Looking Back and Pushing Forward
Dear Catawba-Wateree Water Management Group Members:

Looking back at 2015 and 2016 we all recognize that our region has faced many challenges in water supply management and delivery. Like the rest of the water industry, we face the need to balance funding and cost concerns with the need to keep our systems sustainable and safe. We are challenged to keep our costs down and our rates low, while at the same time being efficient, proactive and resilient to our fiscal and environmental conditions.

More then ever before, high-profile events are raising awareness and impacting public perception to the condition of our systems and our ability to adapt to today’s demands. As managers of this water supply we have to recognize that the challenges experienced by utilities across the country, flooding of our coasts and droughts in our Basin, will change the way our customers and stakeholders value our contributions to their quality of life. We must take the steps necessary so customers have confidence in us, as experts, to ensure we can deliver them a safe and reliable water supply.

In the midst of these challenges it’s you, the members of the Catawba-Wateree Water Management Group, who continue to be the stewards of our water resources through the proactive management of your own organizations and continued sponsorship of our water management partnership. Together, we realize that our defining goal is to pave the way for extending our shared water supply into the next century and ensuring that our members and partners are engaged and informed of our contributions along the way.

In the past two years, we have completed several projects benefitting our entire Basin. We are preparing for water supply shortages. We are pushing research boundaries. We are addressing threats potentially impacting our ability to bring safe water to our customers. We are doing so much more.

Together, we’re looking ahead to the future with a thoughtful approach and strategic focus. We look forward to continue doing this with you.

Barry Gullet, PE
Chair
Trends Influencing Our River

The Catawba-Wateree region is ever evolving, the demand for water is growing, and the supply is limited.

The river and surrounding lakes and streams are the principal source of water for nearly two million people.

The river provides enough electricity to power nearly 3.7 million homes.

The overall water demand for the entire Basin is expected to increase approximately 120 percent by 2065.

Projected climate change impacts include an estimated 3.2°F average temperature increase and an 11 percent increase in lake evaporation between now and 2065.
Our Mission is to identify, fund, and manage projects that will help preserve, extend, and enhance the capabilities of the Catawba-Wateree River Basin to provide water resources for human needs while maintaining the ecological integrity of the waterway.

We deliver on this Mission through an Annual Strategic Focus

**Water Supply Master Plan**
- Leverage strategies of the WSMP to effectively protect, preserve and increase awareness of our water supply, and encourage practices that support extending our supply into the next century.

**Research and Technical**
- Identify and execute a series of research and technical projects that directly serve CWWMG members and address regional issues requiring leadership and vision.

**Communications**
- Promote CWWMG’s brand, visibility and reputation by providing the highest quality research, data and support, and communicating often with a wide range of community partners.

We are improving water loss in our water distribution systems.

We are identifying and addressing future scenarios that threaten our ability to bring safe water to our customers.

We are providing the mechanism for proactive planning and response to water supply shortages.

We are studying issues that impact long-term water supply in the Basin.

We partner with national and international water organizations to push boundaries and have secured funding for our efforts.

We are establishing a communications network to advance regional water knowledge.

Our Work

Basin-wide Water Audit Program:
- Provides a regional multi-phased implementation plan for best management practices and a water loss reduction program for use by all member water utilities.

WSMP Phase 3 Water Quality Program:
- Provides insight into current and future water quality issues and available treatment options to help members plan for sustainable delivery of safe water to their customers.

Raw Water Intake Contingency Plan:
- Provides robust contingency plans for water utilities to access water through alternative means in the event their intake or raw water pump station is unusable due to drought, low water levels, and other source water supply emergencies.

Sediment Monitoring Project:
- Verifies long-term water storage loss assumptions and determines the annual reduction in volume and distribution of reduced volume within the reservoirs.

USGS Groundwater Well Project:
- Provides a groundwater-level real-time monitoring network for the Basin to assist water managers in assessing hydrologic and water supply conditions, particularly during times of drought.

Strategic Communications Plan:
- Presents a framework, schedule, messaging and tactics for communicating the benefits of the CWWMG to member organizations and the public.

Basin-wide Advisory Committee:
- Facilitates advisory level input by key organizations that have an interest in the future planning efforts for the Basin.
Water, wastewater and stormwater utilities face ever-increasing resource limitations, aging infrastructure, growth pressures, regulatory changes and tight budgets. Coupled with climate change, sea levels rising and other environmental threats, this becomes a juggling act that requires a reliable, long-range vision supported by a current and comprehensive plan - one that is tailored to key regional and local values, yet is still affordable and provides sustainable solutions.

As a proactive planning accomplishment, completed in 2015, the CWWMG developed water supply intake contingency plans for each of the water utility members within the Catawba-Wateree River Basin. Driven by the impacts of the 2006-2009 drought of record in the Basin, the CWWMG recognized the need to evaluate and identify contingency opportunities for large public water supply intake owners whose raw water intakes could become inoperable due to reduced water storage during a severe drought, when usable reservoir storage becomes depleted, or in the event of a catastrophic intake failure. After comprehensive technical evaluations of the CWWMG-member water utilities' physical water withdrawal facilities and existing emergency response procedures, robust water intake contingency plans were developed for 16 of the utilities.

The advantages of this project extend beyond the emergency or contingency water supply benefits to each utility. This project benefits the Basin and CWWMG members through identified opportunities for regional management and implementation of joint contingency measures to prepare for and respond to source water supply shortages.

Water, wastewater and stormwater utilities face ever-increasing resource limitations, aging infrastructure, growth pressures, regulatory changes and tight budgets. Coupled with climate change, sea levels rising and other environmental threats, this becomes a juggling act that requires a reliable, long-range vision supported by a current and comprehensive plan - one that is tailored to key regional and local values, yet is still affordable and provides sustainable solutions.

As a proactive planning accomplishment, completed in 2015, the CWWMG developed water supply intake contingency plans for each of the water utility members within the Catawba-Wateree River Basin. Driven by the impacts of the 2006-2009 drought of record in the Basin, the CWWMG recognized the need to evaluate and identify contingency opportunities for large public water supply intake owners whose raw water intakes could become inoperable due to reduced water storage during a severe drought, when usable reservoir storage becomes depleted, or in the event of a catastrophic intake failure. After comprehensive technical evaluations of the CWWMG-member water utilities' physical water withdrawal facilities and existing emergency response procedures, robust water intake contingency plans were developed for 16 of the utilities.

The advantages of this project extend beyond the emergency or contingency water supply benefits to each utility. This project benefits the Basin and CWWMG members through identified opportunities for regional management and implementation of joint contingency measures to prepare for and respond to source water supply shortages.

Water, wastewater and stormwater utilities face ever-increasing resource limitations, aging infrastructure, growth pressures, regulatory changes and tight budgets. Coupled with climate change, sea levels rising and other environmental threats, this becomes a juggling act that requires a reliable, long-range vision supported by a current and comprehensive plan - one that is tailored to key regional and local values, yet is still affordable and provides sustainable solutions.

As a proactive planning accomplishment, completed in 2015, the CWWMG developed water supply intake contingency plans for each of the water utility members within the Catawba-Wateree River Basin. Driven by the impacts of the 2006-2009 drought of record in the Basin, the CWWMG recognized the need to evaluate and identify contingency opportunities for large public water supply intake owners whose raw water intakes could become inoperable due to reduced water storage during a severe drought, when usable reservoir storage becomes depleted, or in the event of a catastrophic intake failure. After comprehensive technical evaluations of the CWWMG-member water utilities' physical water withdrawal facilities and existing emergency response procedures, robust water intake contingency plans were developed for 16 of the utilities.

The advantages of this project extend beyond the emergency or contingency water supply benefits to each utility. This project benefits the Basin and CWWMG members through identified opportunities for regional management and implementation of joint contingency measures to prepare for and respond to source water supply shortages.

The CWWMG prides itself on being good stewards of the Catawba-Wateree River Basin and of the funding to keep this organization financially healthy. We use member dues to provide proactive management of our water supply so we have a pathway and a plan for the next century.

In 2015:

- **Member Dues:** $560,000
- **Interest:** $973
- **Projects:** $497,249
- **Administration:** $82,935
- **South Fork Alliance Dissolution:** $4,497

Over the recent past, for every $1.00 provided in dues from each member, approximately $1.50 was provided in return by leveraging research and funding support from others.

Administration costs are only fourteen percent of total organizational expenditures.

Eighty-six percent of organizational expenditures go directly to projects that benefit the entire Basin.

---


The Basin is composed of 11 interconnected reservoirs (some lake-to-lake and some with flow releases into regulated river reaches), 13 hydropower stations and numerous public water utilities. River reaches connect the various tributaries to the main stem of the Catawba-Wateree River and deliver watershed runoff to the river and reservoirs. The River from Lake James through Lake Wateree is about 220 miles long with an associated watershed area of 4,750 square miles.

Our member organizations manage the water you need every day.

Our Members

- Catawba River Water Treatment Plant (Union County, NC; Lancaster County Water & Sewer District, SC)
- Chester Metropolitan District, SC
- City of Belmont, NC
- City of Camden, SC
- City of Charlotte, NC
- City of Gastonia, NC, Two Rivers Utilities
- City of Hickory, NC
- City of Lenoir, NC
- City of Morganton, NC
- City of Mount Holly, NC
- City of Rock Hill, SC
- City of Statesville, NC
- Duke Energy Carolinas, LLC
- Lincoln County, NC
- Lugoff-Elgin Water Authority, SC
- Town of Granite Falls, NC
- Town of Long View, NC
- Town of Mooresville, NC
- Town of Valdese, NC

Advisory Committee

- Academic/Research: Jeff Allen, PHD, Director of South Carolina Water Resources Center, Clemson University
- Regulatory/State Government: Don Rayno, Water Resources Planner at Division of Water Resources, North Carolina Department of Environmental Quality
- Recreation: Tim Gestwicki, Chief Executive Officer of North Carolina Wildlife Federation
- Residential Landowner of Project or River Frontage: Joe Stowe, Executive Director of Lake Wylie Marine Commission
- Local Government: Jason Wager, AICP, CEP, Planning Program Supervisor-Sustainability, Centralina Council of Governments
- Environment: Vicki Taylor, Executive Coordinator at Catawba-Wateree Relicensing Coalition
- Economic Development: Bonnie Ammons, Executive Director at South Carolina Rural Infrastructure Authority
- Industrial or Agricultural: Bob Tourville, Environmental Manager at Resolute Forest Products-Catawba Operations