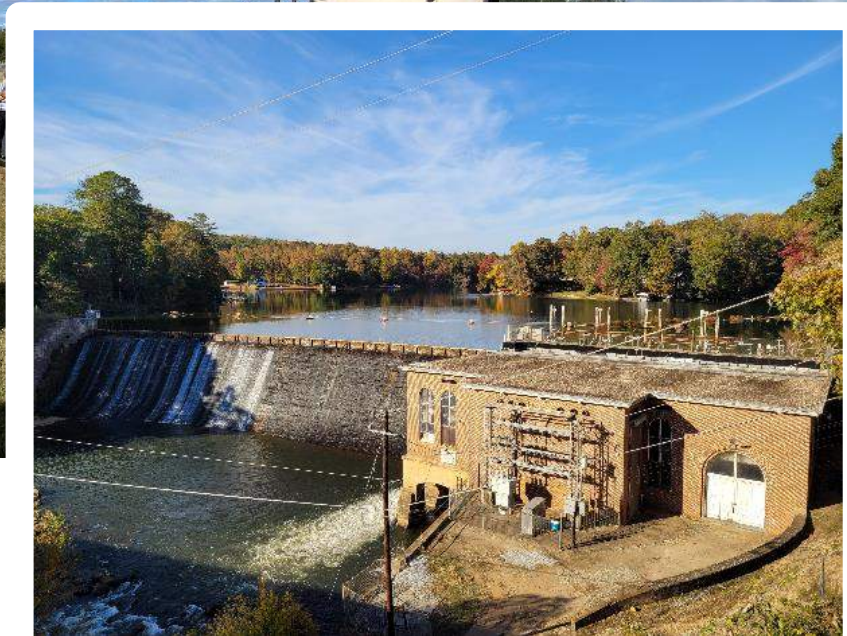




Draft Saluda River Basin Plan Public Meeting

May 29, 2025

Draft Saluda River Basin Plan – Public Meeting Agenda

- **Welcome and Introductions** **6:15 – 6:25**
- **Overview of the Planning Process** **6:25 – 6:35**
- **Draft Saluda River Basin Plan Highlights** **6:35 – 7:15**
- **Public Comments and Q&A with the RBC** **7:15 – 7:50**
- **Raffle Drawing for Prizes** **7:50 – 8:00**



Reedy River at Unity Park



Welcome and Introductions



SC DEPARTMENT *of*
**ENVIRONMENTAL
SERVICES**

**CDM
Smith**

CLEMSON
UNIVERSITY

**Thank You
Planning Team!**

THANK YOU

To Our Event Sponsors



Saluda River Basin Council

Name	Organization	Interest Category
David Coggins	Laurens County Soil & Water Conservation District/Farmer	Agriculture, Forestry, and Irrigation
Jason Davis	Saluda Valley Farms, LLC	
Robert Hanley	Greenville County Soil & Water Conservation District	
Paul Lewis	Holly Tree Country Club	
Thompson Smith	SC Farm Bureau and Twin Oaks Farm	
Katherine Amidon	Bolton & Menk Inc.	At-Large
Rick Huffman	Earth Design	
Devin Orr	SC Rural Water Association	
Charlie Timmons	Timmons Commercial	
Eddie Owen	Dominion Energy SC	Electric-Power Utilities
Phil Fragapane	Duke Energy	
Josie Newton	Friends of the Reedy River	Environmental Interests and Conservation Groups
Melanie Ruhlman	Save Our Saluda	
Rebecca Wade	Upstate Forever	
Brandon Grooms	Colonial Pipeline Company	Industry and Economic Development
Patrick Jackson	Laurens County Soil & Water Conservation District/Farmer	Local Governments
Larry Nates	Lexington County Soil & Water Conservation District	
Rett Templeton	Greenwood County	
Jeff Boss	Greenville Water	Water and Sewer Utilities
Jay Nicholson	(Lexington) Joint Municipal Water & Sewer Commission	
K.C. Price	Laurens County Water and Sewer Commission	
Kaleigh Sims	Renewable Water Resources (ReWa)	
Kevin Miller	Foothills Paddling Club	Water-Based Recreational
Michael Waddell	SC Trout Unlimited	



The Saluda RBC



North Saluda River



Saluda RBC

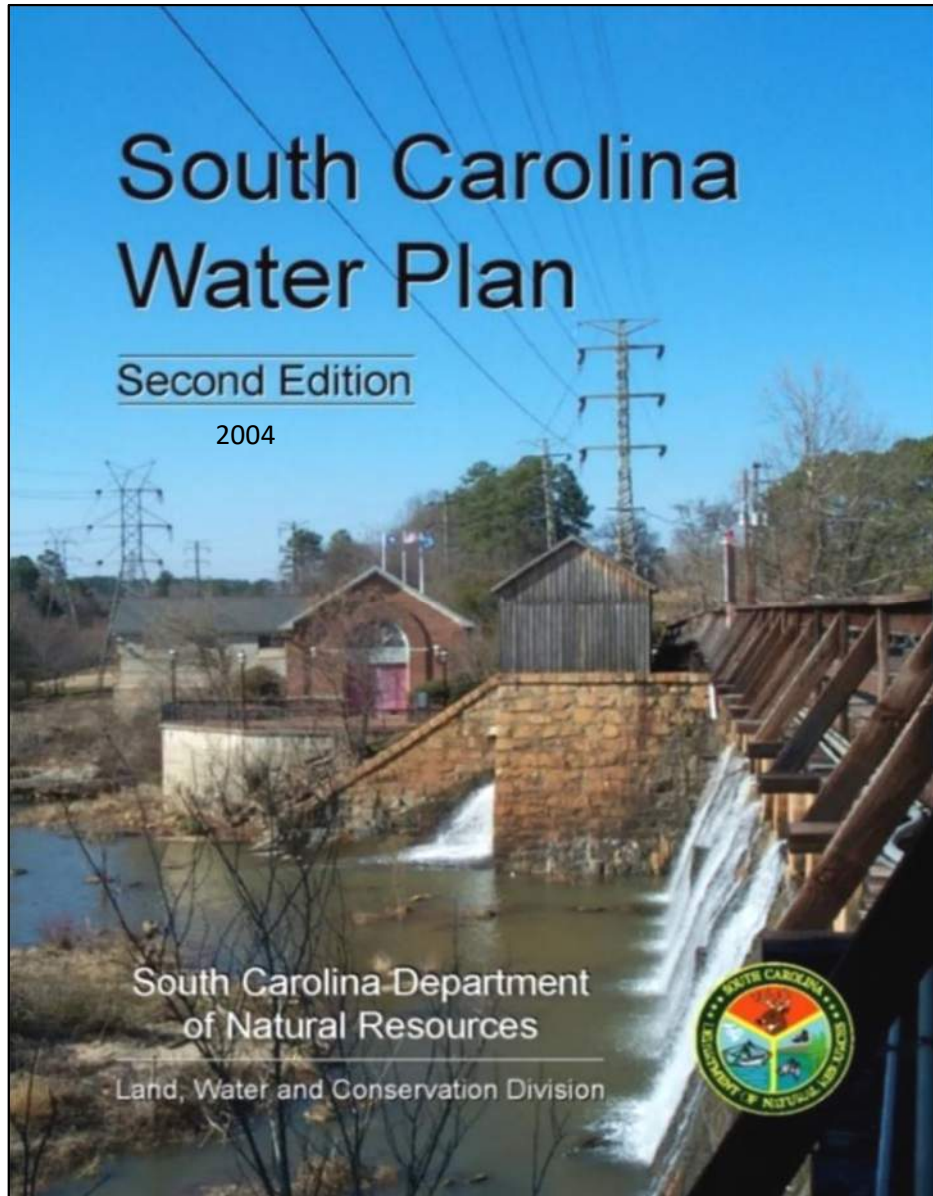
Cooperators and RBC Support Provided by:





Overview of the Planning Process

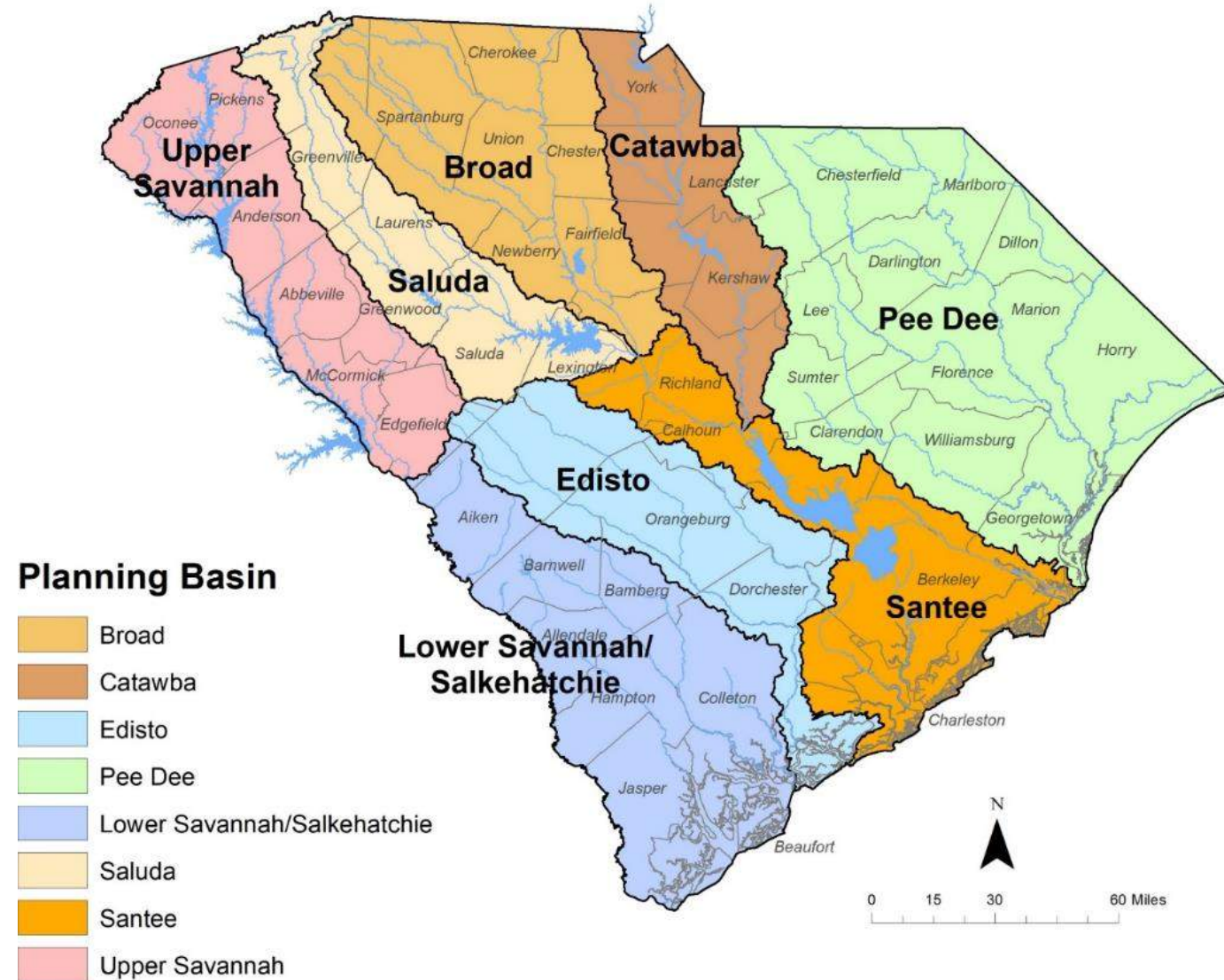
History of State Water Planning



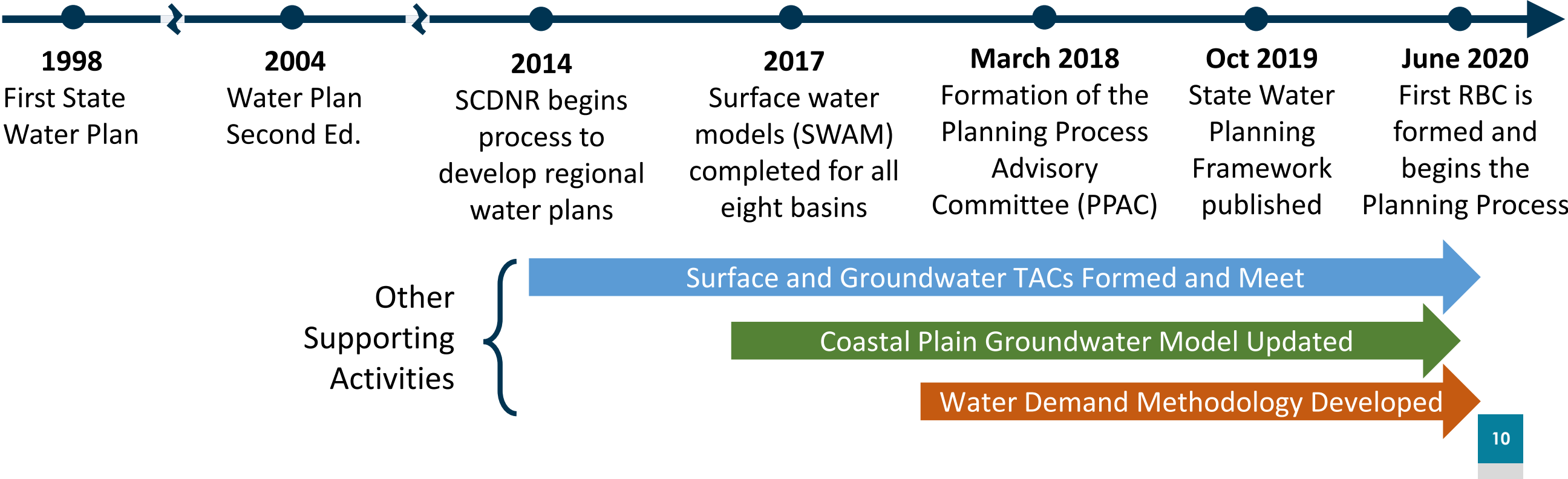
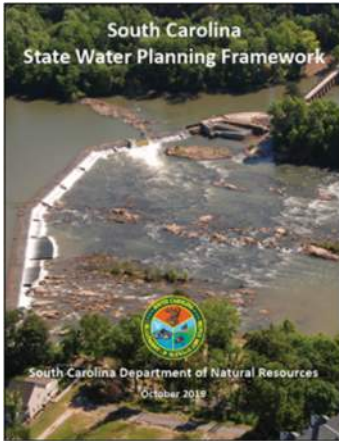
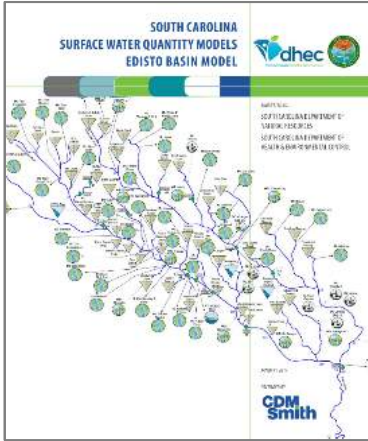
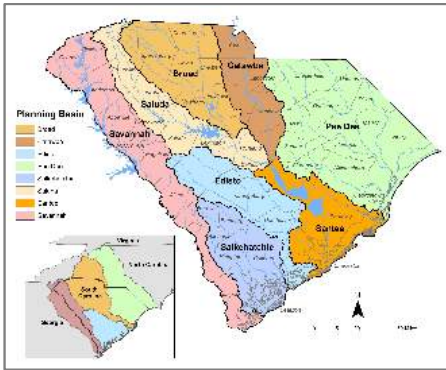
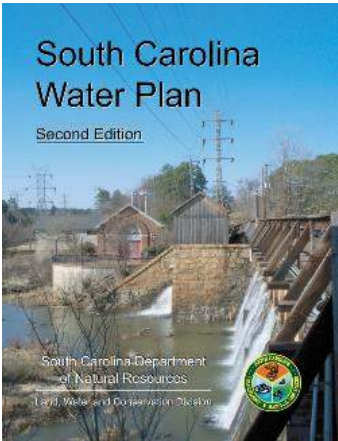
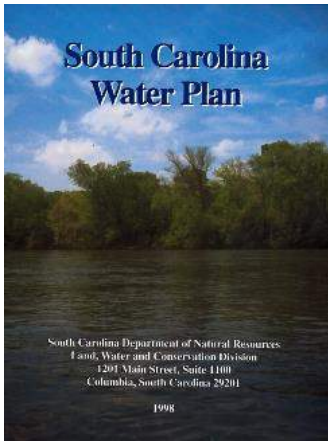
- SCDES is legislatively mandated to develop a State Water Plan.
- SCDNR published the first edition of the State Water Plan in 1998.
- In 2004, SCDNR published the second edition of the South Carolina Water Plan incorporating lessons learned from the drought of 1998-2002.
- One recommendation was to develop a regional water plan for each major river basin in the State.

South Carolina's Eight Planning Basins

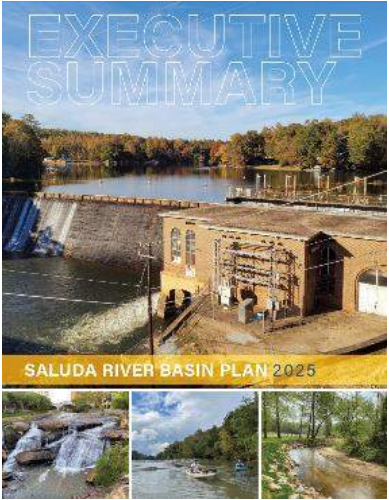
- River Basin Plans will be developed for the State's eight major river basins using a “bottom-up” approach where stakeholders in each basin lead the development of their basin plan.
- Collectively, the River Basin Plans will form the foundation of a new State Water Plan.



South Carolina State Water Planning Timeline



South Carolina State Water Planning Timeline



March 2023
Saluda RBC
Convenes

September 2024
Gov. McMaster signs
Executive Order

October 2024
First Meeting
of WaterSC

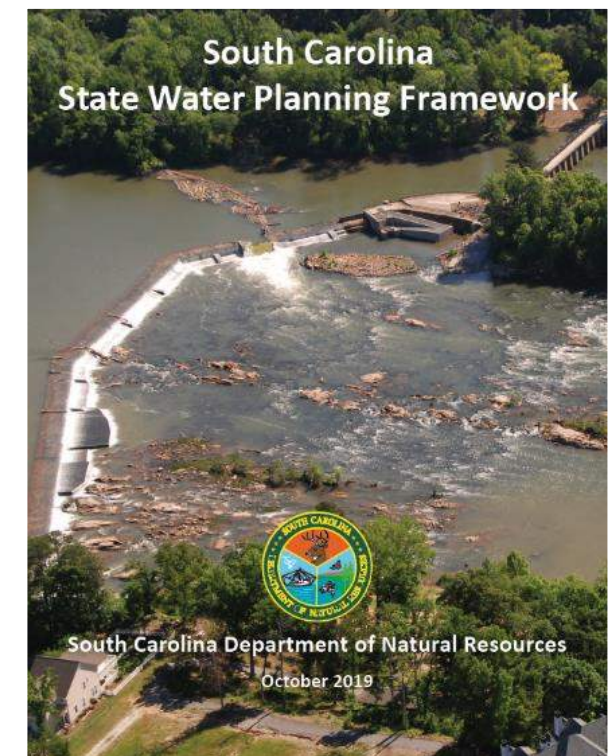
January 2025
Surface Water
Study Legislative
Committee
Meets

May 2025
Draft Saluda
River Basin
Plan

January and April
WaterSC Listening Sessions

Planning Process Advisory Committee

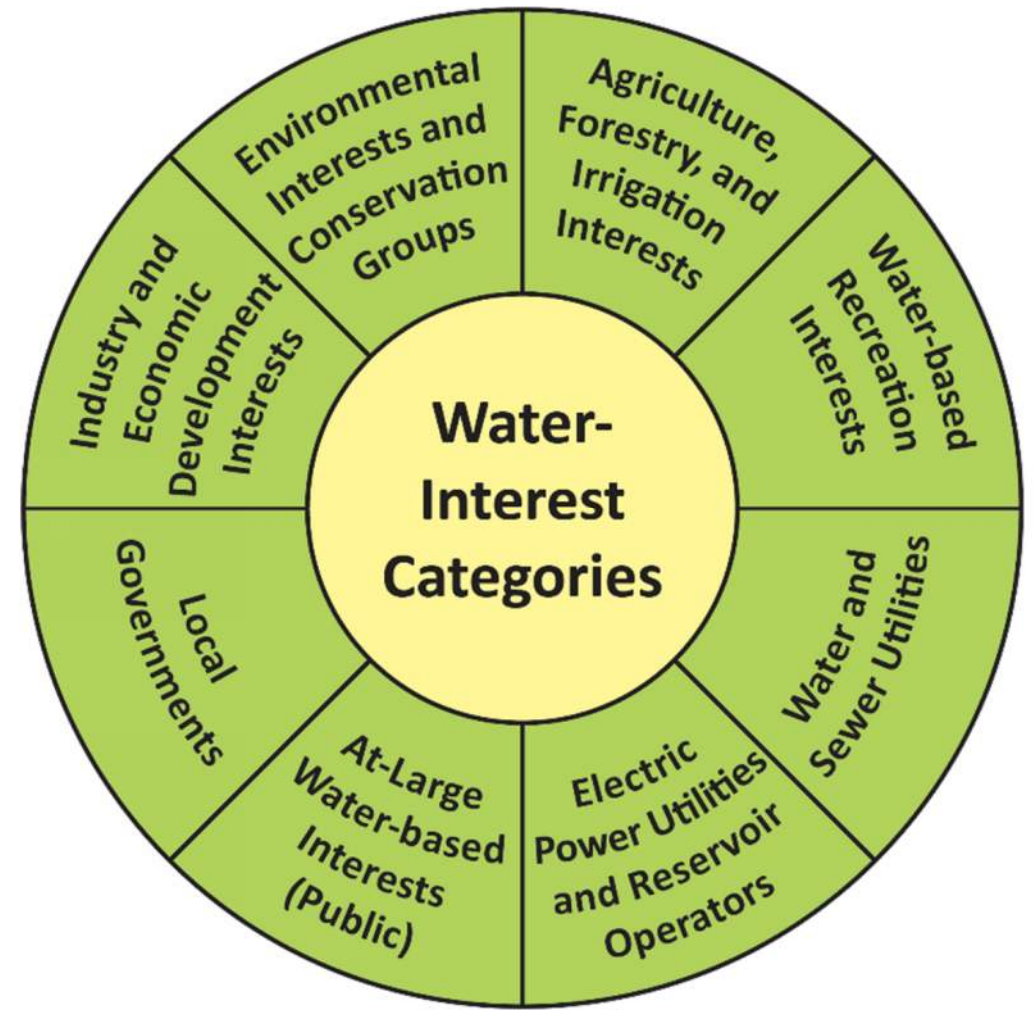
- Convened by SCDNR in March 2018.
- Purpose - develop a guidance document (Planning Framework) for developing River Basin Plans and for updating the State Water Plan.
- South Carolina State Water Planning Framework (Planning Framework) was published in October 2019 after an 18-month process.
- **New WaterSC committee has recently replaced the PPAC.**



Planning Framework is available for review and download at:
<https://des.sc.gov/programs/bureau-water/hydrology/water-planning>

Planning Framework calls for the formation of a River Basin Council (RBC) in each planning basin

- **Stakeholder-led team** responsible for developing the River Basin Plan
- Up to **25** members representing **8 interest categories**
- Governed by a set of Bylaws
- **Consensus based** decision-making process
- Chair and Vice-Chair elected by RBC



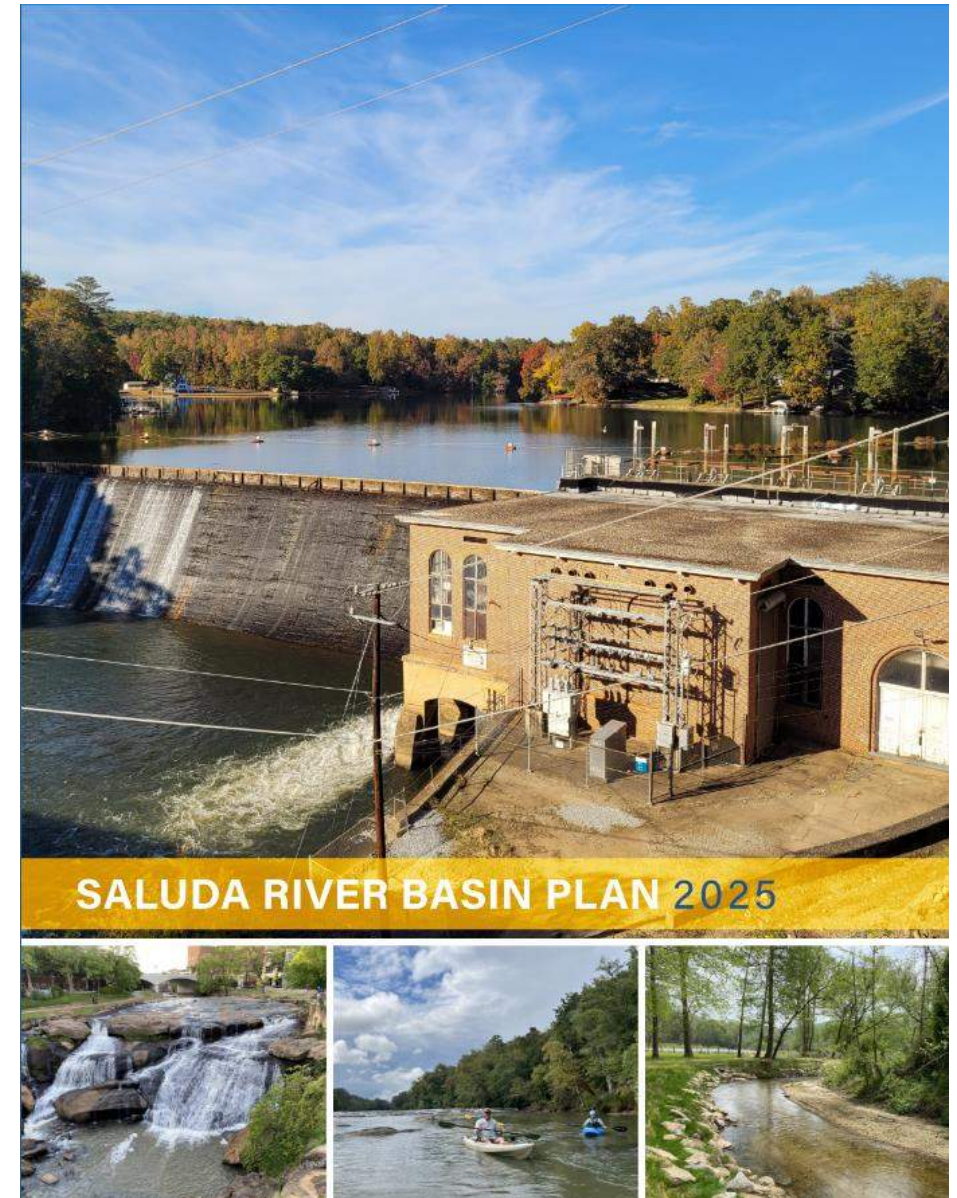
What is a River Basin Plan?

Key Outcomes

- Assesses **current** water supply and demand
- Identifies **future** water demand scenarios
- Identifies water management **strategies** to ensure supply meets or exceeds demand over the Planning Horizon

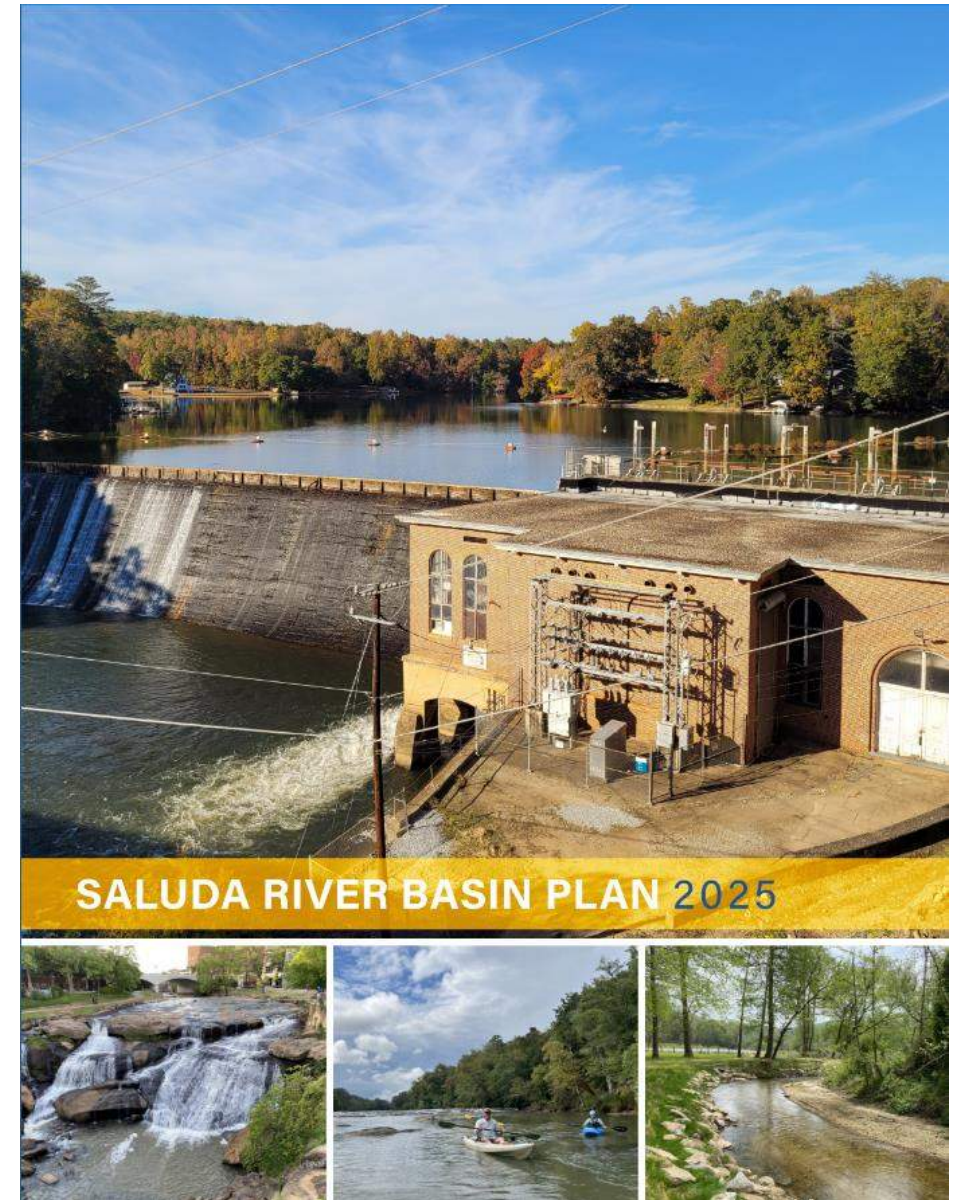
Features

- **Stakeholder-developed**
- Covers a **50-year** Planning Horizon.
- Considers both **surface water** and **groundwater**
- Supported by hydrologic data, models, and water-demand projections.



The current focus of River Basin Plans is on **water quantity**, with emphasis on drought conditions.

Subsequent phases of planning may evaluate **water quality** issues that are important in each river basin.



The Four Phases of the Planning Process

Phase 1 Understand Baseline	• Develop a vision statement and goals • Learn about the basin's water resources and modeling tools • Evaluate water demand projections
Phase 2 Assess Future Availability	• Evaluate current and future water availability issues • Identify and quantify potential water shortages through year 2070 for several water demand scenarios
Phase 3 Develop Strategies	• Develop and evaluate water management strategies • Recommend and prioritize strategies
Phase 4 Develop the Plan	• Develop legislative, policy, technical and planning process recommendations • Prepare the River Basin Plan that includes an implementation plan, Identifies drought response initiatives, and considers public input



River Basin Planning Current Status

Basin	Status	Completion Date
Edisto	Completed	June 2023
Broad	Completed	February 2024
Pee Dee	Completed	March 2025
Saluda	March 2023 – present	July 2025
Upper Savannah	July 2023 – present	June 2025
Lower Savannah/ Salkehatchie	November 2023 – present	September 2025
Catawba	CWWMG’s Integrated Resource Plan 2020 – present	2025
Santee	December 2024 – present	Fall, 2025
State Water Plan	October 2024 – present	December 2025

Stakeholder Participation

Edisto River Basin Council Field Trip



PPAC Meeting



Broad River Basin Council Meeting



Pee Dee River Basin Council Meeting



Edisto Basin Water Demand Projection Stakeholder Meeting



SWAM Model Stakeholder Meeting



Reedy River

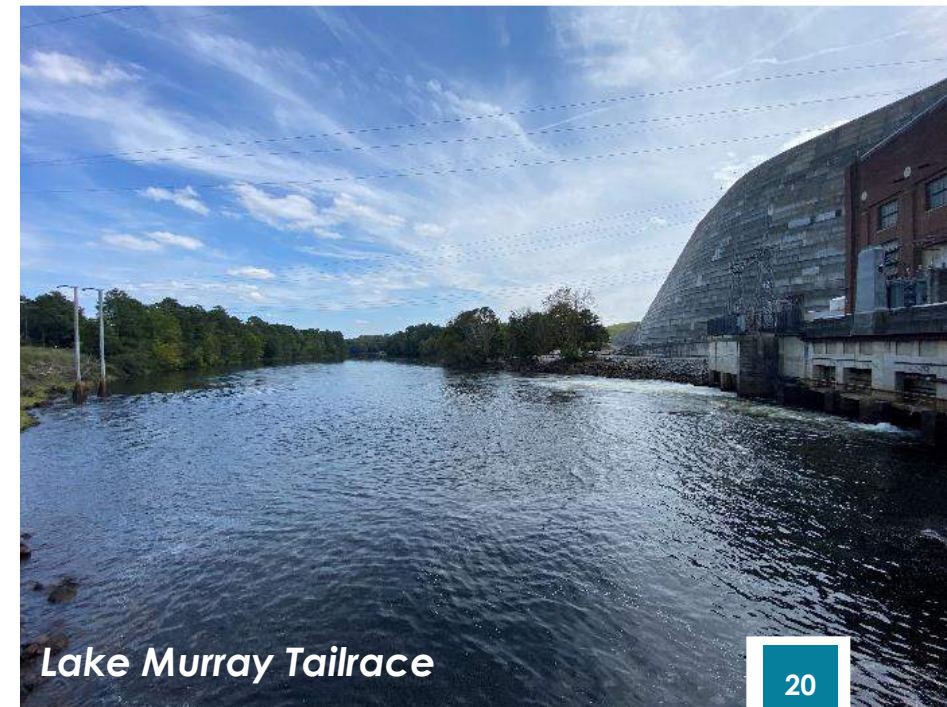


Draft Saluda River Basin Plan Highlights

Draft Saluda River Basin Plan Highlights

We Will Review:

- Current and projected water demands in the basin
- Results of current and future water availability assessment
- Streamflow ecology
- Extended drought scenario analysis
- Recommended water management strategies
- Other Plan recommendations and implementation approach
- Issues and challenges



Real People – Real Investment

- Long range planning is inherently hard
- Consensus takes tough conversations with a respectful tone
- Your Saluda RBC is very passionate and engaged
- Committed to next phase, active WaterSC participation
- 2200 hours of meeting time invested by RBC members!
 - *does not include drivetime, meeting prep time, follow up, or review of draft chapters*



Saluda RBC Vision Statement

A resilient and sustainably managed Saluda River Basin that balances human and ecological needs.



Saluda RBC Goals

1. Develop and implement an education and communication plan to promote the strategies, policies, and recommendations developed for the Saluda River Basin.

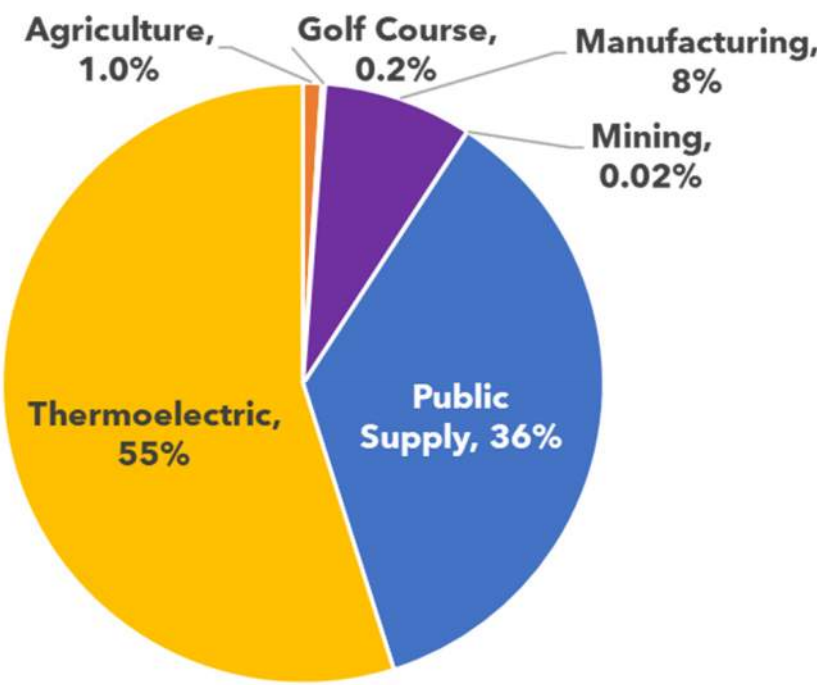
2. To perform a review and update of the plan every 5 years at a minimum or sooner should a significant event occur requiring plan update.

3. Apply science-based resource management & conservation strategies that consider resource availability & allocation.



Current Water Demands in the Basin

Water Use Category	Groundwater (MGD)	Surface Water (MGD)	Total (MGD)
Thermoelectric	0.0	171.2	171.2
Public Supply	0.04	111.9	112.0
Manufacturing	0.02	24.9	24.9
Golf Course	0.02	0.6	0.6
Agriculture	0.4	2.7	3.1
Mining	0.0	0.08	0.08
Total	0.5	311.4	311.9



Current Water Demands in the Basin

Water Use Category	Total (MGD)
Thermoelectric	171.2
Public Supply	112.0
Manufacturing	24.9
Golf Course	0.6
Agriculture	3.1
Mining	0.08
Total	311.9



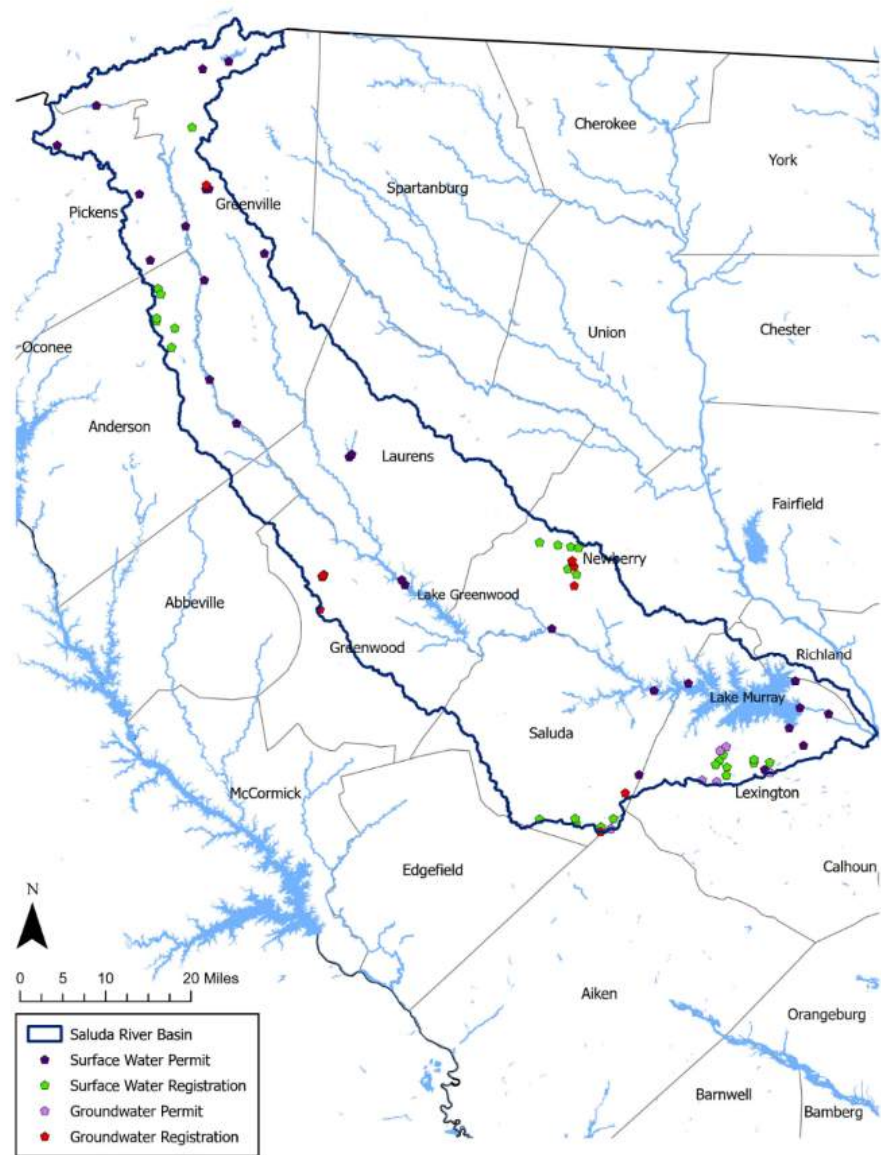
Scale Example 1:
An Olympic-sized swimming pool holds 0.66 MG. **Public Supply** throughout the basin would fill 170 pools in one day

Scale Example 2:
If the average flow rate of a garden hose is 15 gallons per minute, **golf course** demand of 0.6 MGD is approximately the flow rate of 28 garden hoses running in one day.



 Key Finding

Only 28 Percent of the Permitted and Registered surface water is currently being used in the basin

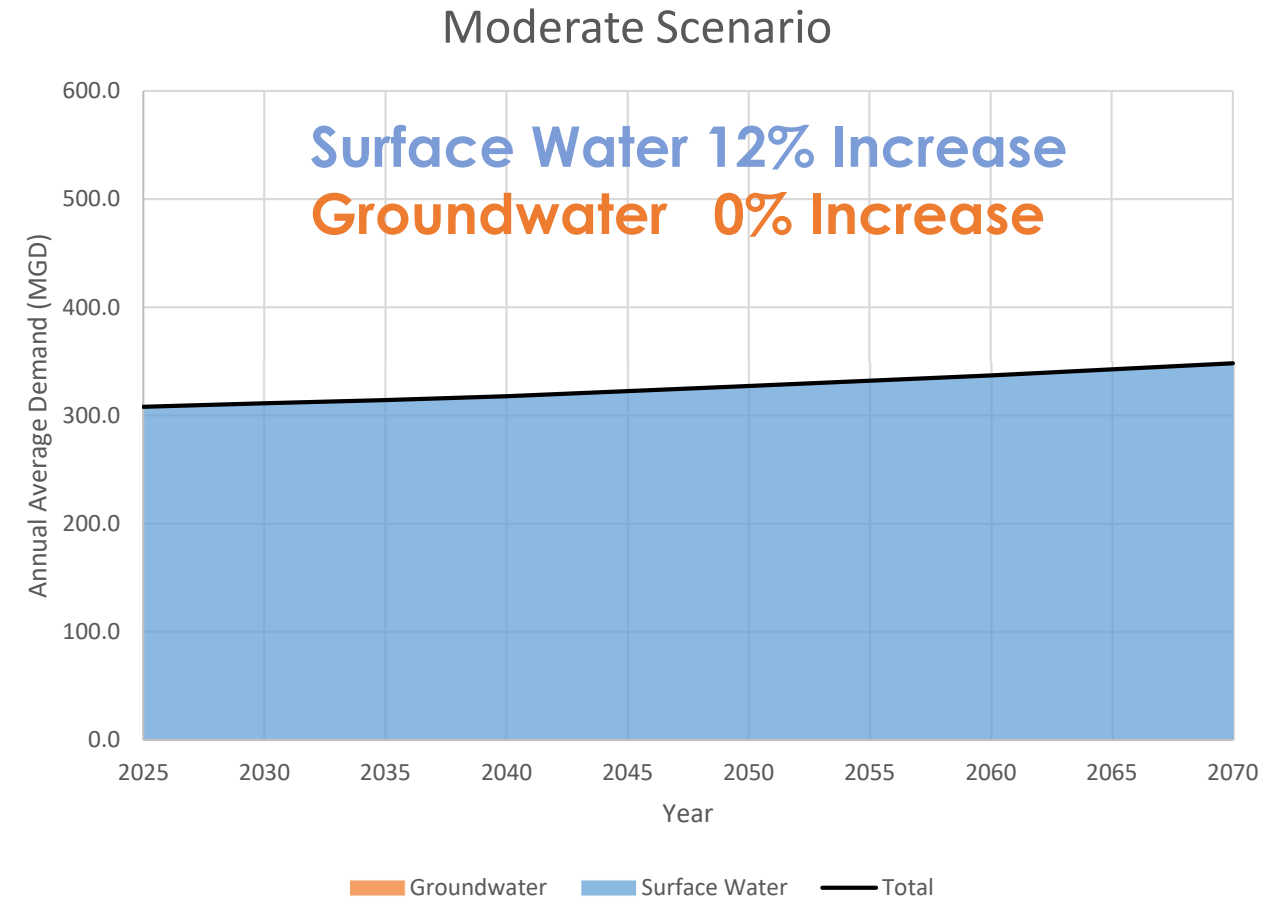


	Surface Water (MGD)
Currently Used	311.4
Permitted and Registered Amount	1101.6
Percent of Total Permitted and Registered Amount Currently in Use	28%

Future Water Demand Scenarios for the Basin

Moderate Demand Scenario
demands increase 40 MGD
from 2025 to 2070

2070 surface water
demands for this scenario
are 32% of Permitted and
Registered amounts

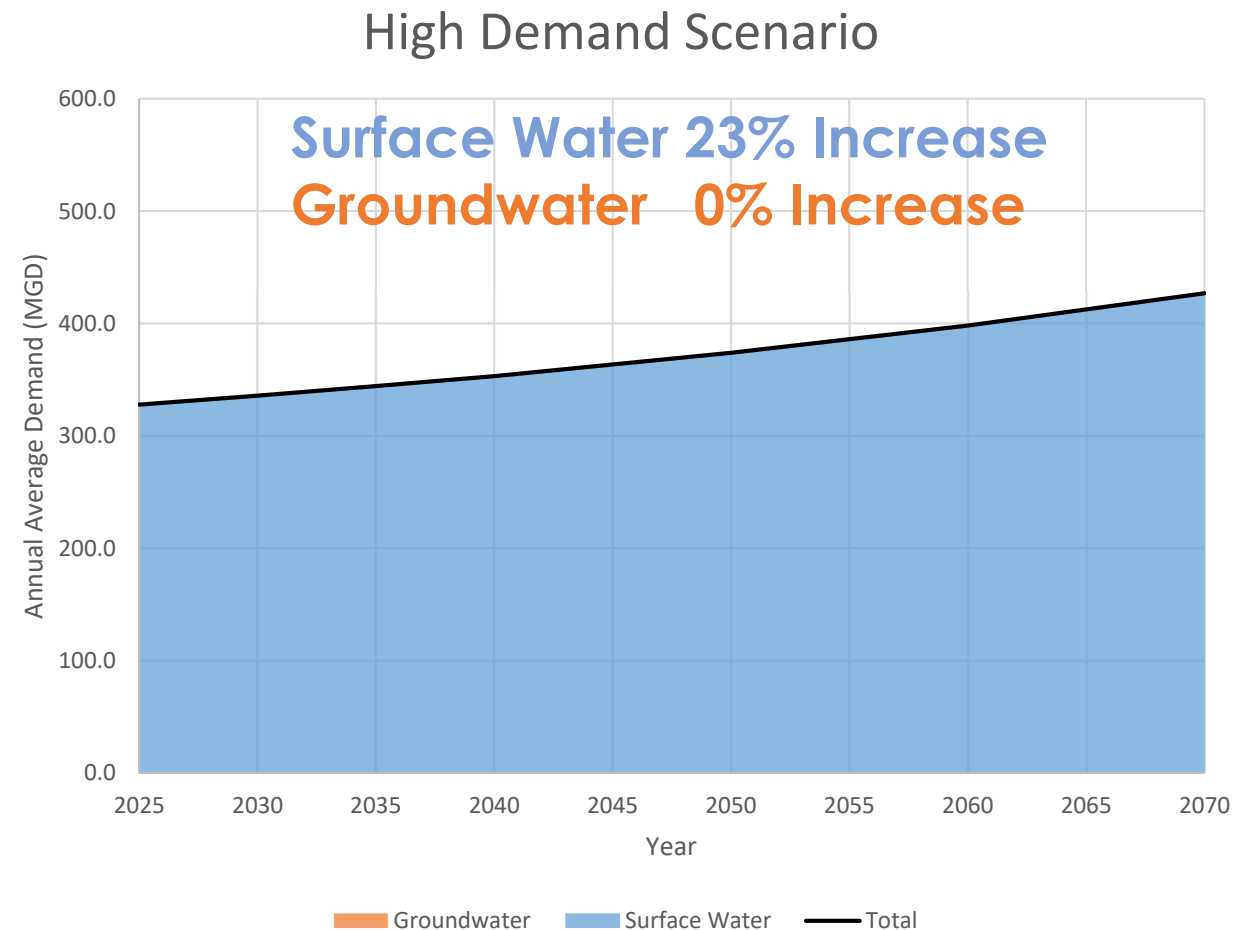


Note: Groundwater demands, projected at a constant average annual demand of 0.5 MGD are too small to be seen on this chart.

Future Water Demand Scenarios for the Basin

High Demand Scenario
demands increase 99 MGD
from 2025 to 2070

2070 surface water
demands for this scenario
are 39% of Permitted and
Registered amounts

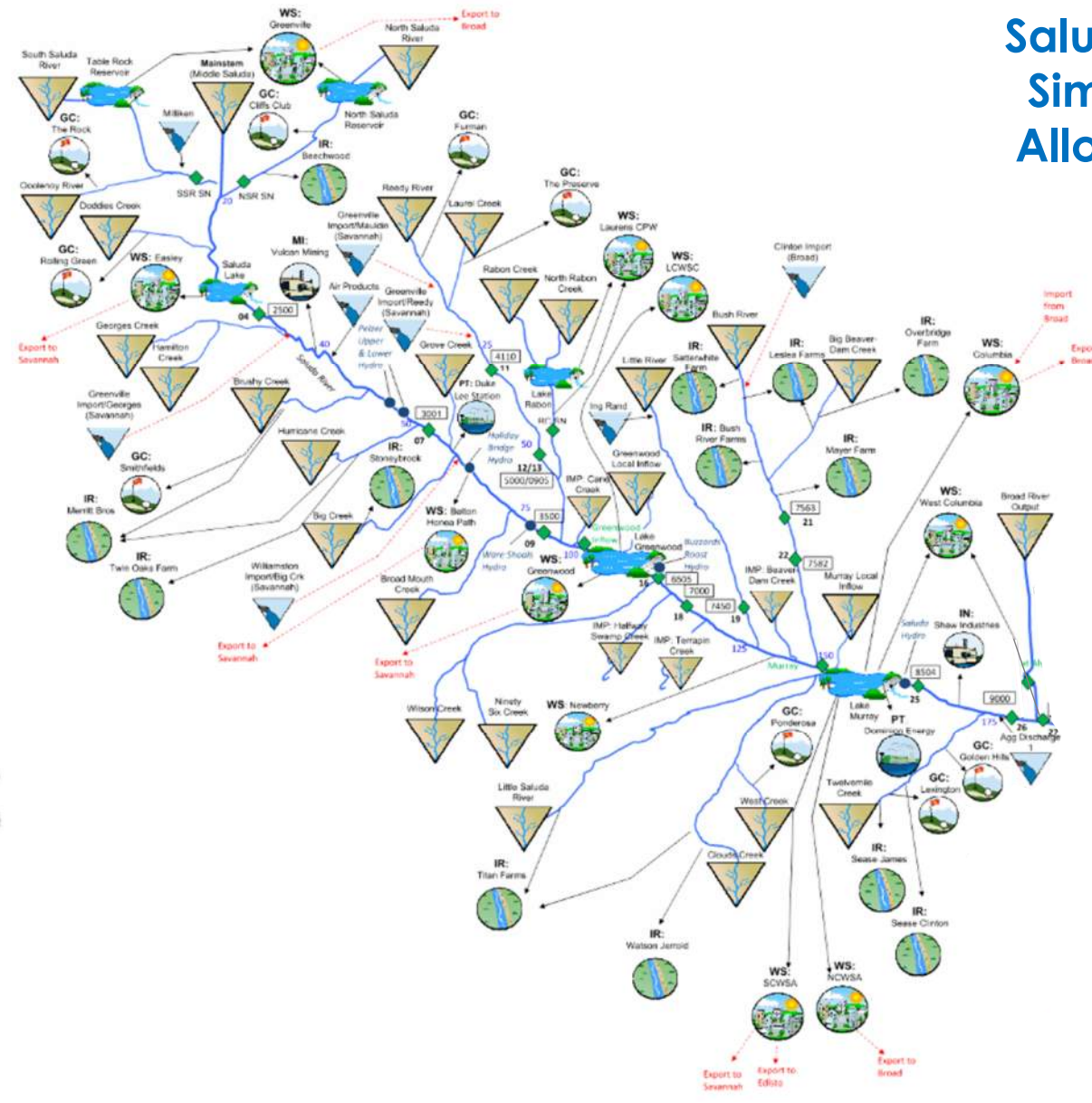


Note: Groundwater demands, projected at a constant average annual demand of 0.5 MGD are too small to be seen on this chart.

Current and Future Water Availability Assessment

A surface water model was used to compare available supply to current and projected water demands

Saluda River Basin Simplified Water Allocation Model (SWAM)





Surface Water Key Findings

- Surface water availability modeling suggests a low risk of water supply shortages under the Current Use Scenario.
- The surface water resources of the basin are over-allocated based on existing permit and registration amounts without considering any requirements for minimum instream flows.
- Given current climate conditions and existing basin management and regulatory structure, basin surface water supplies are predicted to be adequate to meet increased demands.
- At 2070 demand levels, shortages are projected for three agricultural water users under the Moderate Demand Scenario and two additional agricultural water users and one golf course experience shortages under the High Demand Scenario.



Extended Drought Scenario Analysis

- **Objective:** Given the uncertainty about future climate conditions and to further evaluate water supply resiliency in the basin, the SWAM model was used to test additional, **hypothetical drought conditions** using the 2070 High Demand Scenario water demands.
- The extended drought scenarios tested:
 - **Scenario 1:** Repeating the 24-month period covering the drought of record (2007 through 2008)
 - **Scenario 2:** Repeating the 24-month low-flow period covering 2011 through 2012



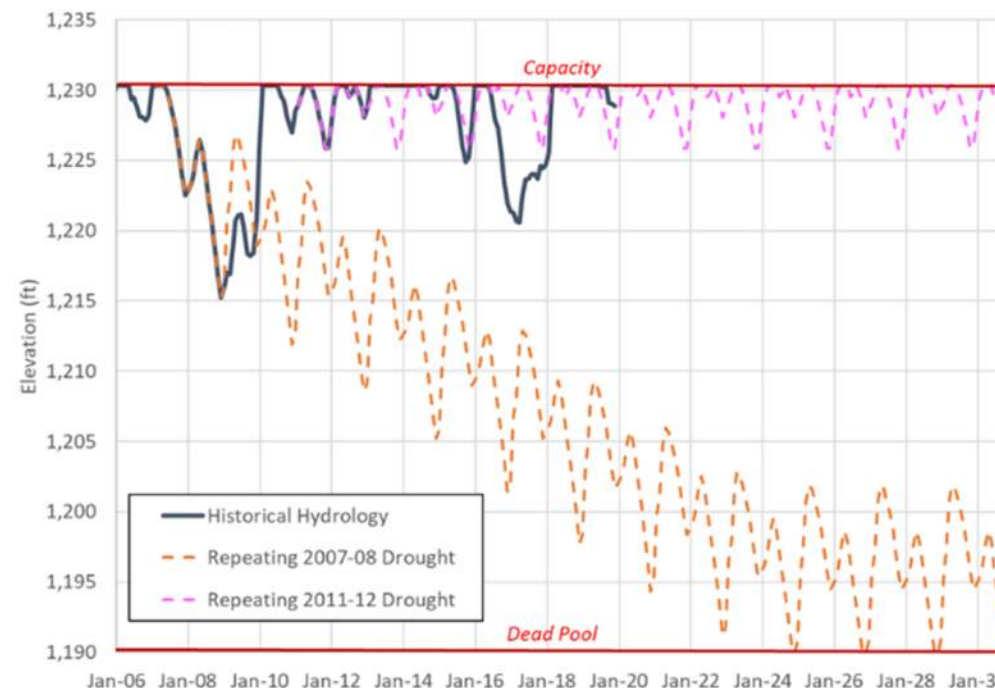
Extended Drought Scenario Analysis

Key Finding

Results show Lake Murray and Lake Greenwood would not **experience extended drawdowns** under the more severe drought scenarios.

Table Rock and North Saluda Reservoirs were more impacted by extending the 2007-2008 drought; however, Greenville Water's combined portfolio of three sources (including Lake Keowee) would continue to be able to meet demands under these conditions.

North Saluda Reservoir
simulated water levels for
extended drought
scenarios 1 and 2

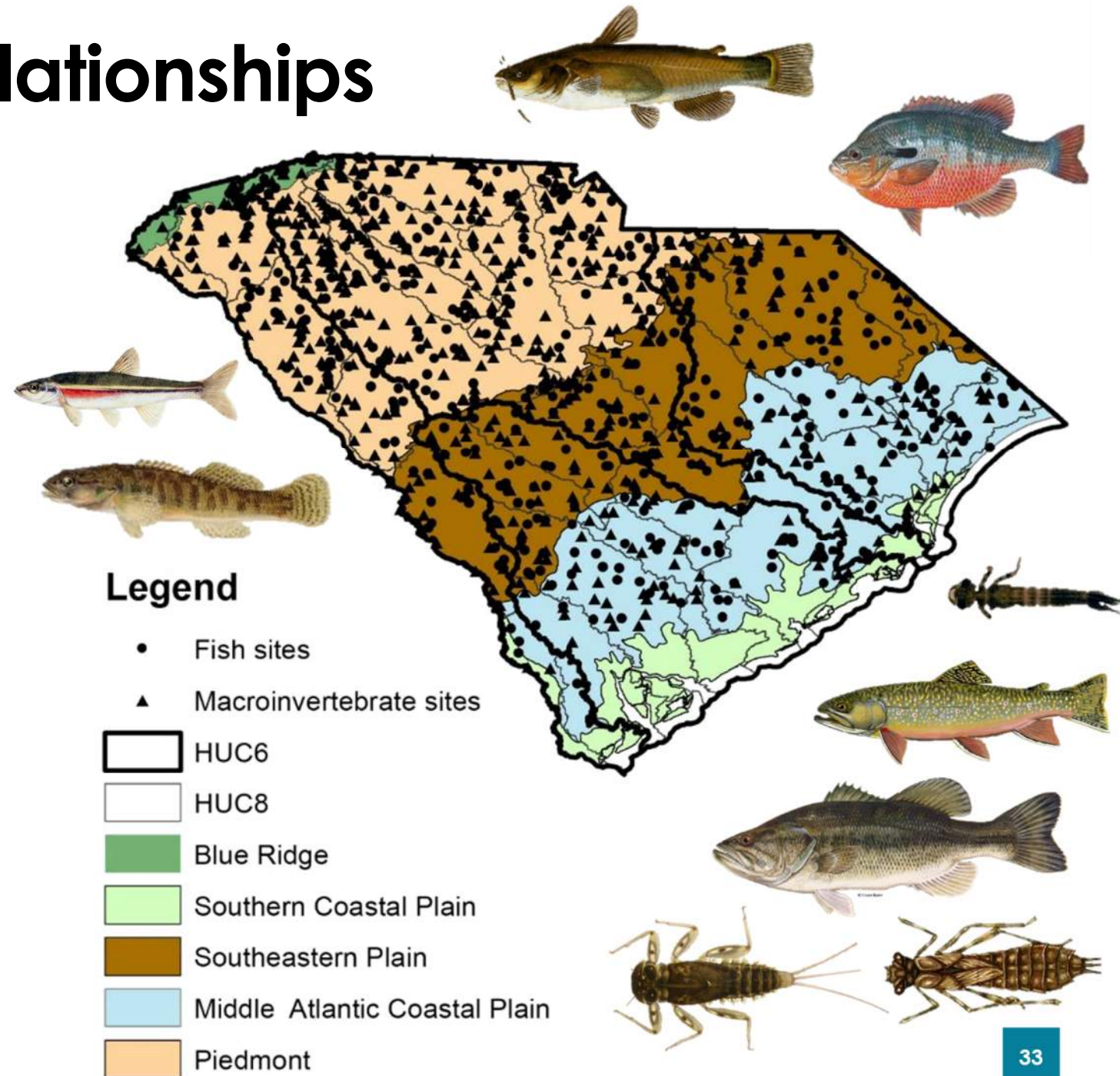


Scenario 2
(repeat of 2011-2012 drought)

Scenario 1
(repeat of 2007-2008 drought)

Streamflow-Ecology Relationships

Objective: Identify relationships between river flow and aquatic habitat suitability to better inform water flow standards throughout the state and serve as a tool supporting informed decision making in the river basin planning process.



Streamflow-Ecology Relationships

Key Finding

Simulated flow metrics for the Moderate and High Demand 2070 Scenarios **result in low risk for ecological integrity and tolerance.**

This does not consider potential negative impacts that that increased development could have on flow regimes and the ecological integrity of streams and rivers in the basin.

There not enough data to evaluate the potential impact of changes in flow on ecological health in the Blue Ridge portion of the basin.



Surface Water Management Strategies

Portfolio of Demand Side Strategies



Municipal Strategies (Examples)

- Update, and implementation of drought management plans
- Public education about water conservation
- Conservation pricing structures
- Residential water audits
- Landscape irrigation program and codes
- Leak detection and water loss control program
- Reclaimed water programs
- Time-of-day watering limit

Agricultural Strategies (Examples)

- Water audits and nozzle retrofits
- Irrigation scheduling
- Soil management
- Crop variety, type, and conversion
- Irrigation equipment changes
- Future Technologies

Some of these strategies are already in practice throughout the basin.

Saluda RBC Recommendations

Example Technical and Program Recommendations

Future modeling should incorporate scenarios that further examine future uncertainties, such as changes in rainfall and hydrology, alternative population growth scenarios, and potential impacts of future development on runoff.

Future planning efforts should include evaluation of surface water quality and trends, including nutrient loading and sedimentation.

The legislature should fund, and appropriate state agencies and partners should **establish a mesoscale network of weather and climate monitoring stations**



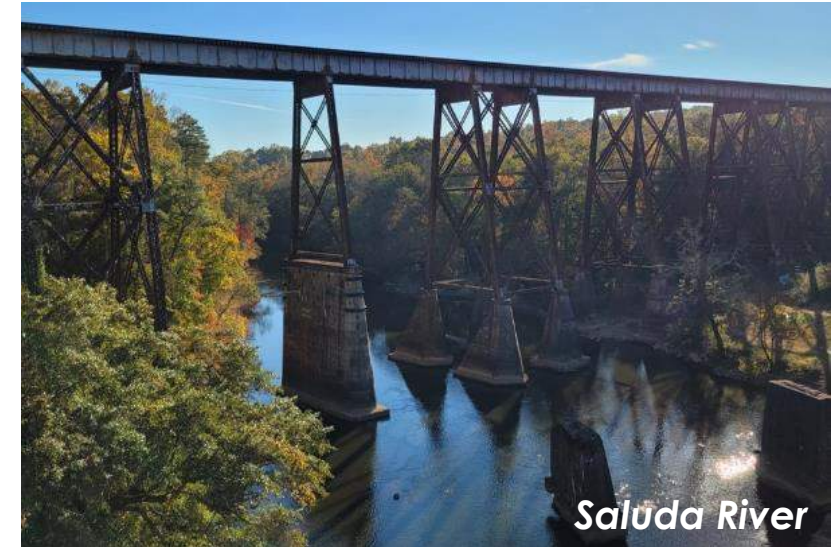
Saluda RBC Recommendations

Planning Process Recommendations

SCDES should organize **annual coordination meetings of all RBCs**.

SCDES should form an **Upstate Interbasin River Council** consisting of members from the Broad, Saluda, and Upper Savannah RBCs.

More outreach and education is needed to increase awareness with the public around watershed-based planning.



Saluda River



Terry Creek



ReWa Mauldin Road WRF

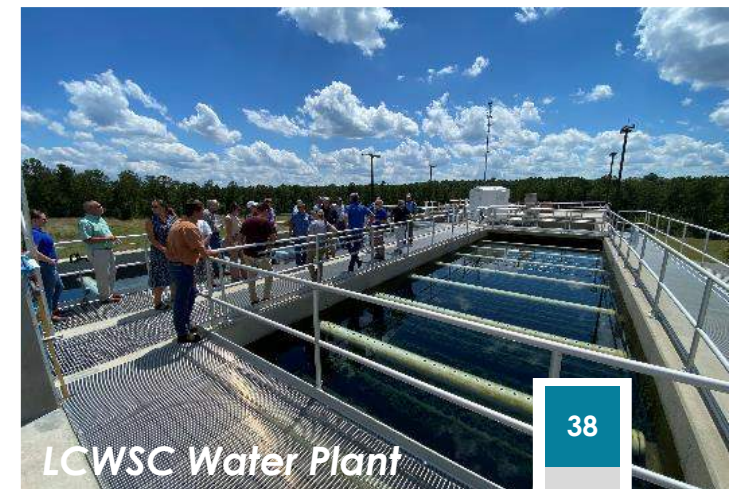
Saluda RBC Recommendations

Example Policy, Legislative, and Regulatory Recommendations

Water utilities within watersheds should consider **partnerships and collaboration opportunities**.

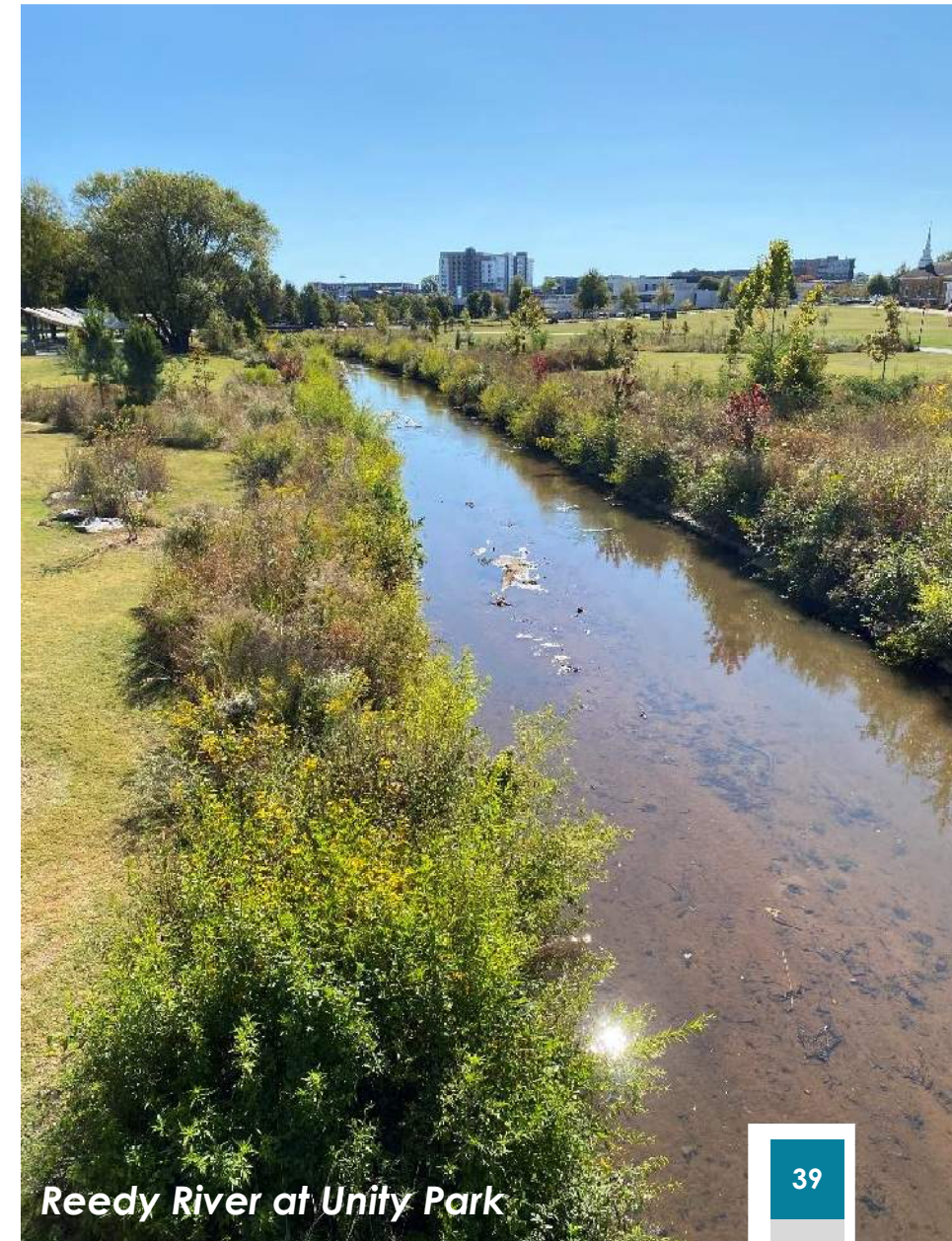
The South Carolina Surface Water Withdrawal, Permitting, Use, and Reporting Act should allow for **reasonable use criteria to be applied to all new surface water withdrawals**, like those that currently exist for groundwater withdrawals.

Current laws that allow for regulation of water use should be **improved so that they are enforceable and effective**.



Identified Issues, Challenges, and Threats

- Surface water resources in certain parts of the basin are over-allocated based on existing permit and registration amounts.
- There is a 14-mile section of the Saluda River below Saluda Lake that has been designated as hydrologically impaired, impacting aquatic life and recreational uses.
- No surface water users in the Saluda River basin are subject to Minimum Instream Flow requirements under the SC Surface Water Withdrawal Law.
- Potential threats and uncertainties include:
 - The impact of changing land use on flow
 - Reservoir sedimentation
 - More severe droughts



Reedy River at Unity Park

Implementation Plan

The RBC-developed implementation plan includes specific short-term (5-year) and long-term strategies and actions to address the following five objectives:

1. Improve water use efficiency to conserve water resources
2. Communicate, coordinate, and promote findings and recommendations from the River Basin Plan
3. Improve technical understanding of water resource management issues
4. Protect water resources
5. Improve drought management
6. Promote engagement in water planning process



Example Implementation Strategy

Strategy	5-Year Actions	Responsible Parties	Budget
Objective 1. Improve water efficiency to conserve water resources.			
A. Municipal Conservation	Public Education of Water Conservation 1. Identify funding opportunities (Years 1–5). 2. Survey to understand the extent of AMI/AMR use amongst utilities (yrs 1-2). 3. Encourage water utilities to conduct a water loss/leak detection audit using AWWA M36 Method, establish a baseline, and continue to measure every 2-3 years (yrs 1-2). 4. Work with water utilities to determine how water is being used and understand where conservation measures may have the most impact (yrs 2-3). 5. Implement outreach and education program about recommended water management practices and funding opportunities (yrs 1-5) 6. Individual water users to implement conservation practices (yrs 3-5) 7. Develop survey of practices implemented, change in per capita use, funding issues, and funding sources utilized (yr 5)	RBC with support of SCDES and contractors – Identify funding opportunities and develop information to distribute. Conduct surveys and analyze results. Municipal Withdrawers — Implement appropriate strategies and seek funding from recommended sources, as necessary.	Costs of implementation will vary by municipality according to current program capabilities and financial means. Chapter 6.1.6 provides discussion of cost-benefit of individual strategies. Ongoing RBC meeting budgets include the cost of RBC support activities.

Call to Action

Implementation of the identified strategies and actions requires support from all who have a vested interest in water resources, including:

- **Water Users** – Public Water Suppliers, Power Companies, Industry, Agriculture, Golf Courses, Fishing and Recreational Users, **and You!**
- **State and Federal Agencies** – SCDES, SCDNR, USGS, SCOR, USACE, GAEPD, etc.
- **Conservation Groups** – The Nature Conservancy, Upstate Forever, and others.



**This is Just the
Beginning**





Submitting Comments on the Draft River Basin Plan

The Draft Saluda River Basin Plan, Executive Summary, and a 2-Page Summary Sheet are available at the SCDES Water Planning web page.

QR Code Link



Comments can be e-mailed to Dr. Tom Walker at:
scwatermodels@clemson.edu

Or mailed to:
SC Water Resources Center
Office 105-E
509 Westinghouse Road
Pendleton, SC 29670
Attn: Dr. Tom Walker

Comments must be received by: June 30, 2025

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Draft Saluda River Basin Plan

Home > Programs > Bureau of Water > Hydrology > Water Planning > River Basin Planning > Saluda Basin Planning > Draft Saluda River Basin Plan

Draft Upper Savannah River Basin Plan Document Links

- [Draft Saluda River Basin Plan – Full Report](#)
- [Draft Saluda Basin Plan – Executive Summary](#)

Public Meeting Information

Date and Time:
May 29, 2025, 6:15 PM – 8:00 PM

(Attendees are also welcome to arrive early for a walking tour of ReWa's new Swamp Rabbit Trail Extension, beginning at 5:15 PM.)

Location:
Graham W. Rich Operations and Training Center
560 Mauldin Road
Greenville, SC 29607
[Directions via Google Maps](#)
[ReWa Parking Map](#)



SALUDA RIVER BASIN PLAN 2025 DRAFT



Public Comments and Q&A with the RBC