

Troubled waters

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BY CHARLES SOWELL staff writer

EPA figures show more than half the state's streams are tainted

More than half of the monitoring stations on South Carolina streams showed the water quality unfit for recreation or fishing, according to reports from the U.S. Environmental Protection Agency.

Drinking water supplies appear to be well protected, according to EPA figures.

The records are based on state Department of Health and Environmental Control data as provided to the EPA and tabulated

by the *Journal* from state and federal Web sites.

Most of the problems stemmed from fecal coliform, a broad indicator of fecal matter in the water; some were due to metals, primarily copper and chromium. High levels of phosphorus and water pH were also found.

These records reflected only the substances DHEC checks for, and give no indication of other, possibly more dangerous problems, such as pollutants locked up in sediments from previous decades of unregulated industrial and municipal discharge. See **WATERS, PAGE 10**

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The numbers are illustrative of a growing dilemma for environmental groups whose primary focus is to inform, educate and advocate for better environmental quality in all areas. They claim DHEC is a dysfunctional agency, one at cross purposes between protecting the public health and welfare of South Carolinians and promoting economic development.

DHEC officials say they do the job they're given to the best of their collective abilities and funding.

Asked if overall water quality is getting better, worse or about the same in the state, DHEC spokeswoman Clair Boatwright could not say with certainty.

"We are monitoring more sites in bodies of water across the state, so comparing years without the context may be a little apples and oranges," she said. "In some areas, water quality is getting better, but with the additional monitoring we are also finding more problems."

She also said some of the problems stem from the fact federal and state standards are more restrictive.

"We are now concentrating on the tiniest of amounts (parts per million, billion) that may be in the water plus we're testing for more compounds," she said. "Certainly, conditions like the recent drought would have an impact on the numbers."

Liz Booth of the Georgia Department of Natural Resources Environmental Protection Division said most states don't know if things are getting better or worse between reporting periods.

"There are just too many variables," she said.

For 2002, the EPA reported 52.26 percent of the monitored streams sites in South Carolina were impaired. In 2004 that number had risen to 63.21 percent.

That same year, 58 percent of Georgia's monitored rivers and streams were impaired; North Carolina had 46.02 percent.

Gerritt Jobsis of the South Carolina office of American Rivers, an environmental group, said he was shocked the South Carolina numbers are that high.

Of particular concern is mercury contamination, which in fish tissue has become endemic in rivers along the coast.



Charles Sowell/Staff

CONESTEE DAM: The 100-year-old structure holds back sediments as high as the spillway laced with 100 years of unregulated discharge by industry.

These blackwater streams, so named because of the darkening influence of tannic acid from the decay of natural organic material, are uniquely vulnerable to mercury due to their somewhat more acid character, most experts agree.

An EPA listing of mercury-impaired stream-monitoring sites includes all the rivers in the ACE Basin, which at 134,000 acres makes it one of the largest undeveloped estuaries on the East Coast. It includes land along the Ashepoo, Combahee and Edisto rivers.

Also suffering from mercury are the Black, Congaree, Cooper, Great Pee Dee, Little Pee Dee, Lynches, Salkehatchie, Santee, Savannah, Waccamaw and Wateree rivers. Lowcountry lakes Marion and Moultrie and Upstate impoundments Lake Jocassee and Lake Russell are on the list.

Mercury contaminants make up a small portion of the total pollutant load of South Carolina's streams, but they are particularly dangerous to pregnant women and children.

David G. Baize, assistant chief of DHEC's bureau of water, said, "Something

that's important to remember is that we test specific sites and those tests give us a snapshot of what conditions are like at that time and place, not necessarily for the entire body of water or entire length of the river."

In 2006, DHEC found 151 sites with mercury in fish tissue, and 2,183 stream miles were impaired for metals out of a total of 20,954 monitored stream miles or 10.4 percent.

The EPA reported in 2004 North Carolina had 31 sites (3.91 percent) impaired for mercury; Georgia tallied 61 sites (4.24 percent). EPA has not posted figures for 2006.

DHEC does not know or care where the pollutants are coming from, said Bob Wislinski, a spokesman for the Coastal Conservation League, an environmental group fighting state-owned Santee-Cooper's plan to build a coal-fired power plant in the Lowcountry.

Fallout from coal-fired plants is strongly suspected as the source of most mercury pollution in the coastal area, Wislinski said.

Dr. Susan Lives, a Coastal Carolina >

> professor of marine chemistry, said since DHEC does not monitor stream sediments, one of the prime suspects in concentrating mercury levels goes untested.

"DHEC has so far refused to test for mercury in humans," Wislinski said. "Nor do they test for mercury in stream sediments. We've found the highest concentrations of mercury are in bottom-dwelling fish (catfish) that make up a big chunk of some (poor) people's protein intake along the coast."

Wislinski said DHEC has posted signs along Lowcountry rivers warning about mercury in fish. Previously, that information was available only online.

In the Upstate, sediment poses a

particular problem.

"We are at the epicenter of development in South Carolina," said Jason Van Driesche, water quality director for **Upstate Forever**, an environmental advocacy group. "One of the side effects is that we've altered stream hydrology to the point that it has created some real problems."

Even small rains flush chemicals into rivers, particularly the Reedy. But this is minor compared to the amount of polluted sediment in the river from northern Greenville County to Lake Greenwood.

According to reports filed with DHEC, Lake Conestee, located just south of Greenville on the Reedy River, is a

repository for more than 100 years of unregulated outflow from industry.

The mud at the bottom of that lake is a veritable stew of dangerous industrial chemicals, including arsenic and mercury, the reports showed.

"Amazingly, to me, is the fact that you can still occasionally find people fishing in that lake," said Van Driesche.

Overall, contact with the Reedy is best avoided.

"I might put my feet into the Reedy on the rocks on a day when the water was particularly clear, but I would not touch the mud for any reason," said Van Driesche.

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