



Federal money flowing into Lake Erie to help reduce flow of bacteria

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Michael Scott, The Plain Dealer



Peggy Turbett/The Plain Dealer

Edgewater Beach in Cleveland, shown here in a 2009 photo, is one among many Lake Erie swimming areas where bacteria levels are forecast through the Nowcast system.

Federal money is finally starting to follow bacteria into the waters of Lake Erie.

And that means the lake's swimming beaches -- sullied by some the most bacteria-contaminated water in the country -- should have a fighting chance to recover, health officials say.

"That's true, but it's hardly 'game over' ," said Frank Greenland of the **Northeast Ohio Regional Sewer District**. "It's never really going to be game over when it comes to water pollution, but you also never turn your back on federal money."

The sewer district and **Cuyahoga County Health Department** will likely get more than \$500,000 on three different projects in the ongoing bacteria battle over the next two years. The grant money will come as part of the first wave of President Obama's \$475 million Great Lakes Restoration Initiative.

That first portion is about \$161.5 million and although the money hasn't been formally awarded yet, federal

officials said last month that **their list of 270 finalists** were all likely to be funded.

Creek pollutes Huntington Beach

The county Health Department expects to use its \$247,518 to reduce bacterial pollution pouring out of the Porter Creek in Westlake and Bay Village and into the lake at Huntington Beach.

"We have known for some time that there are problems out there at Porter Creek, but it was a matter of 'Who's going to pay to fix these things?' " said Jill Lis, supervisor of environmental health services at the health district. "Now, we have an answer to that."

Until recent studies by the University of Toledo proved otherwise, Lis said, environmental investigators believed that runoff from Porter Creek was pushed eastward, away from the beach, by prevailing winds.

"But DNA testing of the bacteria in the creek and the swimming area showed that they are similar so now we know otherwise -- a lot is coming from Porter," she said.

The district will now look for "bacteria hot spots" in the watershed, Lis said. "We also need to determine if it is a human, or non-human pollution source," she said.

Sewer district and the U.S. Geological Survey research in recent years at some East Side beaches **had implicated the geese** -- birds that can expel its waste up to six times an hour -- in the high bacteria levels.

'Nowcast' and rapid testing

The sewer district will spend \$248,060 in GLRI grant money to further develop its **Nowcast forecasting program** for the troubled side-by-side beaches at Euclid Creek-Villa Angela -- routinely the worst in Northeast Ohio.

Those two beaches have each been closed up to 50 times a summer in recent years because of unsafe levels of bacteria in the water.

Lester Stumpe, a sewer district watershed manager who died from cancer earlier this year, wrote the grant proposal. "This is his legacy project --really his last hurrah for the sewer district," Greenland said.

Nowcast is already in place on the West Side -- Huntington and Edgewater Park in Cleveland -- and for small segment of the Cuyahoga River in the Cuyahoga Valley National Park.

The forecast isn't based on actual measurements of E. coli bacteria in lake water. Instead, a computer model analyzes wave height, water clarity, lake level, recent rainfall and water temperature to predict with about 85

percent accuracy whether bacteria levels are likely to be dangerous that day.

The district also expects to get \$87,988 to continue its research toward developing rapid bacteria testing. It now takes at least 18 hours to accurately confirm after-the-fact whether pollution exceeds a healthy level in the water.

"That's a day late, obviously," Greenland said.

"But I think the science will catch up soon. Then we'll test in the morning and post results within a few hours. That would give people information immediately to keep their family safe."

Reputation hard to change

But for now, Northeast Ohio officials still have to deal with a long and deserved reputation for tainted water.

The National Resources Defense Council **declared Ohio beaches the worst** in the nation in 2007 and second worst in the last two years, based on EPA reports from 30 different shoreline states.

This year's report, due out later this summer, will likely rank Ohio among the worst again.

But Lis and Greenland have argued that frequent water-quality testing here -- daily in some cases compared to once a week or less in other states -- can give the false impression that our water is that much worse.

The state had been ranked somewhere in the middle of the bottom 10 before 2006, the year agencies began testing more frequently.

Overall, about 7 percent of all water samples taken nationwide exceeded federal health standards -- but beaches on Lake Erie and other Great Lakes beaches were nearly two times that.

The most common bacteria found in swimming water in Ohio and elsewhere is E. coli, which is found in fecal matter in sewage or in runoff from wildlife or farms. Symptoms of illness from E. coli may include nausea, stomach cramps, and ear infections and skin rashes

But Lis and Greenland reminded swimmers that the best advice for avoiding waterborne bacteria is still the simplest: Stay out of the water in the 24 hours after a rainstorm.

"Everyone can do their part in little ways," Lis said. "At home, by keeping pollutants out of your storm drains -- and at the beaches by following common sense."

Weekend forecast good

With no recent rain to wash impurities into the creeks, storm sewers and then Lake Erie and little chance for rain conditions should be safe for swimmers this weekend.

Swimmers at Huntington and Edgewater beaches can get daily water-quality forecasts by going to **Nowcast** or by calling 216-432-7301.

Swimmers at other beaches can also view bacteria levels on an **Ohio Department of Health website**. Although the information is from the day before, it can still be helpful to confirm that a swimming area has been clean up until the day you go.

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