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States Join E.P.A. Study of Pathogens in Ohio River

By BOB DRIEHAUS

CINCINNATI — Six states bordering the Ohio River are joining the Environmental Protection Agency in the largest study of its kind to identify and reduce dangerous levels of bacteria that plague the waterway.

Unsafe levels of fecal coliform, or E. coli, have been identified in about 500 miles of the 981-mile river, which stretches from Pittsburgh to the Mississippi River at Cairo, Ill.

The pathogens can sicken swimmers and others who come in close contact with the water. The river also provides about five million people with drinking water, including residents of Cincinnati, Louisville, Ky., and the suburbs of Pittsburgh, though typical bacteria levels do not pose a threat to safely treating the water.

The analysis, which officials plan to finish next year, will identify how much bacteria sewage treatment plants, factories and farms, among others, can discharge into the river without exceeding safety standards.

Kentucky, Illinois, Indiana, Ohio, Pennsylvania and West Virginia are participating, as well as the Ohio River Valley Water Sanitation Commission, which has collected weekly water samples during the recreational season, May through October, since 1992.

“It kind of sets a pollutant diet for the river,” said Dean Maraldo, an E.P.A. official who attended a public hearing about the study last Thursday near Cincinnati. “The study itself doesn’t bring financial resources but highlights problems so that states and stakeholders can target what resources they have.”

According to the E.P.A., carrying out the recommendations of a similar study led to the restoration of healthy oxygen levels in the Middle Cuyahoga River in northeastern Ohio through the removal of one dam and modification of another. After another study, oyster harvesting was revived in Lynnhaven Bay in Virginia after bacteria pollution caused by boaters, sewer systems, farms and pet waste was reduced.

But cleaning up the Ohio poses a much bigger challenge because its watershed spans seven states and covers 204,000 square miles.

In 49 cities and towns, combined sewer and storm water systems release untreated sewage directly into the river during heavy rains. Upgrading those systems will cost billions of dollars, officials said, and federal regulations require sewage treatment plant operators to assemble long-term improvement plans, which will be taken into consideration in the new study.

Runoff of manure used as fertilizer and waste from animal farms, referred to as nonpoint-source pollution, are also major bacteria contributors. The E.P.A. and the states have little authority to force farmers to change...
their practices, and the study cannot mandate changes to farms.

“Everybody recognizes the need to reduce the bacteria levels,” said David Montali, the study’s West Virginia coordinator, adding that he did not know whether the study would “be a driving force to make things happen.”

Kevin Kratt, a project manager with Tetratech, a private firm that was hired as a consultant, said he hoped the study’s wealth of new information on pollution sources would enable the E.P.A. and the states to better focus money on projects that yield the biggest improvements in water quality.

“The publicity generated may drive some nonpoint-source improvements as well,” Mr. Kratt said.

Jennifer Clark, an environmental protection specialist in Illinois, said the study’s intention was “to get people on board and aware that it needs to be dealt with.”

“A lot of people want to choose a smaller watershed because it would be easier,” Ms. Clark said, “but we need to hit this on the head and find out our biggest problems and where we can make a difference.”