

Reedy River

Water Quality Group



2019 PROGRESS REPORT





WHAT IS THE REEDY RIVER WATER QUALITY GROUP?

The Reedy River Water Quality Group (RRWQG) has one mission. We want to protect, preserve, and improve water quality in the Reedy River and its tributaries, known as the Reedy River watershed. Since 2015, local city and county agencies, the regional water resources recovery facility, homeowners groups, conservation groups, business organizations, and area citizens have worked together under the umbrella of the RRWQG toward reducing the amount of nutrients flowing into the river. More than 30 entities are all stakeholders in the water quality of the Reedy River watershed, from its headwaters in Travelers Rest to the mouth of Lake Greenwood. They all have a stake in reducing the amount of nutrients entering the river and complying with a section of our nation's Clean Water Act whose intent is to identify and restore impaired waters. There are hundreds of impaired water bodies around the country, but the approach that the RRWQG is taking to restore the Reedy River watershed is exceptional, shared by a handful of watersheds.



What activities are going on TODAY?
Check our website www.cleanreedy.org

LOCAL ENGAGEMENT, TAILORED WATER QUALITY APPROACH

For most impaired water bodies, the State or Federal governments write a prescriptive watershed plan requiring actions for compliance. For the Reedy River, the State is a partner and representatives from the local stakeholder organizations are developing the water quality plan by actively engaging in the process. This means that the Reedy River watershed plan is being crafted by people who live and work close to the Reedy River, the people who best understand the river environment, its uses, its potential, and its impact on the local economy.

The process is hands-on and sleeves rolled up. The multi-year work is being done by committees whose participants represent the stakeholders and who bring technical expertise, knowledge of the watershed, resources, or just a commitment to a better Reedy River. The committees work together to deliver work products, and to make sure that the work is aligned and the plan stays on schedule. Since the RRWQG was created in 2015, the committees have worked to achieve milestones that mark progress toward improved water quality.

The three executive sponsors—the City of Greenville, Greenville County, and Renewable Water Resources-- oversee the process, and a facilitator, WQR, manages the committee work.

Community & Conservation Groups

- Boyd Mill Pond HOA
- Conestee Foundation
- Connect Lake Greenwood
- Friends of the Reedy River
- Greater Greenville Association of Realtors
- Greenville Chamber of Commerce
- Home Builder's Association of Greenville
- Preserving Lake Greenwood
- United Utilities
- Upstate Forever
- Waterloo Water Wizards

City, County & University Partners

- City of Greenville
- City of Mauldin
- City of Simpsonville
- City of Travelers Rest
- Greenville County
- Greenwood County
- Laurens County
- Renewable Water Resources
- Greenville County Soil & Water Conservation District
- Laurens County Water & Sewer Commission
- Clemson Extension Service Greenville County

State, Regional & Federal Partners

- Appalachian Council of Governments
- Greenville Area Development Corporation
- South Carolina Department of Transportation
- SC Department of Health & Environmental Control
- South Carolina House of Representatives
- South Carolina Senate
- US Environmental Protection Agency Region IV

COLLABORATION TO SUPPORT THE CLEAN REEDY VISION

Since its formation, a hallmark of the watershed planning process has been the collaboration of the diverse stakeholders: environmental and business groups and government agencies all working toward the goal of the restored watershed. During 2019, that stakeholder collaboration strengthened:

- Greenville County, Laurens Water and Sewer, the City of Greenville, Greenwood County, and Renewable Water Resources are funding additional river monitoring stations, a weather monitoring station, and a monitoring buoy in Lake Greenwood to extend the dataset available for the water quality model and watershed-based plans.
- City of Greenville, EPA Region IV, Greenville County, Home Builders Association, ReWa, SCDHEC, Upstate Forever, and Greenville County are collaborating on the water quality model setup and calibration.
- Upstate Forever, ReWa, Clemson University Center for Watershed Excellence, Greenville Soil and Water Conservation District, Greenville County, City of Greenville, Friends of the Reedy River, and citizens developed a report card for health of the Reedy River. You can see the grades at reedyreportcard.org
- Fourteen organizations engaged consulting engineers and economists to conduct a study of the economic impact of riparian buffers and watershed-scale water quality improvements in the Reedy River watershed. The organizations included City of Greenville, Clemson Extension Service, Clemson University Center for Watershed Excellence, Conestee Foundation, Friends of the Reedy, Greater Greenville Association of Realtors, Greenville Chamber, Greenville County, Home Builders Association of Greenville, ReWa, Trees Greenville, Upstate Forever, and citizens
- The entire Reedy River Water Quality Group celebrates the water quality improvements that have been confirmed on the SCDHEC's list of impaired waters. Boyds Millpond and the Reedy River Arm of Lake Greenwood are no longer impaired for total phosphorus or chlorophyll a, which is a measure of algae. These water quality improvement demonstrate the current effectiveness and future potential of the Reedy River Water Quality Group and USEPA's Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program.

COMMITTEES WORK TOWARD A WATERSHED PLAN

During the November 2019 Big Tent meeting, all stakeholders have an opportunity to see the progress gained toward greater water quality as the Committees present their work reports.

Public Outreach Committee

The Public Outreach Committee (POC) continues to touch a growing number of residents with its water quality education and engagement activities. It maintains a current website, www.cleanreedy.org, for the public and for internal communications, and has broadened awareness through its social media posts and photos.

The POC created and managed three separate “Keep it Clean” public outreach campaigns that encouraged the public to use best practices in washing cars, maintaining vegetated buffers, and adding fertilizer, all to reduce nutrients entering streams. The campaigns reached out with



billboards, television, newspaper ads, T-shirts, and mobile signage on field trucks and sanitation trucks. The POC sponsored a booth at the County Earth Day celebration that distributed soil testing kits to reduce the occurrence of unneeded and harmful fertilizer that can runoff and enter streams. The future campaign will educate residents to prevent fats, oil, and grease from entering the drain, and from flushing disposable wipes (which are not flushable) in order to reduce sanitary sewer overflows.



The POC recently created a “report card” for the Reedy River that interprets water quality metrics into descriptive uses for the River and charts its health in categories of water quality, recreation, and wildlife.

The POC stays in contact with the other committees in order to distribute information on their activities to the public.

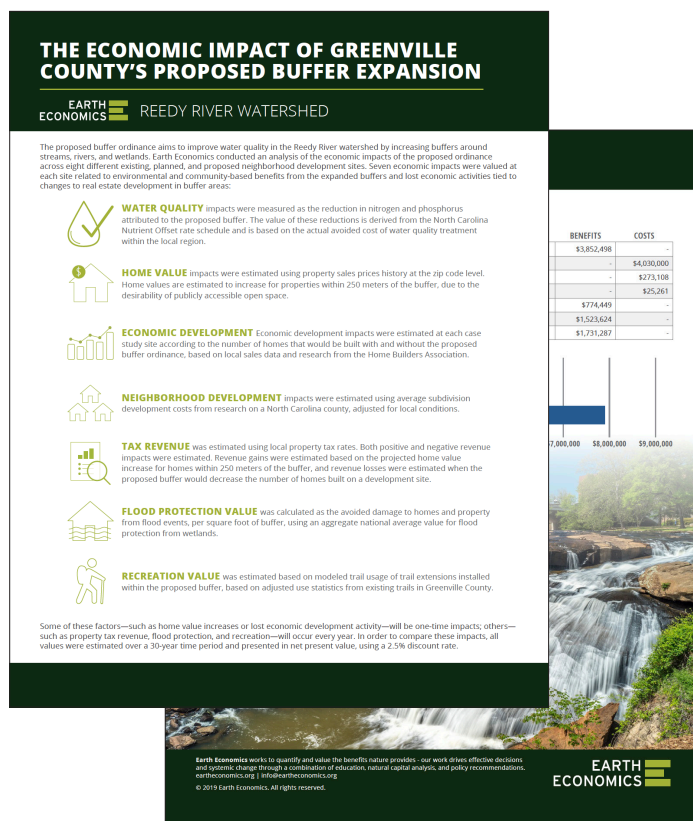
Economic Impact Committee

The economic impact committee is working with the best management practices committee to gauge the costs and benefits of the proposed County ordinance to widen the riparian buffers, one of the effective best management practices to reduce runoff of nutrients and sediment. The two committees studied eight scenarios of existing, planned, and proposed developments to value seven criteria, such as home values, water quality, flood mitigation, and tax revenue. The consultant Earth Economics analyzed the data and summarized it in a fact sheet that provides a bottom-line valuation for the proposed widening of the riparian buffers.

Best Management Practices Committee

The Best Management Practices (BMP) Committee continued its activities to identify the most effective practices to reduce the entry of nutrients into the waters and to promote those practices for private land owners and public agencies. As noted above, the BMP committee worked with the economic impact committee to estimate the costs and benefits of the proposed ordinance to widen the riparian buffers.

The committee followed the USEPA “Handbook for Developing Watershed Plans to Restore and Protect Our Waters” to identify: existing best management practices in the watershed, critical areas where additional management efforts are needed, and possible management practices and their efficiencies to reduce nutrients. Through its research, the Committee found that

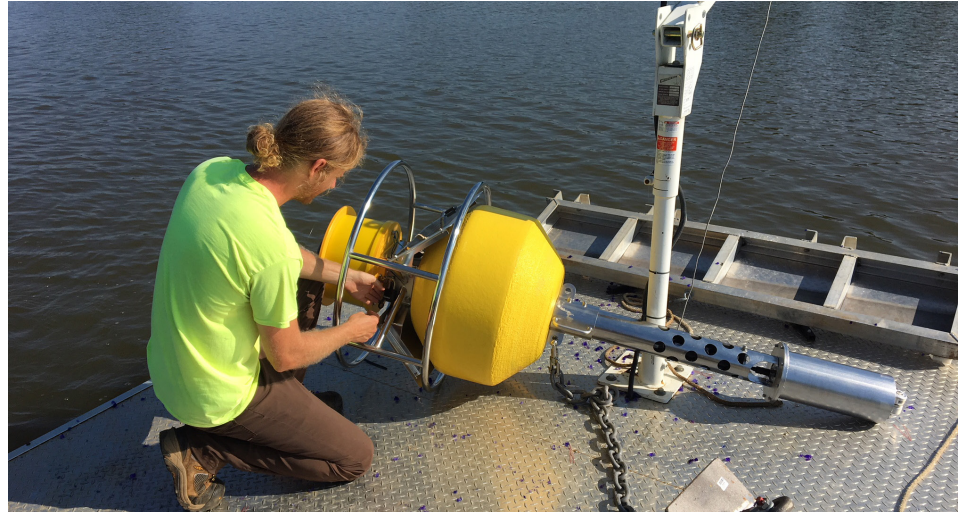


riparian buffers, streambank stabilization, and ending illicit sanitary sewer connections are among the most cost effective for the results.

The committee is evaluating the pre- and post-projects for streambank stabilization for nutrient reduction performed by the City in Cleveland Park and McPerson Park. With the streambank stabilization and the riparian buffer data, the BMP committee is compiling an impressive local inventory of BMP effectiveness.

Monitoring Committee

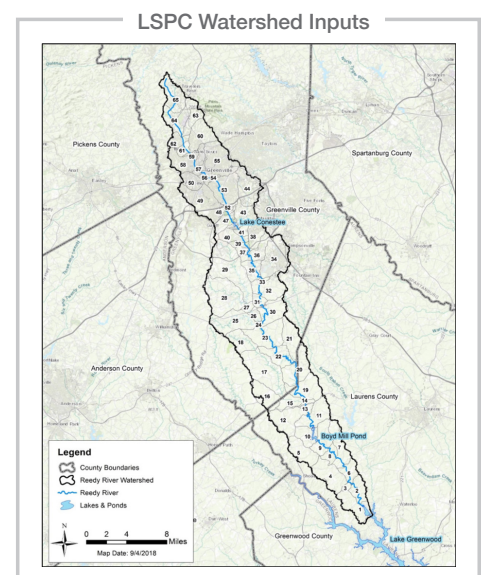
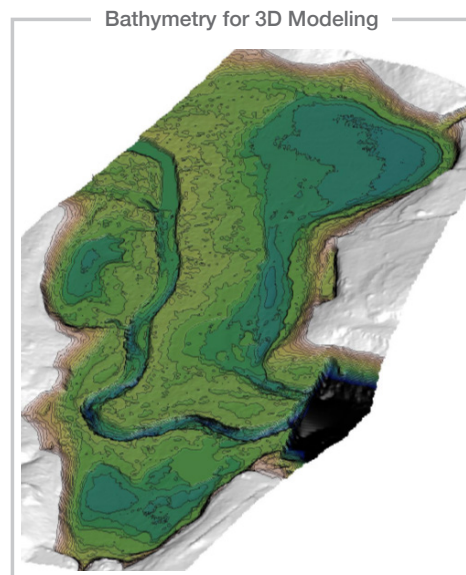
The goal of the monitoring committee is to identify the point and nonpoint sources causing the impairment in the Reedy River watershed. The committee began the year working with the modeling committee to identify data gaps in the model that needed to be filled to improve its accuracy. The committee completed its sampling plan and data analysis of the samples and transmitted the data to the modeling committee for its work.



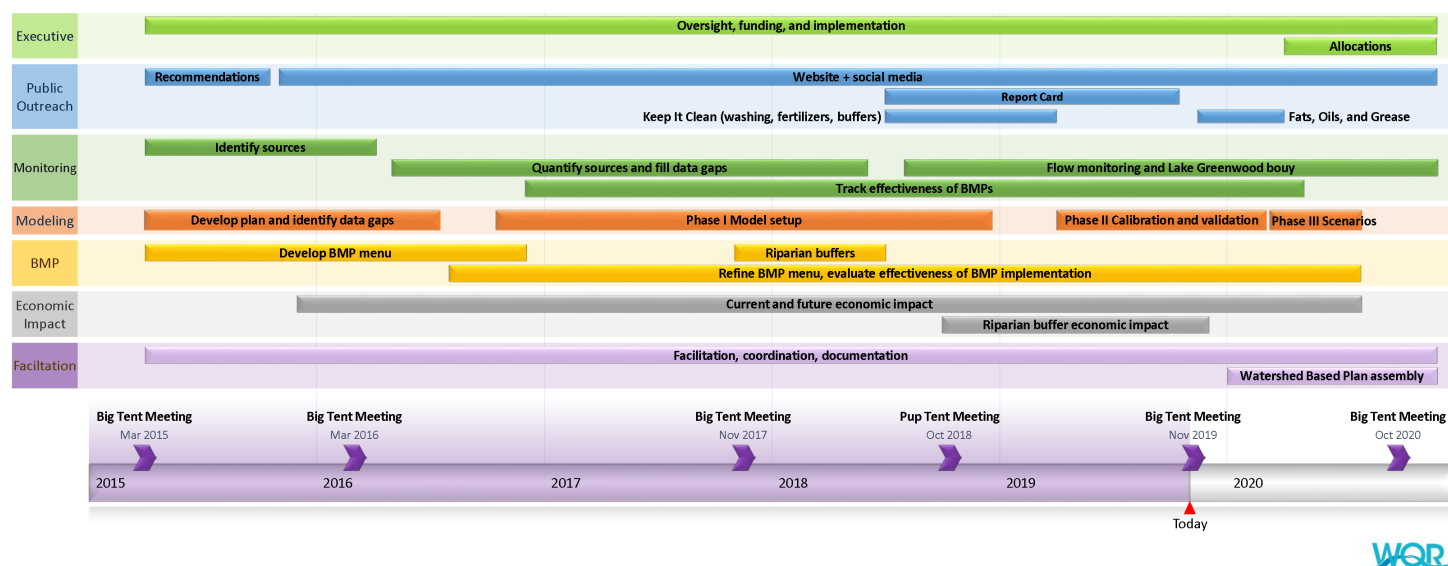
Subsequently, the Monitoring Committee developed a monitoring plan to obtain additional water quality information in Boyd's Millpond and in Lake Greenwood. Four group members funded a weather station, a Reedy River flow station, and a Lake Greenwood water quality monitoring buoy to extend the data set available for the modeling committee and watershed based plans. The committee also worked with a sampling crew from the US EPA to provide additional data.

Modeling Committee

Using samples obtained from the monitoring committee, the modeling committee is close to calibrating the model. With that milestone, the committee will be able to run allocation scenarios using best management practice variables.



WATERSHED BASED PLANS DEVELOPMENT SCHEDULE



OUR VISION

The Reedy River Water Quality Group participants share a vision for clean water and are invested in the quality of life and economic development of the Upstate region.

www.cleanreedy.org



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