

Report examines water quality in the May River

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Bluffton's stormwater drainage system might be keeping more fresh water out of the May River than previously thought, said an author of an upcoming report on the river's water quality.

Derk Bergquist, a manager with the S.C. Department of Natural Resources' Marine Resources Research Institute, said that although the May River has had an increase in the fecal coliform bacteria concentrations since the 1990s, water-quality monitoring stations also have recorded an increase in salinity.

Too much fresh water in a saltwater system can lower a river's salinity, which diminishes its ability to break down bacteria, he said. But these new findings don't explain why there are high amounts of fecal coliform -- a pollutant that restricts shellfish harvesting when levels exceed state standards -- in the river's headwaters.

The high fecal coliform levels might be attributed to stormwater drains flushing large amounts of bacteria during big storms, Bergquist said. "It could be the drainages are flushing all the fecal coliform out all at one time during only the heaviest rain events," he said. "But the total volume of freshwater hasn't increased. It's almost like all the stormwater drains are too much of a good thing."

The study's findings rely on data from water-quality sampling sites along the river. The most recent water sampling data, collected by the S.C. Department of Health and Environmental Control, DNR, the town of Bluffton and Palmetto Bluff, are from 2008 and some data date back to 1994, Bergquist said.

"It was a large number of data sets to sort, pull together and make sense of," he said. "What we have is data that's very suggestive. What we need to start considering are ways to control 'flashiness' -- or large amounts of stormwater runoff -- coming from stormwater system lagoons.

"Bergquist's supervisor still must review the report; it should be available for public comment in the next two weeks.**THE OKATIE**

Another water-quality study in southern Beaufort County is expected soon.

After a two-year study, DHEC hopes to reopen the Okatie River to shellfish harvesting.

The agency recently completed a program to improve the river's water quality, impaired in some areas by fecal coliform.

The DHEC program, specific to state waters, tests harvested shellfish to determine how much of a particular pollutant a body of water can accept and still have the shellfish meet federal Food and Drug Administration standards.

The report found there must be a 51 percent reduction in fecal coliform in the headwaters of the Okatie River to meet water quality standards, according to Mihir Mehta of the state's Bureau of Water.

"The challenge here is that there is no way to pinpoint the exact source," Mehta said.

The process helps identify the pollution's source, or sources -- which could be pets or farm animals, failing septic tanks or stormwater drainage systems -- and is necessary to be awarded grants from the U.S. Environmental Protection Agency.

Mehta said he expects a draft of the report to be available online in about two weeks for public comment.

"We have a plan -- we have a goal," Mehta said. "We need to try to leverage our resources and work together to solve the problem."