

### NATURAL RESOURCES CONSERVATION SERVICE

*U.S. Department of Agriculture Agency Expands Beyond Its Dust Bowl Roots – Water Quality a Key Area of Focus*

The NRCS was created in 1935 as the Soil Conservation Service, partially in response to the Dust Bowl. At the time, persistent drought in the Great Plains led to widespread crop failures and dust storms which affected much of the Eastern U.S. Today, the NRCS offers farmers, ranchers, and landowners technical and financial assistance to put conservation practices in place that benefit both the environment and the landowner.

Some of the specific areas where NRCS can provide expertise on improving water quality include stream restoration, wetlands conservation and restoration, animal waste management, and nutrient management from fertilizer use on crops. Many of these programs also improve soil health and prevent erosion. Depending on the program, landowners invest in a certain percentage of the improvement costs and the federal NRCS programs pay for the remainder.

Partnering with NRCS on its various improvement programs can amplify the benefits to the surrounding community especially considering that more than **70% of land in the continental United States – more than 1.4 billion acres – is privately owned!**

Content developed from [www.nrcs.usda.gov](http://www.nrcs.usda.gov)

#### BY THE NUMBERS: NRCS IN GEORGIA \*

**\$8+ million** NRCS investment in programs in Georgia

**200+** employees in the state  
**4 million** acres of cropland

*\*FY2014 (most current information)*

You can learn more about programs and projects happening in Georgia by visiting [www.ga.nrcs.usda.gov](http://www.ga.nrcs.usda.gov).



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



### FALL LEAVES AND WATER QUALITY



Cooler temperatures, shorter days, and falling leaves signal autumn's arrival. But too many leaves create problems for stormwater management and water quality for the entire community. Meeting these challenges can enrich your yard, protect local waterways, and help your community.

- » Rake or blow leaves off your driveway or walkway, and away from curbs, gutters, storm drains, streets, etc. They can clog stormwater infrastructure, which could lead to localized flooding during storms. Build leaf piles in your yard instead for proper disposal or other beneficial uses.
- » Compost leaves to create a natural fertilizer/soil enhancer to place around shrubs and in garden beds. Decaying leaves release lots of nutrients, including phosphorous, that are great plant food. But they contribute to algae blooms in waterways that harm fish and other aquatic life.
- » Use your lawnmower to break down leaves directly into your lawn to help feed the grass. Mulching gives the nutritional benefit of a chemical fertilizer without the cost.
- » Bag extra leaves in appropriate yard waste bags. Many private haulers serving the County offer curbside pickup or you can take the bags to one of several local/regional landfills accepting yard debris. Learn more at <https://www.forsythco.com/Departments-Offices/Solid-Waste-Recycling>.

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## WATER QUALITY IMPROVEMENT PROJECT PLANNED IN NORTHEAST FORSYTH

Fourmile Creek is a state-designated “impaired” waterway in northeast Forsyth. The County’s ongoing monitoring shows high levels of bacteria near the headwaters. DNA testing traced the bacteria directly to cattle and deer, and scientists monitoring the creek also saw signs that cattle have direct access to the creek.



Cattle contribute to impaired streams because of the amount of manure they drop any and everywhere that lets bacteria wash into the stream. They also trample banks causing erosion that overloads the stream with sediment (fine silt and dirt), which suffocates fish and other aquatic life.

The County is partnering on a water quality improvement project for Fourmile Creek to implement best management practices (BMPs) to improve water quality. BMPs will include all or some of the following:

- » Fencing along the stream bank
- » Graveled stream crossing(s)/access area(s) for livestock
- » Possible alternate water source(s) for livestock
- » Vegetative buffers of native grasses, plants, and trees along the banks

The state will administer the federal grant to offset a portion of the costs to establish the BMPs. Work is expected to get underway early next year.

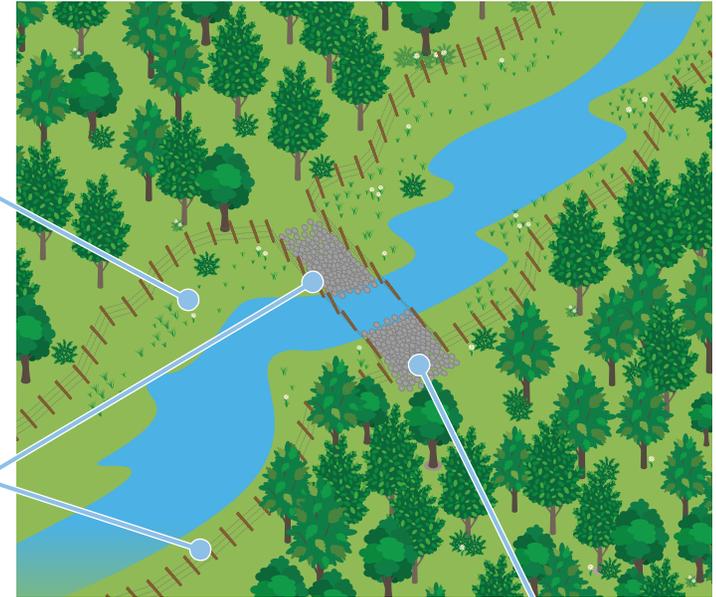
Scientists will continue to monitor the creek to measure any improvements. If successful, the effort will serve as a pilot project for future water quality improvement projects in the watershed and beyond.

## BREAKING DOWN BMPs – LIVESTOCK FENCING

Best Management Practices (BMPs) are methods or structures that protect or restore water quality by preventing pollution.

**Riparian Buffer:** area of plants, trees, shrubs alongside a waterway.

**Fencing:** keeps livestock out of stream and buffer area, prevents erosion, and limits fecal bacteria.



*Cows can create a long-term water quality issue if allowed unlimited access to waterways.*

**Limited Access/ Stream Crossing:** a very limited and narrow place, strengthened with gravel and fabric to prevent erosion, where livestock can access the stream to get water.

## FOURMILE CREEK WATER QUALITY PROJECT PARTNERS

