

# 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, six 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 Strategy while developing a more productive, cost-effective and reasonable strategy for Stage II.

By relying on science, focusing on the lake's uses, and considering fiscal constraints, our members' investments will make cost-effective and sustainable water quality improvement possible for Falls Lake.

## 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?

Chlorophyll-a is the green pigment 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 in our water, which stimulate plant and algae growth.

In 2010, the NC Environmental Management Commission adopted a nutrient management strategy and rules for the Upper Neuse Basin to reduce the amount of nitrogen and phosphorous that enter the lake.

## 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 2024

- ◆ 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

2024 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

## Success in Stage I

Substantial investment throughout the basin has led to what appears to be early compliance with the Stage I nutrient management rules.

For example...

- ◆ Wastewater treatment plant retrofits have reduced nitrogen output by 20 percent or more and phosphorous output by 40 percent or more.
- ◆ Local governments across the Basin implemented mandatory rules for new urban development to prevent increases in nutrient runoff as a result of the new construction. In some cases, nutrient loading has even decreased after development as a result!
- ◆ Agricultural pasture lands have already exceeded their Stage I goals for nitrogen, while crop lands have exceeded the nitrogen goals for both Stage I and II.

Measurements show that investments like these have improved water quality around the City of Raleigh's drinking water intake facility, located in the lower part of the lake.

## Stage II Stumbling Block

Stage II is a stumbling block in the path toward ongoing water quality improvements. Research by our technical consultants indicates that Stage II...

- ◆ Requires nutrient reductions that are impossible with today's technology
- ◆ Rules out cost-effective, innovative solutions that do exist today
- ◆ Would cost local governments and citizens in the Basin over **\$1 billion** to implement
- ◆ May only produce limited benefits – Falls Lake already provides safe drinking water, supports a healthy fishery, and provides enjoyable recreation with today's water quality.

**The UNRBA is committed to leading the development of a more effective strategy for improving water quality in Stage II.**

The Falls Lake Nutrient Management Strategy foresaw the need to reevaluate the Stage II rules, and the UNRBA is leading that charge by working with the State of North Carolina and partners across the basin.

## 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.

## 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

Science alone cannot tell us how to balance competing wants and needs. We are committed to continued engagement with Basin stakeholders. 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](http://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](http://UpperNeuse.org)