

Implementing Water Quality Improvement Strategies in the Coosawattee River/Carter's Lake Watershed

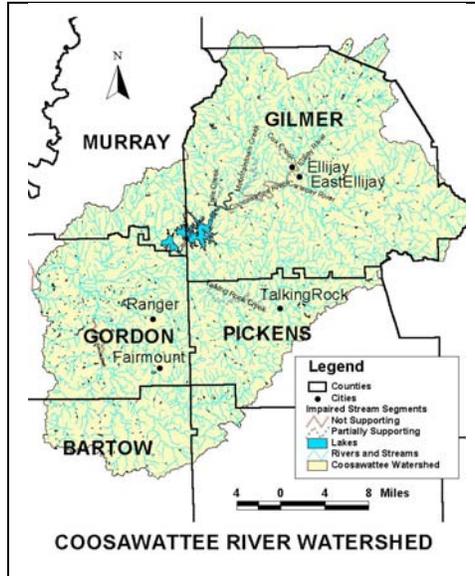
North Georgia Regional Development Center
Barry L. Tarter, Executive Director

Every year the State is required to make a list of lakes, rivers, and streams which do not meet Federal and State water quality standards. This list is based on results of periodic water quality testing done by the State of Georgia's Environmental Protection Division (EPD) and the US Geological Survey. In Gilmer County, all lakes, rivers, and streams meet the standards for most pollutants except for fecal coliform bacteria, which is an indicator of the presence of potential bacteriological pathogens to humans. The Coosawattee River, Cartecay River, Ellijay River, Mountaintown Creek, Flat Creek, Cox Creek, and Tails Creek all have segments exceeding Federal and State standards for fecal coliform bacteria pollution. This type of pollution comes from animal or human waste. Increased nutrient loads from this waste have resulted in increased water treatment costs to local governments. In addition, negative public perception of Carter's Lake has adversely impacted tourism and recreational dollars generated by the lake.

Over the past two years, the North Georgia Regional Development Center (NGRDC) has been working with local governments and other agencies in Gilmer County, as well as with a citizen advisory committee, to determine how to address fecal coliform bacteria



pollution. Initially, efforts were made to determine the potential source of the pollution. Because fecal coliform bacteria comes from animal and human waste, a study was made to determine how many cattle and poultry operations existed in the watershed and where they were located relative to the many streams in the area. It was determined that there are over 200 poultry and cattle farming operations in the Coosawattee River watershed.



Many of the cattle operations allow cattle to enter streams for watering purposes. A number also have heavy feeding operations, where animal waste accumulates and runs off into adjoining streams. Many of the poultry operations spread heavy amounts of poultry manure on fields in the area, which often runs off into adjacent streams during heavy rains. These kinds of conditions contribute to high fecal coliform bacteria pollution.

Most of Gilmer County's residential development is served by a septic tank and drainfield system to treat human waste. Unfortunately, these

systems can fail and cause surface water pollution. Decades ago, many people did not even use septic systems and instead used a drain pipe that dumped waste directly into a nearby stream. Such conditions contribute to the high fecal coliform counts that are found in many streams in the Coosawattee River watershed.

Recognizing that these problems existed, local governments and agencies supported NGRDC's efforts to secure a grant from the US Environmental Protection Agency (EPA) under the Federal Water Quality Control Act. NGRDC was awarded \$150,000. The project, which began in January 2003, was designed to address four objectives.

1. One objective is to provide funding for agricultural best management projects. Such projects will serve as a demonstration to cattle and poultry farmers in the area on ways to minimize animal waste entering streams. The NGRDC will provide a small grant covering 60 percent of the cost of a poultry waste stack house, fencing along streams, off stream watering facilities, or construction of heavy use feeding areas to



those farmers whose current operations may be contributing to the fecal coliform bacteria in a nearby stream. The NGRDC has grants to fund approximately seven of these projects. Three projects have already been completed and four projects are currently in development. These projects were selected through the assistance of USDA Natural Resources Conservation Service.

2. A second objective is to fund septic system repairs which may be contributing to the fecal coliform pollution. Again, NGRDC will provide a small grant (up to 60 percent of a project cost, not to exceed \$1,500) to property owners that are having septic system failures that are located adjacent to streams. Six projects have been completed and three projects are underway. Most of these projects consisted of homes that did not have a septic system at all. The projects were selected through the assistance of the Gilmer County Environmental Health Office. NGRDC has grants to fund approximately twelve septic system repair projects.



New Septic System

3. A third objective is to educate local citizens, farmers, and government officials about water quality in the watershed and what can be done to improve it. This will be accomplished through workshops, press releases, and demonstration projects. Two activities are currently planned.

First, an on-site agricultural best management practices (BMP) workshop was held in May at a local farm. The workshop gave area farmers a chance to see first hand a variety of cattle BMPs that are designed to keep cattle waste out of streams. Plans are being made for a poultry BMP workshop in the near future.



BMP Workshop

Second, a public educational forum was held in November with 80 people attending. The objectives of this forum are to a) provide information about the importance of the Coosawattee watershed and water quality problems within the watershed, b) provide

information about program activities that are currently underway and others that are planned for the future, and c) determine if there are local citizens willing to get involved in improving and preserving the water quality health of the watershed.

4. The fourth objective is to determine if there is interest in forming a Coosawattee River Alliance. This would consist of establishing an on-going organization of local officials, citizens, State agencies, and others who are interested in preserving water quality. Over the past several months, the NGRDC and other State and local agency representatives have been meeting to discuss water quality concerns in the watershed. This group is urging the public to become more involved in the protection and clean up of the Coosawattee River through the formation of an Alliance.

Future Activities

Two new grant applications have been submitted and approved by the EPA and Georgia EPD and funds are expected to be available in the fall of 2004. These proposals, which will



Poultry Stack House

be funded by under the Section 319(h) of the Clean Water Act will continue to provide cost sharing grants for the implementation of agricultural BMPs and for septic system repairs of failing systems. Under the agriculture component, funds will be available to cost share with 50 to 70 farmers for the installation of BMPs. Potential projects include 26 poultry and dairy dry waste storage facilities, 15 cattle grazing and holding areas, 3 solid waste separators, 2 waste storage ponds, and 3 agro-chemical mixing facilities.

Under the septic system component, funds will be available to cost share with approximately 65 landowners on projects to correct failing septic systems that are located along a stream. This project will also include an education program to increase awareness regarding septic system design, installation, and maintenance.

For more information, contact:

Karl Kreis, Water Resources Planner
North Georgia Regional Development Center
503 West Waugh Street
Dalton, Georgia 30720
Phone: 706-272-2300 Fax: 706-272-2253
email: wer@ngrdc.org