

# Upper Neuse River Basin Association



## What is UNRBA?

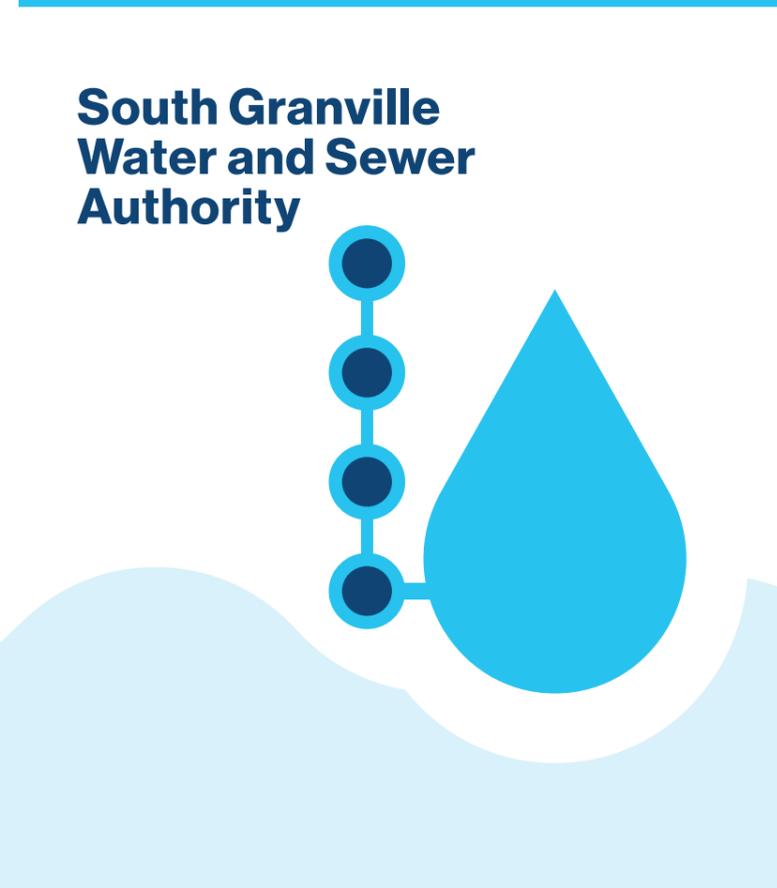
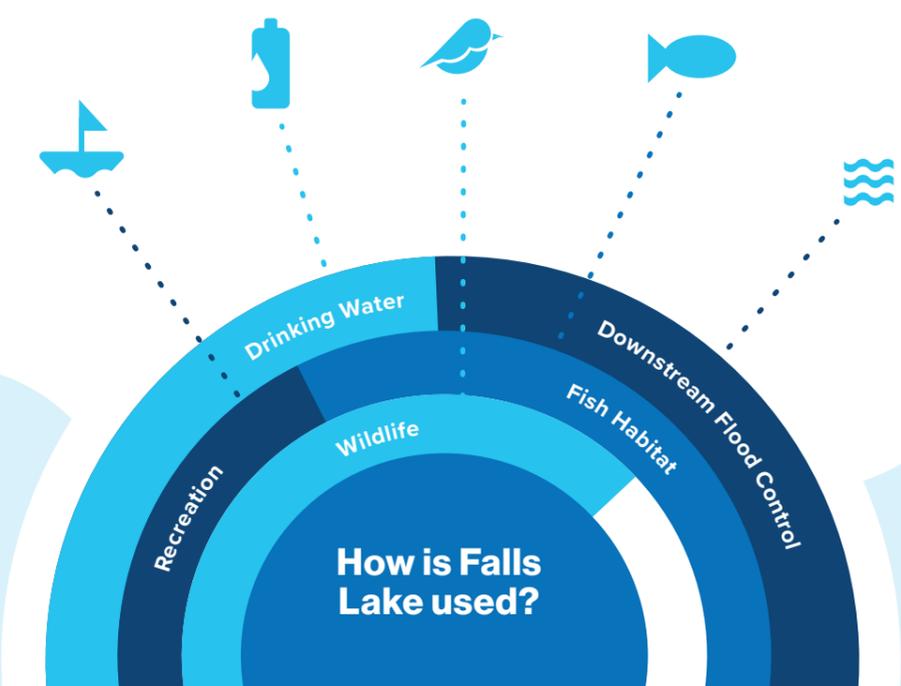
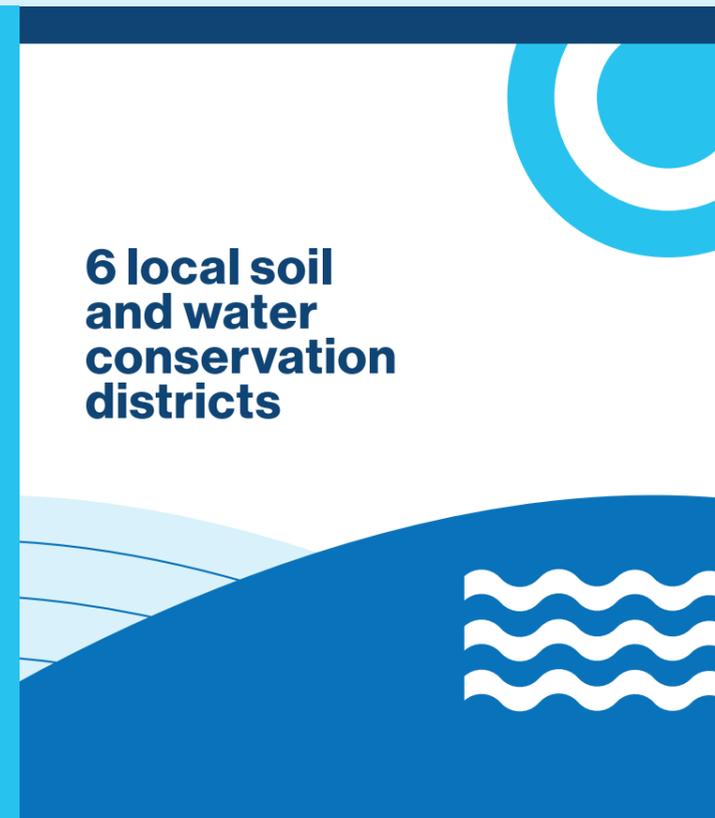
The Upper Neuse River Basin Association is a partnership of 15 local government organizations. The UNRBA promotes cooperative approaches to water quality planning in the Upper Neuse River Basin's 770-square-mile watershed.

## Our Mission

We help our members to comply with water quality regulations in the Falls Lake watershed and serve as the forum for their joint efforts to develop an updated nutrient management strategy for Falls Lake.

## Our Focus

Since 2011, we have focused our efforts on developing a productive strategy for managing the amount of nitrogen and phosphorous that flows into Falls Lake. Our data-driven approach and commitment to collaboration enables all jurisdictions to achieve innovative, cost-effective solutions for watershed regulations.



## The Falls Lake Nutrient Management Strategy and Rules

In 2010, the state of NC passed a set of regulations to reduce the amount of Nitrogen and Phosphorus nutrients entering Falls Lake. These rules are broken down into Stage I and Stage II.

### The Rules regulate two nutrients which can encourage harmful algae growth in high concentrations.



#### Phosphorus

Allows plants and algae to transfer energy, grow, and mature



#### Nitrogen

A building block of protein and a major component of chlorophyll, which allows plants to turn sunlight into sugar

### Research by our expert technical consultants indicates the Stage II Rules are...

- **Unachievable with existing technologies**
- **Cost-prohibitive**
  - \$1 billion – State of NC cost estimate for cost of implementation of Stage II rules. Recent estimates show this is probably too low.
  - \$1,400 per household – yearly contribution, in 2013 dollars, needed to achieve Stage II goals.
- **Limited** – Innovative, cost-effective practices that could contribute to reductions aren't recognized and can't be counted toward progress

### Nutrient Management Highlights Success in Stage I

#### Agriculture

- 32% reduction in N loss from pasture land versus the 2006 baseline
- 75% reduction in N loss from crop land versus the 2006 baseline, surpassing the Stage II requirement
- Implementing best practices to reduce P loss

#### Wastewater Treatment Facilities

- N↓ 20% or more
- P↓ 40% or more

### We recognize that good policy is built on sound science...

**\$800K per year** invested in water quality monitoring and modeling programs to fill gaps in the data

We are developing science-based decision making tools to evaluate and compare options for a more successful nutrient management strategy

### ...and that stakeholder input is vital to the success of our mission.

#### New Development

- New regulations require equal or less nutrient runoff to watershed after development occurs

#### Existing Development

- Improvements in progress

#### What's Next?

The UNRBA is working with the State of North Carolina and partners across the Basin to secure more effective Stage II Nutrient Management Rules to continue to improve water quality in Falls Lake.

Visit [UpperNeuse.org](http://UpperNeuse.org) to learn more!

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