

How Will This Program Affect Me?

The information collected through the ambient water quality monitoring program will provide continual information on the vitality of the County's waterways. Ultimately, this information will be used to help inform everyone in the County as to their influence on the health of our rivers, lakes and streams. Every one of us has an impact on our natural environment and contributes to pollution in our waterways. The purpose of the development of the monitoring program is to identify those pollutants and provide educational information to residents, workers, and business owners as to how they can reduce their impact to the environment. These educational programs will be coming soon, so keep an eye out!

We all play a role in the health of our community; through research, information and technological developments, the County wants to provide the most accurate information to its residents as to how we can all become better stewards of the environment and preserve the beauty of Richland County for generations to come.



The Dripster says "Stormwater...Let's Keep it Clean"

CONTACT US...

Richland County Department
of Public Works

Stormwater Hotline:
(803) 576-3599

Internet: [http://www.richlandonline.com/
departments/publicworks/NPDES_Construction.asp](http://www.richlandonline.com/departments/publicworks/NPDES_Construction.asp)

**South Carolina Department
of Health and Environmental Control**
Phone: (803) 898-4300

Internet: [http://www.scdhec.net/
environment/water/swerfmain.htm](http://www.scdhec.net/environment/water/swerfmain.htm)



Ambient Water Quality Monitoring Program





Introduction

As part of the federal government's (EPA) National Pollutant Discharge Elimination System Permit (NPDES) program, administered in South Carolina by the Department of Health and Environmental Control (SCDHEC), Richland County is required to apply stormwater pollution control measures. In particular, Richland County must identify key pollutants that are prevalent in the existing waterways and develop programs to reduce these pollutants. A comprehensive program of identification, reduction and monitoring is currently underway in your neighborhood!

In this brochure you will learn what steps the County is taking to identify and monitor existing water quality conditions throughout the County through the ambient water quality monitoring program.

What is ambient water quality monitoring?

Ambient water quality monitoring involves testing of streams, rivers and lakes during normal flow conditions. Samples are taken and tested when the affect of runoff from rainfall events is not present. This provides information regarding the overall quality of the water at these locations. The natural water quality of our rivers, lakes and streams can be influenced by a variety of factors that are detected through ambient testing. These problems may include:

Natural influence – the natural degradation of vegetation, including plant material, grass clippings and leaves can alter the balance of nutrients and bacteria in the waterways. Excess vegetation in the water can lead to an increase in bacteria and microorganisms that naturally break

down organic material. This can reduce the amount of oxygen in the water and severely limit fish and amphibian habitats.

Livestock/wildlife influence – an elevated level of fecal coliform bacteria in the water could indicate higher than normal populations of wildlife, pets and/or livestock waste. A significant source of this pollution is often attributed to water fowl. Geese and ducks tend to migrate and can spike fecal levels during these times of migration. The increasingly permanent populations of geese and ducks around lakes, rivers and golf courses can cause a serious problem and increase fecal levels in the water. Geese can produce up to five pounds of waste per day!

Illicit discharges – illicit (unpermitted) discharges are any type of illegal dumping of liquid or solid waste into waterways. The ambient testing can help to determine the source of these discharges so that they can be eliminated and reduce the amount of overall pollutants in the water. Illicit discharges may include washing machines (gray water) draining directly to creeks, carwash runoff, industrial runoff or damaged and leaky sewer and septic systems.



Where is monitoring taking place?

Richland County has identified over twenty locations where ambient water quality testing is being performed quarterly. Since temperature has an influence on levels of organisms in the water, these sites are being monitored every quarter to develop comprehensive information on various problems associated with different times of the year. These stations are located throughout the County's three major watersheds. These stations are also dispersed through different development areas of the County, including:

- Low Density Residential Areas
- Medium Density Residential Areas
- High Density Residential Areas
- Commercial Areas
- Industrial Areas

What can this data tell us?

With this program collecting data throughout different areas and watershed in the County, the resulting information can be used to tailor specific pollution reduction programs for different sites and neighborhoods. Specifically, the County has initiated an Illicit Discharge and Detection Program (IDDE). This program identifies potential sources of water pollution and takes steps to notify the offending parties and work with them to clean up the discharge problems. The solutions range in complexity, but may be as simple as installing Best Management Practices (BMPs). Leaking sewers and septic systems can be repaired, and livestock and wildlife can be relocated further from stream channels to preserve water quality. The ambient water quality testing program is currently being utilized to identify the locations of the problems. Once the problems have been identified and corrected, the program will continue as a monitoring program to ensure that our waterways are clean and safe for wildlife and our recreational enjoyment.

