

Fast Facts



What is the Upper Neuse River Basin Association (UNRBA)?

For more than 20 years, the UNRBA has provided a collaborative forum for considering and promoting innovative approaches to water quality planning and management in the Upper Neuse River Basin's 770-square-mile watershed. Our members represent seven municipalities, six counties, local soil and water conservation districts, and a regional water and sewer authority.

We are committed to helping our members comply with Stage I of the Falls Lake Nutrient Management Rules while providing support for their joint efforts to develop an updated nutrient management strategy.

Why is Falls Lake important?

Falls Lake is a tremendous asset. It was originally constructed to help protect downstream areas from flooding, and it also provides drinking water, habitat for fish and wildlife, and a place for recreation.



What is the Falls Lake Nutrient Management Strategy?

Although today's water quality supports the lake's intended uses, the amount of chlorophyll-a measured in some areas exceeds state standards. Chlorophyll-a is the green photosynthetic pigment that plants use to turn sunlight into food. At high concentrations, it can point to nutrient pollution – in other words, the presence of too much nitrogen and phosphorous, which stimulate plant growth.

In 2010, the NC Environmental Management Commission adopted rules to reduce the amount of nitrogen and phosphorous that enter the lake through rivers and stormwater runoff.

Who do the Falls Lake Rules regulate?



State and federal agencies that manage stormwater runoff



New and existing development which are required to reduce nutrient loading through stormwater controls



Agriculture that may grow crops, produce animals, or hold lands in an unmanaged state



And wastewater treatment facilities that discharge treated wastewater into rivers and streams

What do the Rules require?

Stage I

2011 to 2021

- ◆ Meet nutrient-related water quality standards in the lake below Highway 50
- ◆ Improve nutrient levels in the upper lake

- ↓ Nitrogen and phosphorus loading to the lake from all sectors
- ◆ Prevent new development from increasing nutrient loading

Stage II

2021 to 2041

- ◆ Meet nutrient-related water quality standards in both the lower and upper portions of the lake

- ↓ Nitrogen loading to the lake by 40 percent
- ↓ Phosphorous loading to the lake by 77 percent

We've seen successes in Stage I

- ◆ UNRBA's local government members invested in nutrient-reducing retrofits to their wastewater treatment plants. The facilities release at least 20 percent less nitrogen and 40 percent less phosphorous to Falls Lake than before.
- ◆ In 2012, local governments implemented requirements on new development to prevent increases in nutrient runoff from their sites. (In some cases, nutrient loading has even decreased!)
- ◆ Agriculture and state and federal agencies have met their Stage I requirements, and local governments continue to undertake projects to reduce loading from existing development.
- ◆ Evidence suggests that collective efforts have improved water quality around the City of Raleigh's water intake facility, located in the lower part of the lake.

Revisiting Stage II

Research by our technical consultants indicates that implementation of **Stage II** is not likely to be feasible.

- ◆ The State of North Carolina estimates that Stage II would cost the Basin over \$1 billion. More recent estimates suggest that this figure is probably too low.
- ◆ According to a 2013 evaluation, each household in the watershed would have to contribute \$1,400 each year (or \$1,600 each year in 2018 dollars) to fund the actions necessary to pursue Stage II goals.
- ◆ Falls Lake already provides safe drinking water, supports a healthy fishery, and provides for recreation with today's water quality. The Stage II price tag may only produce limited benefits.

Can the Stage II rules be reexamined and revised?

Yes! The Falls Lake Rules specifically allow for a reexamination of the Stage II requirements. Pursuant to the rules, the UNRBA is working with the State of North Carolina and partners across the basin to reexamine Stage II of the Nutrient Management Strategy and to develop a more successful approach for managing water quality.

What steps has the UNRBA taken to reexamine the Stage II rules?

Data collection – Good policy is built on sound science.

We're investing in data collection and modelling to fill important gaps in our understanding of the lake.

Through annual dues paid by our members, we continue to invest \$800,000 each year in robust water quality monitoring and modeling work. We will harness the results to create science-based decision-making tools to help us evaluate ideas and strategies to improve water quality above and beyond what has been achieved in Stage I.

Collaboration

While science is important, it alone cannot tell us how to balance competing wants and needs. We are committed to continued engagement with our Basin stakeholders as we move forward. Broad input will help us to develop an approach that improves water quality and generates widespread support.

- ◆ We will continue to reach out to local governments, agricultural representatives, regulated entities, environmental groups, community advocates, developers, and others.
- ◆ We will continue to host stakeholder meetings for our water quality modeling project to seek feedback on the assumptions our model makes and the next steps in its development.

Where can I learn more?

Visit our website UpperNeuse.org

Members of the public are welcome to attend all UNRBA meetings. To join us at an upcoming meeting or review minutes from previous meetings, visit our website at UpperNeuse.org