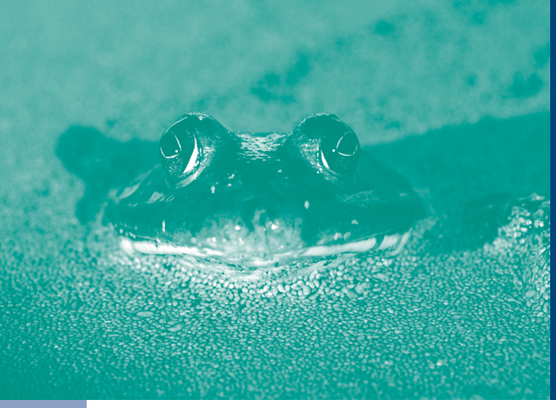


The Resource

Special Edition
SAVANNAH RIVER

A Publication of the City of North Augusta
Stormwater Management Department

Savannah River Basin

As we go about our work and raising our families each day, the Savannah slowly meanders by us quietly, sometimes appearing untouched by the goings on of South Carolinians' and Georgians' on its banks. But that has never been the case and certainly is not now. Many decisions are being discussed about the Savannah, some we hear about in the news, others we don't. Over the past few years the Savannah River has been poked and prodded by scientist for all types of information and it has become the center of debates about water withdrawal, water quality and economic growth, harbor deepening, utility relicensing, salt water intrusion, ecological sustainability and drought management. Every decision under consideration impacts our watershed in one way or another. Many of them could help or hinder economic growth, job creation, water use and long-term water resource sustainability for our region.

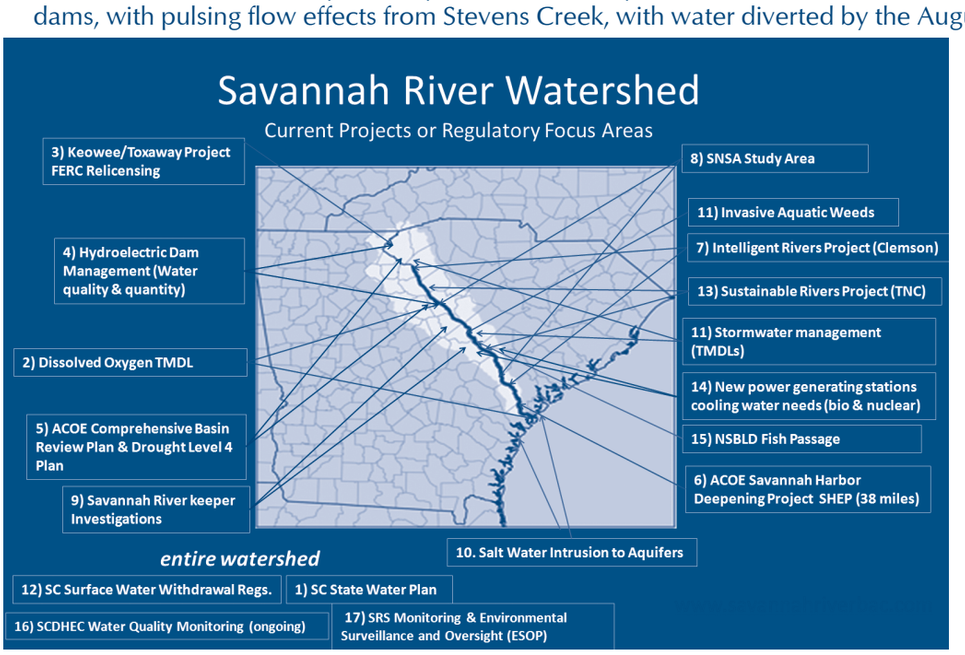
A basin is determined by the lay of the land and the area where rainfall, snow or ice melt flows to. The Savannah River Basin (SRB) includes parts of North Carolina, Georgia and South Carolina. It is divided into three larger sub-basins, the Tugaloo/Seneca, the Upper Savannah and the Lower Savannah that are comprised of 35 smaller watersheds. The smaller sub-basins are streams and creeks that flow to one point and that point ultimately discharges into the Savannah River. The entire basin covers about 2.9 million acres of land. North Augusta falls within the upper part of the Lower SRB which itself is 1.3 million acres (2,123 square miles) and has 15 smaller watersheds. If you were to fly from the upper reaches to the coast you would see that the SRB is vast and has many variations of use between forests, urban cities, industrial areas, rural communities and farmland. The people within the SRB all depend on the Savannah River to provide drinking and irrigation water, power generation, wastewater recycling, a place for rainfall to flow, and recreation. With population expanding in the southeast, properly planning and managing water resources now will be critical for future generations.

Savannah River Basin Advisory Council

To bring those of us that live in the watershed into the conversations about the Savannah River basin, the South Carolina Department of Health and Environmental Control (SCDHEC) and the Department of Natural Resources (SCDNR) formed the Savannah River Basin Advisory Council (SRBAC) in 2010. SCDHEC and SCDNR understand that the issues that affect this wonderful resource must include the opinions of those of us that live, work and play in the watershed. The SRBAC is the first South Carolina watershed basin advisory council to date and the state is using it as a pilot program that will be implemented for each of the eight watersheds in the state. Local knowledge about water use and trends is the key to making sound decisions about water. The SRBAC is made up citizens, researchers, companies and local governments from the top of the basin to the bottom. To give members different perspectives of concerns in the Savannah River Basin, early meetings were held in the watershed in North Augusta, Anderson and Beaufort. They are now held in Columbia.

Current Issues Under Debate

The Savannah River is a dynamic system that is always on the move even with the upper portions impounded by five dams, with pulsing flow effects from Stevens Creek, with water diverted by the Augusta Canal, and with the Savannah being impounded again by the Lock and Dam. Most of these devices and their management practices are being reviewed along with water distribution, permitting, water quality and transformation of the lower reaches of the basin. In some way, each of the decisions being hashed-out potentially can affect our community. It is important for citizens to be aware, ask questions and become involved in the discussions. On page 2 are brief descriptions of each issue currently under review in the watershed.



More detailed information is available at the SRBAC website: www.savannahriverbac.com.

Savannah River Issues Under Debate	
1. State Water Plan for SC	Neighboring states are ahead of SC in developing long term strategic plans for managing water resources. New initiatives are currently underway to develop a state "umbrella" plan, specific regional water plans and develop a structure for stakeholder involvement. Still to be addressed are getting funding and having the resultant plan be enacted by the SC legislature to ensure adequate resources are applied.
2. TMDL for Dissolved Oxygen	The Total Maximum Daily Load (TMDL) for dissolved oxygen will affect dischargers on both sides of the Savannah River and they will soon be in place. These regulations will impact companies, utility providers, cities, towns and individuals in the watershed. Georgia and SC have used the river to discharge wastewater and stormwater for generations. Now, with water quality in question, the states and stakeholders are sitting across a table negotiating on how to allocate the resource. Many dedicated individuals are working to resolve the distribution of load allocations.
3. Lake Keowee / Toxaway (KT) Project	Lake Keowee and Toxaway (KT) are near the headwaters of the Savannah River system. The KT Project was licensed to run its facilities in 1966 for 50 years (in conjunction with the Oconee Nuclear Plant) by the Federal Energy Relicensing Commission (FERC). It is time to renew the agreements and permits. The Oconee emergency cooling water comes from Keowee and Jocassee. Below KT are the three dams; Hartwell, Russell, and Thurmond. During the last extreme drought, Duke energy stopped inflows to Lake Hartwell thus reducing the inflow to the SRB. As part of the relicensing, Duke energy has upgraded a hydrologic model of the SRB and is conducting an economic survey at Thurmond. The relicensing of these facilities requires a multi-year process with preliminary meetings beginning in 2009 with the final application due in 2014.
4. Drought Response Plan (Phase II Drought Contingency Plan Study) ACOE	With the number of communities depending on the SRB, unregulated low drought flows can cause irreparable environmental and economic harm. The last two droughts have been harsh and have resulted in many "lessons learned" for everyone. It is important to update the 2006 plan (current plan) to take into account these lessons, while still meeting needs of each community to allow the basin to endure a multi-year drought without exhausting the required conservation pools of the lakes (see item 5). The SCDHEC, SCDNR and GA EPD have indicated to the ACOE that this is their top priority.
5. **Level IV Environmental Assessment:**	The current drought plan is not specific on what happens should an extreme multi-year drought exhaust the conservation pools (level IV) of the 3 lakes ("stay flows at 3600 cubic feet per second (cfs) as long as possible and then input equals output"). This environmental assessment attempts to define this time period and the resulting effects. The draft assessment is complete and has been approved and it should be made available to the public in the next few weeks.
6. Savannah Harbor Expansion Project (SHEP)	This ACOE transportation project proposes to dredge 38 miles of the Savannah 4-8 feet deeper to meet the logistics of shipping and receiving of goods from extra-large container ships. Many economic and environmental concerns for and against this project have been in the news and apparently will result in court action. Deepening the harbor directly impacts North Augusta since the SHEP Plan includes stipulations that will affect the Lock & Dam (NSRBLD).
7. Intelligent Rivers Project:	A project to develop technology to monitor the river basin continuously and in real-time. Clemson has been awarded three million dollars ($3M) by the National Science Foundation to set up a four year study to monitor water quality and flow of the entire Savannah River basin.
8. Southeastern Natural Sciences Academy (SNSA)	The SNSA's Savannah River at Risk project was initiated to help develop a scientifically based understanding of the Savannah. Through federal grants, stakeholder donations and funds from local communities, SNSA is monitoring water quality and biological processes occurring in the SRB. The information and findings generated by the studies are being used by GA, SC, the EPA and ACOE to help develop regulations or policy changes.
9. Savannah River Keeper	Recently this organization has been working to discover what caused two large fish kills in streams in Ga. They continue to monitor water quality, educate citizens and promote protecting the river.
10. Salt water intrusion:	The enormous volume of water being pumped from the ground to provide drinking water to citizens on the coast has literally pulled saltwater into the underground aquifers. This results in higher costs to treat water for drinking, a need for deeper wells or halting more wells, building desalination plants, or piping water from the Savannah River (ex. Hilton Head). SCDHEC and GA EPD are working together to addresses coastal population growth and the needs for water.
11. River maintenance and management:	Aquatic weeds along the Augusta/North Augusta reach are impacting recreational use of the riverfront. Augusta Ports Authority is working with local communities to address the issue.
12. SC Surface Water Withdrawal Permitting	A new permit is in the SC legislature for approval. Any unpermitted company, farmer or community needing water will be required to apply for a permit with new requirements.
13. TNCs Sustainable Rivers Project (Eight US Rivers)	The Nature Conservancy, its partners and the ACOE are testing techniques in the SRB to balance optimum ecological efficiency with dam operations (releases to mimic seasonal flow-patterns).
14. New Savannah Bluff Lock & Dam (NSBLD) and a Fish Passage	The SHEP Plan (item 6) includes stipulations that will affect the Lock & Dam. A proposed fish ladder passage to offset (mitigate) the SHEP deepening project would be built around the lock & dam to let fish pass to the rapids (bluffs) for spawning ($30M cost estimate). The 74 year old dam is in need of repairs. Local communities were told the dam would be repaired and turned over to them to maintain years ago, but Congress has not allocated the $22M needed to make the repairs.
15.–17. Energy, drinking water and routine monitoring	All decisions must take into account that millions of gallons of water from the Savannah are required every day to bring power to our homes and water to our faucets. SCDHEC continues its monthly water sampling in the SRB. The data is used to support permit decisions. Others do as well including the Savannah River Site and SC Environmental Surveillance and Oversight (ESOP).

Upcoming Events in North Augusta!

March 10, 2012	9 a.m. - 12 p.m.	**Electronics Recycling Event**, Kroger Shopping Center, Knox Ave
April 14, 2012	10 a.m. - 2 p.m.	**Kids Earth Day 2012**, Brick Pond Park
April 21, 2012	9 a.m. - 5 p.m.	**6th Annual Yellow Jessamine Festival**
May 19, 2012	10 a.m. - 1 p.m.	**Household Hazardous Waste Collection Event**, Kroger Shopping Center, Knox Ave

For additional information contact:
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North Augusta
South Carolina's Riverfront