KEEP FORSYTH COUNTY BEAUTIFUL

Community Group Focuses on Water Quality, Litter Prevention, Waste Reduction & Recycling, Beautification & Community Greening

Keep Forsyth County Beautiful's (KFCB) mission to beautify and improve the community covers many areas, a number of which contribute to better water quality directly or indirectly. Adopt-a-Stream, Storm Drain Stenciling, and Enviroscape educational presentations (model showing how stormwater affects water quality) are obvious connections. In fact, the 2016 Georgia Adopt-a-Stream Trainer of the Year, Kevin Smith, works at KFCB. But its programs focused on solid waste also touch on water quality. During solid waste workshops, KFCB staff points out that we all create waste and have choices in dealing with it. Litter that starts on the land can easily end up in the water.

This lesson played out on a recent Saturday at the 29th Annual Shore Sweep sponsored by the Lake Lanier Association. While the event can draw up to 1,000 volunteers across several counties all around the lake, KFCB volunteers work two key areas in the county – Bald Ridge and Port Royale Marinas. For several hours, more than 200 volunteers at the marinas collected 7.4 tons of trash in the lake and along the shoreline.

Visit www.keepforsythcountybeautiful.org to learn about all KFCB does and how you can participate.

Volunteers ready to get dirty!

Trash collected at Bald Ridge Marina

FALL 2017

THE RESOURCE

UNDERSTANDING OUR WATER

PARTNERING ACROSS COMMUNITIES TO IMPROVE WATER QUALITY!

Seeing cattle graze in open fields recalls Forsyth County's past, but in fact the County is still 20% agricultural!* Creeks offer a welcome watering spot for cattle and deer, but can be bad news for aquatic animals that need healthy waters to thrive. Animal waste and stream beds churned up by hooves can compromise a stream's health and the creatures living in it.

Fencing along creeks, combined with designated animal crossings helps balance the needs of land animals and water health. Cattle and deer have access to the water, and the aquatic environment stays healthy. Grasses, plants, and trees grow along the banks creating stream buffers, which also helps filter out pollutants.

The Stormwater Division has partnered with the Natural Resources Conservation Service (NRCS) and Keep Forsyth County Beautiful (KFCB) for a federal grant that will help establish this type of water quality best management practice (BMP) in a northeastern section of the County. The grant funding will help with installing fencing along a stream, planting vegetative buffers, conducting water quality monitoring, and reaching out to area land owners. Work is expected to begin later this year.

Fencing along creeks like this one in north Forsyth will help protect water quality by limiting access to animals.

**Forsyth County Comprehensive Plan Update (2016)*

The Department of Engineering publishes The Resource on a regular basis to build community knowledge and understanding of our shared water resources.

FALL 2017

In this Issue…

» *Forsyth Partners on Water Quality*
» *Measuring Watershed Protection through Data and Nature*
» *Water Quality Spotlight: Keep Forsyth County Beautiful*

WATERSHED PROTECTION METRICS: DATA + NATURE

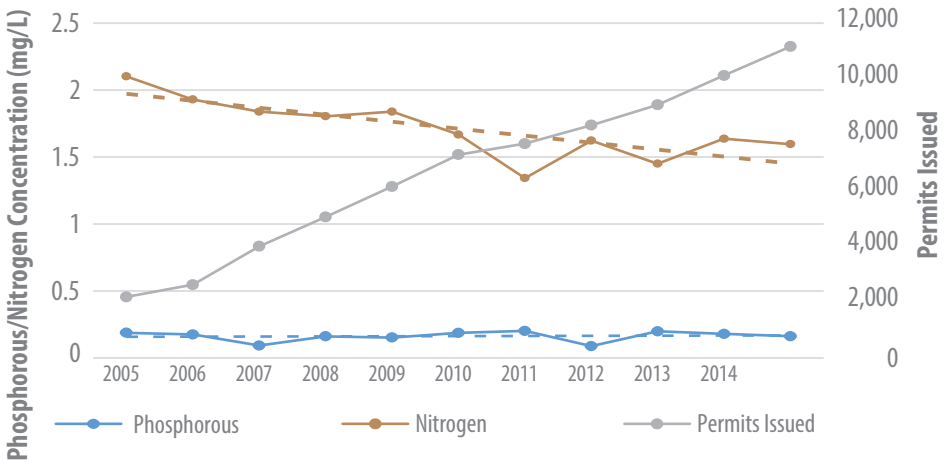
FALL 2017

Since 2001, the County has been working diligently on protecting and improving water resources by implementing a number of State requirements for watershed protection, including:

- Assessing stream conditions
- Identifying pollution sources
- Evaluating water quality improvement and protection options
- Engaging in community outreach and education

These are all elements of the Watershed Protection Plan (WPP) and the Stormwater Management Plan (SWMP), which form the basis of Forsyth County's approach to watershed management and protection.

A key metric showing the benefits of almost two decades of watershed management and protection is a comparison of growth (based on the number of land disturbance permits) against certain water quality parameters, specifically **phosphorous** and **nitrogen**. While Forsyth continues its trend as one of the fastest growing counties, the water quality in most County streams has stayed the same or even improved during the past decade.



What's mg/L? *Phosphorous and nitrogen are measured in milligrams of compound per liter of water or mg/L. It's equivalent to pouring a cup of water in a swimming pool.*

How do nitrogen and phosphorous get in waterways? *They are found in fertilizer which washes off land during storms. They also come from human and animal waste, soil erosion, and septic systems. Both encourage algae overgrowth in waterways that use oxygen aquatic life needs to survive.*

WATER QUALITY MONITORING: A FISH TALE & A BUG'S LIFE

This Fall, water quality monitoring focuses on the natural inhabitants of Forsyth waterways – fish and bugs! Scientists waded through streams in September to better understand the types and number of fish species living there and if they have changed. The survey occurs every other year and compares current fish counts to previous ones. More types of fish equal healthy waterways!

Monitoring team sorting fish by species

Like counting fish in a bucket

Madtom – member of catfish family

Redbreast Sunfish - one of many types found

Coosa Bass – the mouth gives it away

Striped Jumprock - a common species in local waterways

In November, scientists take to County waterways again for a macroinvertebrate (bug) survey. These are small organisms without backbones such as dragonfly nymphs, snails, small crustaceans, worms, leeches, etc. Macroinvertebrates are sensitive to different types of pollution and land disturbance. Since many complete their life cycle in the water, finding healthy adults is a good sign of healthy water.