprehensive water resources policy for the State...”

2) “shall encourage, assist and advise regional, metropolitan, and local governmental agencies...responsible for planning in relation to water aspects of their programs...”

In 1994, government restructuring resulted in the dismantling of the Commission. Water Quantity and Water Planning programs (and people) were transferred to the SCDNR while other programs were transferred to the SC Department of Health and Environmental Control (SCDHEC)

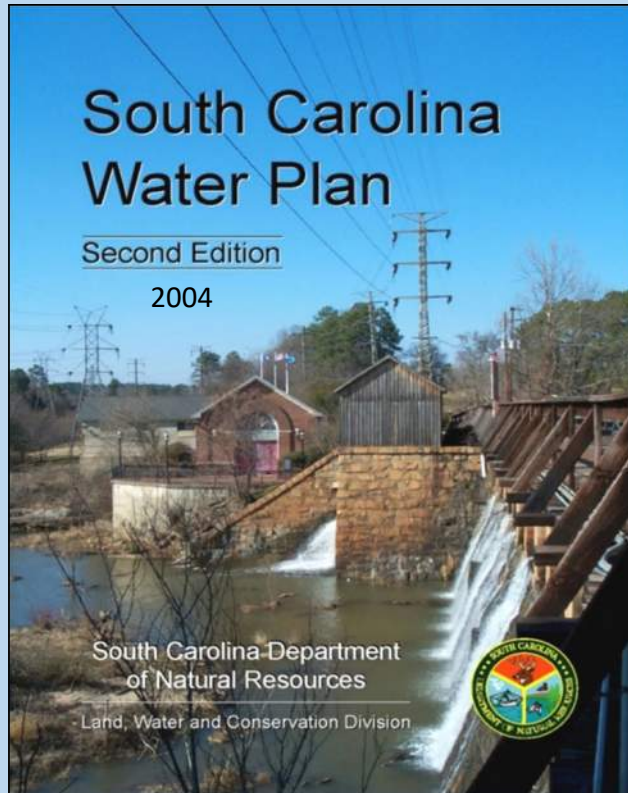
Why Water Planning?

- Population Growth – forecasted to increase by approximately 24% by 2030 (4.6 Million in 2010 – 5.7 Million in 2030) – *increased water demand*
- Uncertainties in water availability under future drought scenarios
 - *Recent droughts* (1998-2002, 2007-2008, 2011-2012)
 - *Historic droughts* - some studies show recent droughts may be relatively minor compared to droughts preceding 20th century
 - *Future drought?* – how could drought dynamics change in the future?



*Plot created by the Southern Climate
Impacts Planning Program (SCIPP)
– www.southernclimate.org

A Brief History of Water Planning...



- SCDNR published the first edition of the State Water Plan in 1998
- In 2004, SCDNR published the second edition of the South Carolina Water Plan incorporating lessons learned from the drought of 1998-2002.
- One recommendation was to develop a regional water plan for each major river basin in the State.
- 10 years later – SCDNR and SCDHEC initiated the first step towards these regional water plans, now formally called *River Basin Plans*.

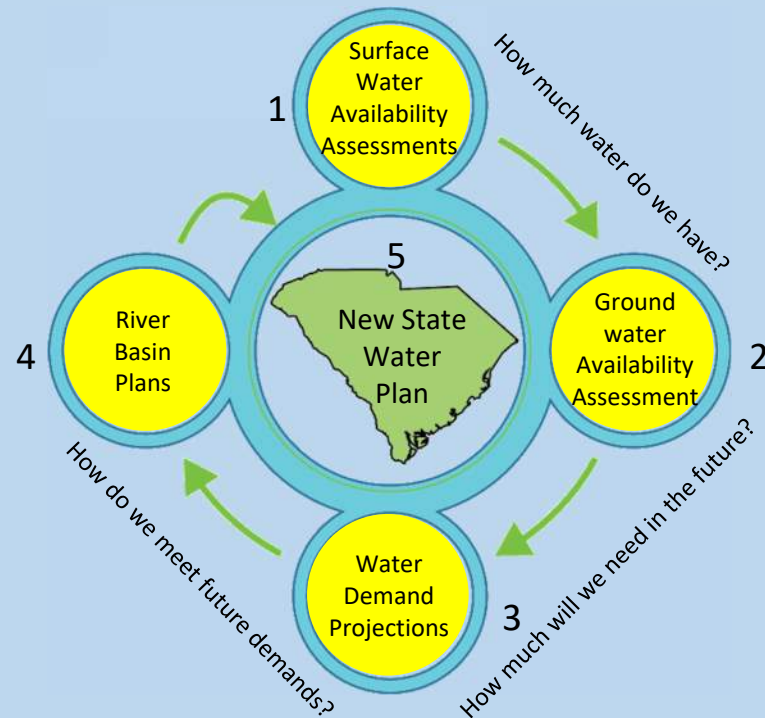
South Carolina's Eight Planning Basins

- River Basin Plans will be developed for each of these basins, the same basins used by SCDHEC for water-quality assessments and for managing interbasin transfers of water.
- River Basin Plans will form the foundation of a new State Water Plan.



Five-step Process...

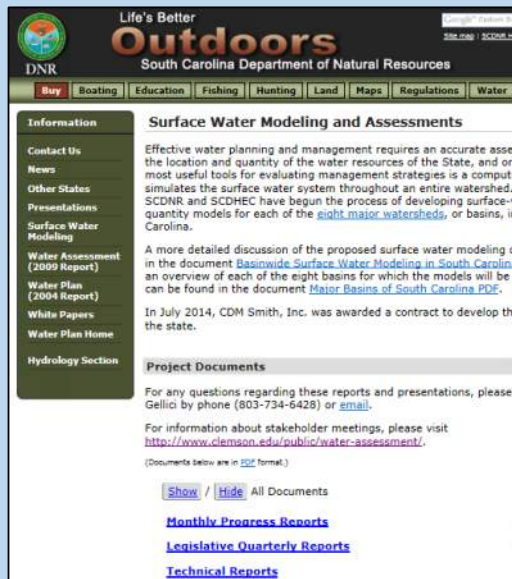
1. *Surface Water Assessments* - completed in 2017 (CDM Smith, Inc.)
2. *Groundwater Assessment* - scheduled for completion in Fall 2019 (USGS)
3. *Water Demand Projections*
 - Methodology report scheduled for completion in summer 2019
 - Edisto projections scheduled for completion in Fall 2019
4. *River Basin Plans*
 - State Water Planning Process Advisory Committee (PPAC) formed to provide framework for river basin planning process
 - Edisto – pilot basin, planning activities scheduled to begin in Fall 2019
5. *State Water Plan* – update contingent upon completion of all 8 River Basin Plans



Cooperators:



On the Web...

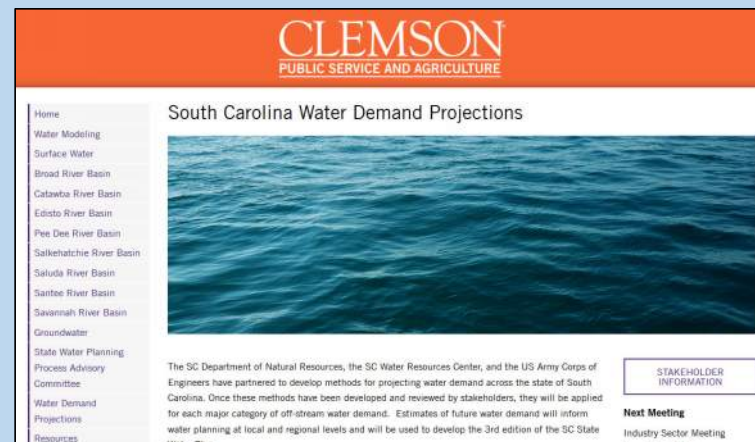


SW Assessments:
<http://www.dnr.sc.gov/water/waterplan/surfacewater.html>

Water Demand Forecasts:
https://www.clemson.edu/public/water-assessment/water_demand_projections.html



GW Assessments: https://www.usgs.gov/centers/sa-water/science/update-south-carolina-atlantic-coastal-plain-groundwater-availability-0?qt-science_center_objects=0#qt-science_center_objects



Planning Process Advisory Committee (PPAC)

- Convened by SCDNR to develop a guidance document (Planning Framework) for developing River Basin Plans and for updating the State Water Plan
- Topics addressed in Planning Framework:
 - Formation of River Basin Councils (RBCs)
 - Process of designating members
 - Roles and responsibilities
 - Bylaws
 - Roles of the State agencies and contractors
 - Public and stakeholder participation
 - Methods for evaluating water availability
 - River Basin Plan format and contents
 - Planning Framework implementation
 - River Basin Plan implementation
 - How River Basin Plans fit into the State Water Plan
- Planning Framework will be published in Fall 2019

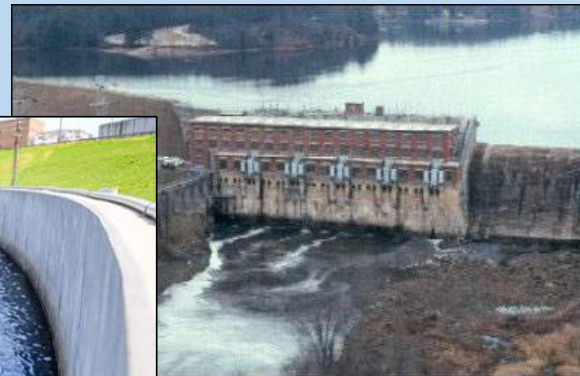


[https://www.clemson.edu/public/water-assessment/State Water Planning Process Advisory Committee.html](https://www.clemson.edu/public/water-assessment/State%20Water%20Planning%20Process%20Advisory%20Committee.html)

State Water Planning Vision Statement

“Reflecting our values of water as a shared resource and a shared responsibility, we will work together to develop and maintain an actionable state water plan balancing economic, environmental and social needs of South Carolina for generations to come”

- Planning Process Advisory Committee, September 6, 2018



PPAC Committee Members

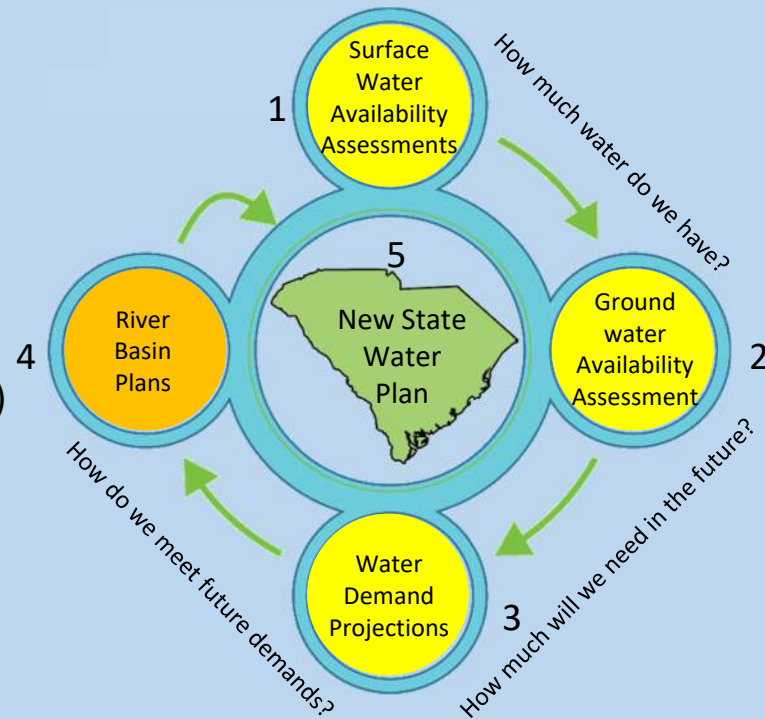
Jeffery Allen – Clemson University
David Baize – SCAWWA/WEASC
David Bereskin – Greenville Water
Jesse Cannon – Santee Cooper
Fred Castles, III – Catawba-Wateree Water Management Group
Clay Duffie – Mt. Pleasant Waterworks
Steve Hamilton – The Dunes Golf and Beach Club
Erika Hollis – Upstate Forever
J.J. Jowers, Jr. – Bamberg County citizen, Edisto
Engineers and Surveyors, Inc.
Eric Krueger – The Nature Conservancy
Jeff Lineberger – Duke Energy
Jill Miller – South Carolina Rural Water Association
Dean Moss, Jr. – Citizen, formerly of Beaufort Jasper WSA
Myra Reece – South Carolina Department of Health and
Environmental Control
Ken Rentiers – South Carolina Department of Natural
Resources
Bill Stangler – Congaree Riverkeeper
Landrum Weathers – Farmer
Scott Willett – Anderson Regional Joint Water System
Charles Wingard – Walter P. Rawl and Sons, Inc.



River Basin Plans

Content includes:

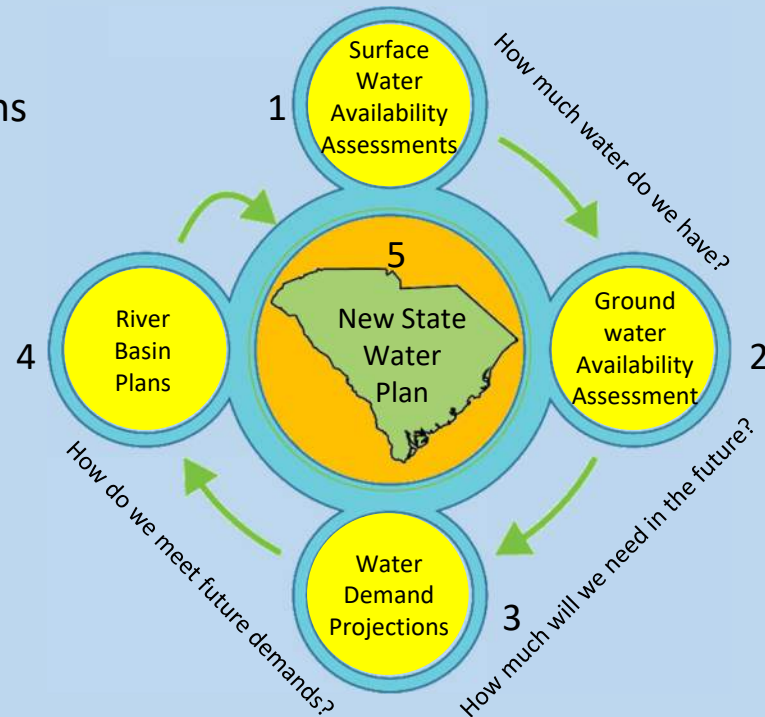
- An evaluation of current and future water demand and water availability
- An assessment of management strategies to meet future demands or to plan for potential changes in water availability:
 - Demand side (water conservation measures, drought management plans)
 - Supply side (new water sources)
- Water planning recommendations for the basin and for the State
 - Policy
 - Legislative
 - Planning Process (how can process be improved)
 - Program (needs for additional monitoring or studies)



State Water Plan

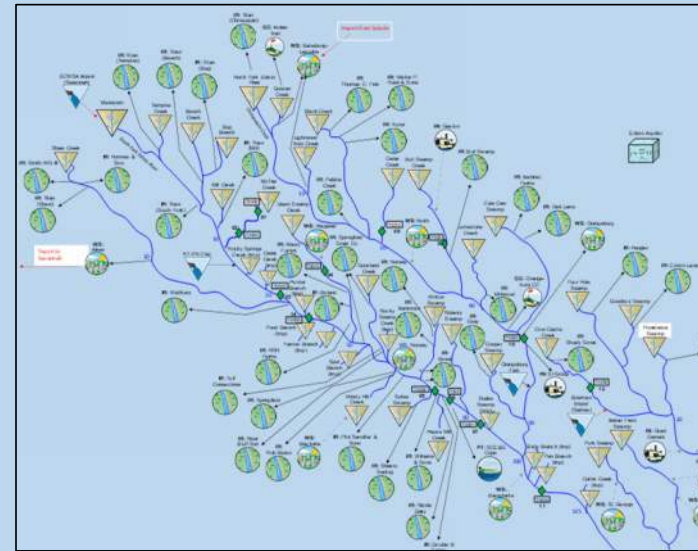
Content includes:

- A summary of legislative, policy, process, and program recommendations regarding the State's water resources
 - Plan will emphasize those recommendations common to two or more basin plans
- A summary of each River Basin Plan's water availability analyses and conclusions
- An evaluation of statewide trends in water use and availability
- A summary of any innovative water management strategies or practices introduced in the River Basin Plans



Edisto River Basin Planning (Pilot Basin)

- State funding secured for Edisto River basin
- Edisto will serve as the pilot for implementing Planning Framework
- Schedule (tentative)
 - Oct 2019: Public kick-off meeting
 - Introduce planning process
 - Solicit RBC membership applications
 - Receive stakeholder input
 - Nov-Dec 2019: Selection of RBC members
 - Oct 2019 – Jan 2020: Solicitation of Contractors
 - Feb 2020: RBC kick-off meeting
- Clemson University will serve as a Coordinator for planning activities
- Two-year process to develop River Basin Plan

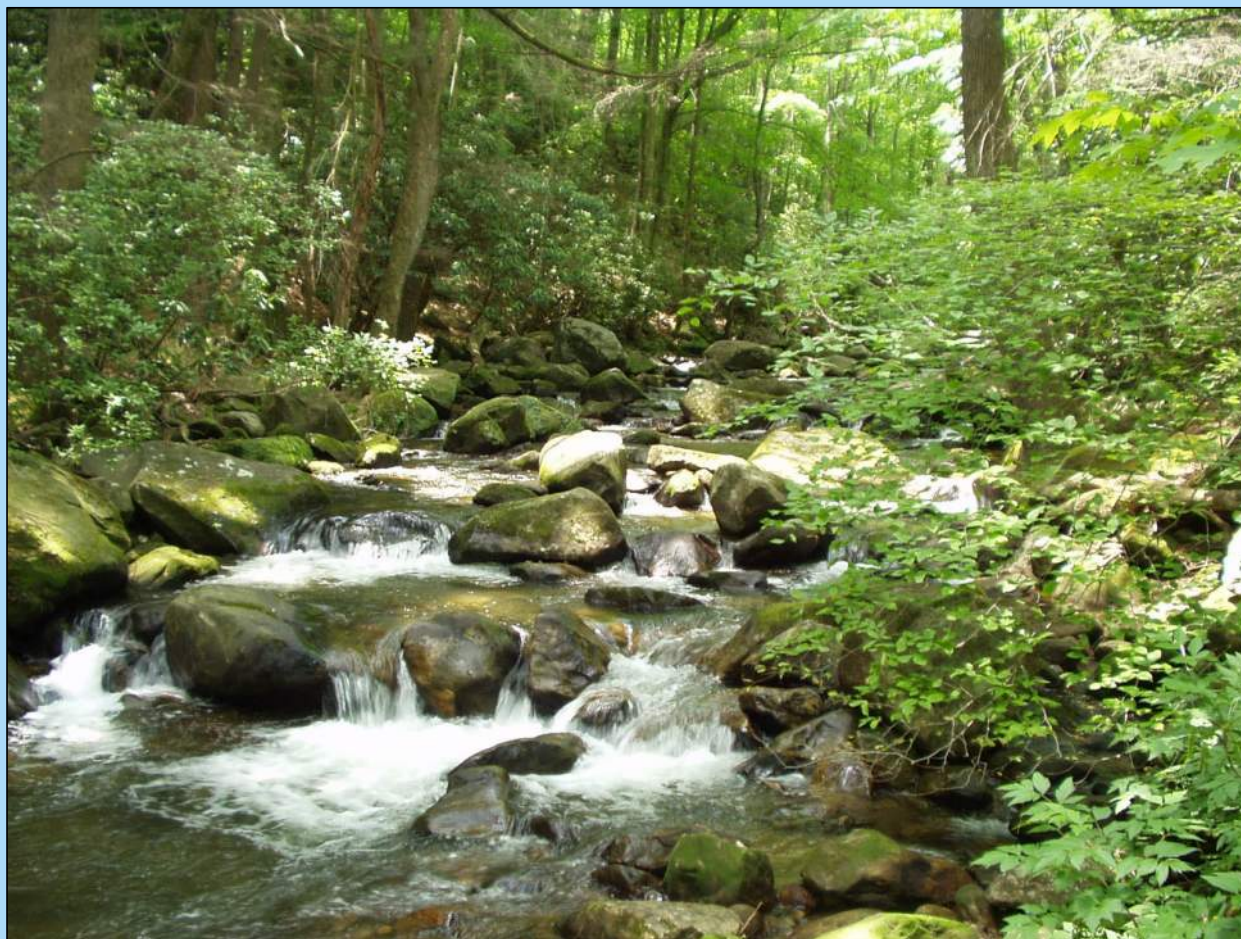


Edisto SWAM Model

(Savannah River Basin Plan will likely be one of the last basins completed)

Planning Challenges

- Funding
 - Secured for one basin
 - Completion of other basins dependent on additional State funding
 - Need for sustained funding support
- Planning Framework is not a regulatory document
 - Planning must navigate current regulatory environment
 - River Basin Plans not “enforceable”/lack of authority
 - What does River Basin Plan implementation look like? How do we move beyond just another report on the shelf?
- *Despite these challenges, there are reasons for optimism...*
 - The State has made significant progress towards more comprehensive planning
 - Work of PPAC and SCDNR in developing the Planning Framework has been generally well received



Contact Info: Scott Harder, harders@dnr.sc.gov



Oxbow Restoration Update

waterplanning.georgia.gov



Georgia's State Water Plan

Update on One Hundred Miles Industrial Use Study

waterplanning.georgia.gov



Wrap Up and Adjourn

waterplanning.georgia.gov

Public Comments

Next Meeting Date & Topics

Thank You!

Questions? Comments? Need
More Information?

smithla@cdmsmith.com

Haydn.Blaize@dnr.ga.gov