Upper Neuse River Basin Association

What is the UNRBA?

The Upper Neuse Basin is the watershed that drains to Falls Lake. The Upper Neuse River Basin Association (UNRBA) is a group of thirteen local governments and utilities in the Upper Neuse River Basin. The UNRBA promotes cooperative approaches to water quality planning and management.

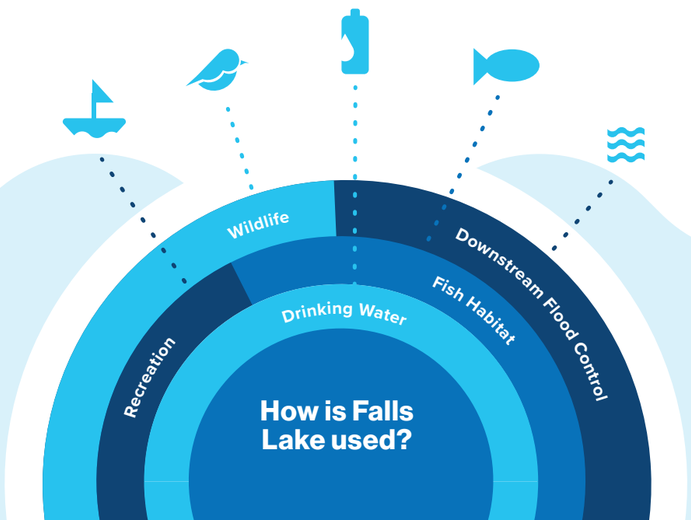
Our Focus

We are committed to protecting and improving water quality in Falls Lake. In 2011, the NC Environmental Management Commission adopted rules to reduce nutrient loading. Water quality in Falls Lake has improved and stabilized. Conditions in the watershed have changed. To continue progress, updated rules are needed.

Successes Achieved Under the 2011 Falls Lake Rules

The regulated entities under the Falls Lake Rules have significantly reduced nutrient loading to Falls Lake. The benchmark year for load comparison is 2006. By 2018, the following reductions had occurred:

- Major wastewater treatment plants reduced total nitrogen loads by 40 percent. These facilities reduced total phosphorus loads by 80 percent.
- Local governments have built more than 350 stormwater projects. These aim to reduce nutrients from land developed before 2012.
- Land developed after 2012 has strict nutrient requirements. Every local government in the watershed implements these rules.
- Atmospheric deposition of total nitrogen has decreased by 20—25%. This source of nitrogen affects every land use and waterbody in the watershed.
- Farmers have reduced nutrients leaving their lands. Practices include nutrient management plans, livestock exclusion, and stream buffer restoration.



Falls Lake is effectively meeting its intended uses. An updated nutrient management strategy is needed to protect this critical resource.

Achieving Further Water Quality Improvement Is Challenging

The requirements for nutrient load reduction in the 2011 Rules were in two stages. The first stage includes goals that have been met by every sector. The second stage is not appropriate for this watershed: it limits cooperation and further progress. Updated rules are needed to address the constraints and further improve water quality.

For progress to continue, updated rules are needed to address the current constraints.

Unmanaged or natural areas, like forests and wetlands, make up **75%** of the watershed. It is very difficult to reduce nutrient loading from these areas.

Many beneficial activities like conserving forests or repairing malfunctioning septic systems don't count towards compliance under the 2011 rules.

Development and agriculture are **25%** of the watershed. Most farms are implementing best practices to reduce nutrients, so further reductions are limited. Less than **1.5%** of the watershed is medium or high intensity development.

The 2011 Rules limit cooperation among regulated entities.

Large rain events flush nutrients from the watershed, particularly from natural areas where organic matter accumulates. In a high rainfall year, delivered nutrient loads to Falls Lake double compared to an average rainfall year.

Reducing nutrient loads from past development is very difficult.

Key Aspects of the UNRBA Recommendations for Continued Water Quality Improvement

In 2018, the UNRBA began working on a new approach. This innovative program focuses on project implementation rather than nutrient tracking. Input from environmental groups and the NC Division of Water Resources was essential. In 2021, the NC Environmental Management Commission approved this program. In the first two years, UNRBA members doubled or tripled their required investments in beneficial projects. This successful program and extensive scientific study are the basis of UNRBA's recommendations for a revised Falls Lake rules. The UNRBA worked with a broad coalition of stakeholders to hone the recommendations and garner support.

- **Conserve forests and other unmanaged or natural areas.**
- **Base compliance on investment in beneficial projects. Provide flexibility and encourage cooperation.**
- **Account for interactions among land, water, soils, climate, and the atmosphere.**
- **Consider environmental benefits, costs, and impacts to users of the lake and those asked to pay the cost of regulations.**
- **Improve water quality throughout the watershed and promote projects with multiple benefits.**
- **Track progress and update the strategy as conditions change.**
- **Continue to treat stormwater runoff from new development.**
- **Continue to track new technologies and optimize wastewater treatment.**

Our Science-Based Approach

UNRBA members continue to find science-driven, cost-effective actions to drive progress in the watershed. The Association invested $11 million to study the lake and the watershed. This investment expanded the data and information for making sound decisions.

Next Steps

The UNRBA has worked closely with the NC Division of Water Resources to develop our recommendations. Many stakeholders provided critical input. These include representatives of agriculture, environmental interest groups, local governments, and utilities. The Division is responsible for updating the rules. The UNRBA and stakeholders will continue to work with the Division throughout this process.

Visit **UNRBA.org** to learn more!

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