



The Resource

A Publication of the City of North Augusta
Stormwater Management Department

Pretty Run Creek Listed Impaired

Where is Pretty Run?

Pretty Run creek originates near Five Notch Road, the Knollwood Subdivision and Green Forest Drive. It then winds along the North Augusta Greenway Trail along Bolin Road. Feeder streams enter to Pretty Run creek from Lynnhurst and from the ponds located below Robinson Drive at Martintown Road. The creek then crosses Martintown and travels through the Rapids subdivision before it enters Savannah River. In North Augusta, this land area or watershed basin is named Pretty Run Basin.

What is the problem?

Pretty Run creek was added to the 2006 South Carolina list of impaired waters (303d list) due to elevated levels of bacteria called fecal coliform. Fecal coliform is present in the environment from animal and human feces. The bacteria can enter streams through direct discharge from mammals and birds, from agricultural and stormwater runoff, and from untreated human sewage. When levels are high there may be an elevated

risk of waterborne gastroenteritis for those that ingest water from the stream.

Many of the sources of fecal coliform to Pretty Run creek are from activities by man and animals. There are a great number of homes located around Pretty Run creek. The close proximity of these homes to the creek can contribute to the problem in several ways including:

- Sewer pipes that tie customers to the sewer system may be cracked or failing causing untreated sewage to discharge to lawns.
- Higher numbers of pets in residential areas can cause the problem. When pet wastes build up on lawns (or are gathered and put into the woods or storm ditches in the area), that

See Pretty Run on page 2

HOW YOU CAN HELP!

Storm Sewers

- Do not dump anything down the storm sewer inlets or grates. Stormwater will wash all debris directly to our creeks, streams, or river.
- If a storm sewer is an open ditch (grassed or concrete) do not deposit animal wastes, chemicals, oils, sediments or yard debris into it. These items will wash directly to our streams during storms.

Septic Tanks

- Manufacturers suggest that septic tanks be cleaned and inspected every three years. Repair all leaks!
- Do not drive on, cover, dig, plant, or allow stormwater to pool on the leach-bed.
- Minimize the daily liquid load to the tank. Space laundry loads through-out the week and wash when you have a full load. Fix faucet leaks around your home and don't let the water run while doing routine tasks.
- Minimize solid loads to the tank. Only three products should go into a septic tank: human wastes, toilet paper, and water.

Public Sewer

- If the system is leaking or backing up on your property, have a licensed plumber inspect your system and repair problems.
- Minimize the daily liquid load to the system. Space your laundry loads through-out the week and wash when you have a full load. Fix leaks around the home and don't let the water run while doing routine tasks.
- Minimize solid loads to the system.
Note: household cleaning chemicals won't hurt the system if used as directed and not in large quantities.

Pet Owners

- If your pet lives indoors or you collect waste in a litter box, place the waste in a trash bag and seal it. Put it in your garbage for proper disposal.
- If your pet waste is accumulated outdoors, limit waste that can wash off the lawn by scooping it and putting it in a trash bag for disposal.
- An alternative to scooping is to purchase a "digerster" that works like a septic tank but is small and convenient for animal waste. The lid rests just above the ground and you can deposit your animals waste there. Look for digester at pet stores, in pet supply catalogs, and on pet retail Web sites. The cost, including both the digester unit and the digester mix, ranges between \$40 and \$75.

Species profile: American Bullfrog

(*Lithobates catesbeianus*, formerly *Rana catesbeiana*)

The American Bullfrog can be heard much more often than seen since they quickly jump into the water and hide under vegetation when approached. The steady and deep honk-like croak of the bullfrog calls are continuous on warm nights near North Augusta ponds. These sounds carry long distances making this aquatic amphibian seem much larger than it is. Although not as large as they sound, the bullfrog is quite a large frog. They can grow to eight inches long and weigh up to one and a half pounds. As a matter of fact, the larger the tadpole, the larger the adult frog will be. Some tadpoles do not morph into a frog for up to three years, growing larger and larger, thus giving it the best advantage when developing into a large adult bullfrog. Once it becomes a frog, it takes about two more years to become an adult. A bullfrog can live up to 13 years. American bullfrogs are the largest true frog native to North America.

Bullfrogs live in or near wetlands, swamps, ponds, rivers, and slow moving streams. They are active day and night. Male frogs can be identified by the size of the ear or tympanum. The tympanum is a round circle located on the side of the head near the eye. If the ear is twice as large as the eye, then it is a male. Males also have yellow throats during breeding season. If the ear is about the same size as the eye, it is a female.

The males are the ones doing all the croaking. They call to the females from February to October. The female lays its eggs in the shallow edges of ponds and wetlands. The tadpoles emerge and live in the water until they are ready to change from tadpoles into young bullfrogs. Bullfrog tadpoles mostly graze on aquatic plants. Once they become frogs, they usually eat snakes, worms, insects, crustaceans, frogs, tadpoles, and aquatic eggs



Photo by: R. Hayes Cummins at Miami University

of fish, frogs, insects, or salamanders. These frogs prefer warm weather and are abundant in the south. During the winter they will dig a burrow and hibernate until the warmer temperatures return.

Bullfrogs are great at adaptation and will survive well in areas of development. They are well adapted to warmer temperatures. For these reasons they are better at survival than other species. The good news, they can control insect populations. The bad news, overabundance of bullfrogs can mean disaster for other species of frogs that might be a tasty meal for them. To learn more about bullfrogs visit our website at www.northaugusta.net.

Pretty Run

Continued from page 1

waste will wash into the stream during rain events.

- Septic tanks will contribute if they are not working properly.
- Older homes may have laundry wash-water that empties into the environment instead of being sent into the sewer system.
- Wild animal populations also contribute to the problem.

All of these sources of fecal coliform bacteria can be carried into Pretty Run creek during rain events. The city has surveyed city sewer lines and found no direct

sources of pollution from them. Since concentrations of fecal coliform are routinely low during dry weather and higher after rain events, non-point sources from stormwater runoff are most likely the cause of the increased levels. Many storm drains empty into the creek. Limiting sources of pollution will improve water quality in Pretty Run creek.

Grant can provide help to residents.

The city of North Augusta is working with the Clemson Extension office in Aiken to help identify sources of pollution and to provide education to citizens regarding ways to improve water quality

in Pretty Run creek and the Horse Creek watershed. Through a grant from the state, cost-sharing is available to residents that need to repair septic tanks or tie on to the system within the Pretty Run creek or Horse Creek watersheds. Please contact Marion Hiers at (803) 649-6297 about the program. If you are a member of a group that would like to learn ways to help improve Pretty Run creek, the stormwater management department is available for presentations on the topic. If your group is interested, please contact us at (803) 441-4246 or through email at stormwater@northaugusta.net.



For additional information contact:

Tanya Strickland, Environmental Coordinator
City of North Augusta
Stormwater Management Department
P.O. Box 6400 • North Augusta, SC 29861-6400
(803) 441-4246
stormwater@northaugusta.net

