

## Dirty waterways subject of environmental probe

By Aaron Kessler

Daily Progress staff writer

Thursday, August 10, 2006

Area residents looking to keep cool in the summer sun may want to avoid going for a dip in certain streams. That is, unless they want to bathe themselves in abnormal levels of fecal bacteria.

The Virginia Department of Environmental Quality has begun a water quality study to examine high levels of fecal bacteria present in several streams in Albemarle and Buckingham counties. The DEQ will hold a public meeting at 7 tonight at the Buckingham Agricultural Center to discuss the study and to invite residents to join the process.

Eight tributaries that feed the James River in Albemarle and Buckingham counties have been identified as "impaired" when it comes to the level of bacteria in the water. The state designates a waterway as impaired when at least 10 percent of the samples collected contain higher-than-acceptable levels of bacteria.

As a result, DEQ officials have been monitoring points along the streams regularly, testing samples to determine the level and type of bacteria found in the water. In particular, they are looking for so-called "fecal coliforms," the bacteria that live in human and animal digestive systems. By analyzing the makeup of the coliforms, DEQ scientists can track the source of the feces that washed into the water - whether it was from humans, livestock, pets or wildlife.

"That's why we're doing this study, to find out where it's coming from," said Kelly Wills, one of two DEQ scientists heading up the project. "Once we know, we can better determine what needs to be done to clean [the waterways] up."

Data on the area's climate, land use, soils and human and animal populations will also be gathered in the coming months to help figure out the causes of the abnormal levels of bacteria, as well as possible solutions to the problem. Wills said state officials are guided by the principle that "all state waters should be swimmable," and that measuring the fecal contamination is how scientists determine whether residents can swim in a river without risk of becoming sick.

In Albemarle County's Totier Creek, for example, 23 percent of the samples revealed excess levels of bacteria. For nearby Ballinger Creek, that number was 35 percent. And testing sites on the North River in Buckingham County contained high levels of bacteria 70 percent of the time.

The good news is that once the fecal contamination stops flowing into the streams, the bacteria level will quickly drop and the water quality will improve. But Robert Brent, also working on the study for DEQ, said the solution is rarely that simple.

"It really depends on the number of sources [of contamination] we find," Brent said. "If it's a single source - one particular location that's causing the problem - that's the easiest situation."

But he said that almost never happens. Usually the contamination is a result of multiple sources of fecal matter flowing into the water all at once - from faulty septic tanks and waste disposal systems to farm animals and pets. As a result, many people within the community generally have to help to achieve the necessary reductions.

The state offers several financial incentives and "cost-share" programs to help homeowners or businesses do just that, although those programs are generally voluntary. Brent said the only entities

the state can directly order to make reductions are those with state permits, such as sewer treatment plants.

DEQ, as part of its study, will develop an "implementation plan" that will recommend what steps should be taken to address the problems in southern Albemarle and Buckingham counties.

Brent said a separate study of streams in the Rivanna River watershed, which includes most of the Charlottesville metropolitan area, will be started sometime in the next few months.

While everyone agrees the streams in question, and others, are being polluted, how to deal with the situation will remain a hotly debated issue in Central Virginia.

John Murphy, director of StreamWatch, which monitors water quality in Charlottesville-area streams, said that dealing with land use issues should be a top priority when it comes to the region's waterways.

"Historically, we find that increased commercial and residential development is equated with poor stream health," Murphy said.

Neil Williamson, executive director of the Free Enterprise Forum, a Charlottesville think tank supported by area realtors and homebuilders, disagreed that development itself is the problem. He said counties should be mindful of what regulations are put in place to steer growth.

"The harder you make it for developers to build where the infrastructure is already set up to handle these kinds of water issues, the more you'll see building in rural areas instead that don't have the same capability to mitigate the problem."

The DEQ study of Albemarle and Buckingham is expected to be completed by the spring of 2007, with a draft report ready by the end of the year. The Rivanna study should begin within several months.

Contact Aaron Kessler at (434) 964-5476 or [akessler@dailyprogress.com](mailto:akessler@dailyprogress.com).

**This story can be found at:** [http://www.dailyprogress.com/servlet/Satellite?pagename=CDP/MGArticle/CDP\\_BasicArticle&c=MGArticle&cid=1149189905299&path=](http://www.dailyprogress.com/servlet/Satellite?pagename=CDP/MGArticle/CDP_BasicArticle&c=MGArticle&cid=1149189905299&path=)

[Go Back](#)