Broad River Basin Council
Phase 1 Progress Report

October 2022

1.0 Introduction

The South Carolina State Water Planning Framework requires River Basin Councils (RBCs) to prepare and submit progress reports after each phase of the river basin plan development. This progress report covers Phase 1 of the Broad River Basin planning process spanning March 3, 2022 through September 8, 2022.

The Phase 1 Progress Report summarizes the activities and accomplishments of Phase 1, including key milestones reached, and identifies existing and potential issues regarding schedule and funding. Anticipated challenges as the RBC moves into Phase 2 of the planning process are also identified.

2.0 Activities and Accomplishments

2.1 RBC Meetings

Six RBC meetings and two field trips were held during the Phase 1 planning period. Meetings (or field trips) were held monthly from March through October. All meetings were conducted as hybrid meetings. Most RBC members attended in person, while some members attended meetings virtually using the Zoom platform. Meeting durations ranged from 3 to 4 hours. Meeting summaries and minutes were distributed to meeting attendees.

2.2 Phase 1 Objectives

The objectives of Phase 1 were to:

- introduce the RBC to the river basin planning process;
- provide technical presentations that inform the RBC members on a range of topics critical to the planning process;
- conduct field trips to key locations in the river basin;
- establish planning metrics;
- develop a vision statement and planning goals; and
- select a RBC Chair and Vice Chair.

2.3 Accomplishments

Information Sharing

A variety of technical presentations were delivered during the Phase 1 RBC meetings. Presenters included staff representing several divisions within the South Carolina Department of Natural Resources (SCDNR), the South Carolina Department of Health and Environmental Control (SCDHEC), the U.S. Geological Survey (USGS), The Nature Conservancy (TNC), the North Carolina Department of Environmental Quality (NCDEQ), Duke Energy, and CDM Smith. Presentation topics included:

- River Basin Planning and Guiding Principles
- Planning Framework and RBC Bylaws
- Water Legislation and Permitting
- Basin Hydrology and Monitoring
- Low Flow Characteristics
- Federal Energy Regulatory Commission Licensing and Hydropower Operations
- Current Water Use and Water Demand Projections
- Broad Basin Climatology
- South Carolina Drought Response Act
- North Carolina Water Planning
- Freshwater Aquatic Resources
- The Broad basin Surface Water Model
- Environmental Flows/Biological Standards Study

Finalizing Water Demands

The RBC was informed of the Broad basin water demand projections for the moderate and high growth planning scenarios during an initial presentation by SCDNR staff in July. Based on water user feedback, minor adjustments in the demand projection methodology were made and DNR staff provided updates during the subsequent meetings. The water demands for both planning scenarios were finalized and provided to CDM Smith for incorporation into the surface water models.

Process and Progress Metrics

The RBC selected nine process metrics. Process metrics are *benchmarks used to monitor the success or failure of the processes which led to RBC actions*. The selected process metrics are:

1. The process to select RBC members is well documented, transparent, and reflects broad-based outreach.
2. RBCs develop a River Basin Plan within two years of RBC formation.
3. RBC meetings adhere to timelines.
4. River Basin Plans are actionable, logical, and address or prevent challenges with a level of detail to be cost-accountable.
5. Information used and generated during the planning process is shared openly, publicly, and is easily accessible.
6. RBC meeting agendas are focused and promote efficient and productive meetings.
7. RBC members are able to effectively consider, digest, and understand technical information through presentations, discussion, group learning, and self-study.
8. Decisions are guided by best available science.

9. The use and outcomes of models and other tools to assess water availability and evaluate strategies are appropriately documented.

The RBC elected to defer selection of progress metrics until later in the planning process, since they primary relate to implementation of the river basin plan. Progress metrics are *benchmarks used to monitor the success or failure of selected actions taken by an RBC*.

Mission/Vision Statements and Goal Setting

The vision statement developed and adopted by the RBC is:

> *Empowered stakeholders taking coordinated actions to conserve and enhance the resilience of the Broad River Basin to provide water resources for quality of life, while accounting for the ecological integrity of our shared water resources.*

The goals were approved by motion.

1. *Enhance the understanding of regional water issues and the need for support of policies and behaviors to protect resources through promotion and education.*
2. *Use sound science and data driven practice to support collaboration for all entities to effectively and efficiently manage the basin.*
3. *Provide policy and legislative recommendations.*

Selection of the RBC Chair and Vice Chair

The RBC selected Ken Tuck of Spartanburg Water Systems (representing the Water and Sewer Utilities) and Daniel Hanks of Weyerhaeuser (representing Agricultural, Forestry, and Irrigation) as the Chair and Vice Chair, respectively.

Field Trips

The RBC completed two field trips during Phase 1. The first field trip was on May 12, 2022. RBC members met at the EdVenture Children's Museum Canal Room and were provided an overview of how the City of Columbia manages their water supply, the challenges they face, and the hydroelectric facility. The RBC then toured the City's Canal Water Treatment Plant (WTP) and visited the diversion dam and fish passage, and minimum flow gate. After lunch, the RBC drove to and toured Dominion Energy's Fairfield Pumped Storage Facility and the Parr Hydroelectric Facility. Photos from the first field trip are shown in Figure 1.

The second field trip was on October 13, 2022. RBC members met at Lake Blalock and paddled (or rode in a pontoon boat) for about 2.7 miles from the Lake Blalock Boat Launch to the Lake Blalock Dam. The RBC then visited Spartanburg Water System's R.B. Simms WTP and learned about the new advanced oxidation system. After lunch, the RBC toured Cooley Farms/Strawberry Hill and learned how they use, recycle, and conserve water for irrigation of crops – most notably, strawberry and peaches. Photos from the first field trip are shown in Figure 2.

Figure 1. May 2022 Field Trip. Clockwise from top left: Columbia WTP, Parr Hydro Facility, Fairfield Pumped Storage Facility, and Columbia WTP.

Figure 2. October 2022 Field Trip. Clockwise from top left: Cooley Farms/Strawberry Hill, kayaking Lake Blalock, RB Simms Advanced Oxidation building, and Lake Blalock Dam.

2.4 Activities Not Completed

All activities outlined in the Planning Framework for Phase 1 were completed except the RBC decided to develop progress metrics until later in the planning process.

2.5 Feedback from the RBC

Near the end of Phase 1, the RBC members were asked to complete a short survey. The survey was intended to gage effectiveness of the facilitation, content, and format of the meetings; identify topics that merit discussion and/or technical presentations; evaluate the pace of the planning process; and identify challenges or issues. Some of the most significant RBC feedback is provided below.

In response to the question, "***Do you think the information presented in Phase 1 has given you a sufficient level of understanding to make informed planning-level decisions as we move into Phase 2?",*** the 15 responding RBC members noted yes, and commented that "*they have covered a wide variety of topics that will provide the council with a strong foundation moving forward*", and "*I feel the diverse subject matter has given me an overall fair understanding*".

In response to the question, "***Do you feel that you have an adequate understanding of how data, models, and other tools will be used to assess water availability, identify shortages, and explore surface water issues and concerns during Phase 2?"***, 15 of the 17 responding RBC members answered "yes" and 2 of the responding members answered "no".

In response to the question "***Based on the RBC meetings held to date, do you have any suggestions for the Facilitator or Planning Team to consider that might improve the meetings or planning process?***", the responding RBC members noted that the "*meetings were planned well and ran well*"; "*…these are some of the most efficiently run and digestible meetings I've been a part of*"; and "*the meetings were well organized and executed*." One member noted that "*the end of classes could use more interaction with RBC members to make sure everyone is clear on the subject matter just covered."* One member asked if any reference materials could be provided that would help improve the understanding of the processes.

In response to the request "***If you have any other thoughts, concerns, or feedback on the Broad River basin planning process, please provide them below***", one member noted surprise in the fact that the RBC is only focusing on water quantity and not looking into water quality. Another member suggested that "*it may be helpful to some RBC members to again emphasize that the focus now is on water quantity and planning for water shortages, as some discussions seem to miss that.*" Other member comments were: "*as long as the overarching goals are consistently stated, I think this process is productive*", and "*explanations and handouts are very good*", and "*continue moving the meetings around some and doing field trips.*"

3.0 Issues Impacting Schedule and Funding

No issues have been identified that are expected to impact the schedule or funding of the planning process through completion of Phase 4.

4.0 Challenges

The only identified potential challenge is maintaining adequate representation from all water interest categories. Following the first RBC meeting, one RBC member representing the Agricultural, Forestry, and Irrigation water interest category resigned. A second member representing the same interest category resigned after the fourth meeting due to personal reasons and other commitments. There are still three active RBC members representing the Agricultural, Forestry, and Irrigation water interest category, which provides sufficient representation.