

Behind Toledo's Water Crisis, a Long-Troubled Lake Erie

By Michael Wines

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TOLEDO, Ohio — It took a serendipitous slug of toxins and the loss of drinking water for a half-million residents to bring home what scientists and government officials in this part of the country have been saying for years: Lake Erie is in trouble, and getting worse by the year.

Flooded by tides of phosphorus washed from fertilized farms, cattle feedlots and leaky septic systems, the most intensely developed of the Great Lakes is increasingly being choked each summer by thick mats of algae, much of it poisonous. What plagues Toledo and, experts say, potentially all 11 million lakeside residents, is increasingly a serious problem across the United States.

But while there is talk of action — and particularly in Ohio, real action — there also is widespread agreement that efforts to address the problem have fallen woefully short. And the troubles are not restricted to the Great Lakes. Poisonous algae are found in polluted inland lakes from Minnesota to Nebraska to California, and even in the glacial-era kettle ponds of Cape Cod in Massachusetts.

Algae fed by phosphorus runoff from mid-America farms helped create an oxygen-free dead zone in the Gulf of Mexico last summer that was nearly as big as New Jersey. The Chesapeake Bay regularly struggles with a similar problem.

When Mayor D. Michael Collins told Toledo residents on Monday that it was again safe to use the city's water, he was only replaying a scene from years past. Carroll Township, another lakefront Ohio community of 2,000 residents, suspended water use last September amid the second-largest algae bloom ever measured; the

largest, which stretched 120 miles from Toledo to Cleveland, was in 2011.

Summertime bans on swimming and other recreational activities are so routine that the Ohio Environmental Protection Agency maintains a website on harmful algae bloom.

Five years ago this month, the federal Environmental Protection Agency and state water authorities issued a joint report on pollution of the nation's waterways by phosphorus and other nutrients titled "An Urgent Call to Action."

"Unfortunately, very little action has come from that," said Jon Devine, the senior lawyer for the water program at the Natural Resources Defense Council in Washington.

"When we bring this subject up for conversation with the regulators, everyone sort of walks out of the room," Donald Moline, the Toledo commissioner of public utilities, said in an interview on Monday. "The whole drinking-water community has been raising these issues, and so far we haven't seen a viable response."

Lake Erie's travails — and now, Toledo's — are but the most visible manifestation of a pollution problem that has grown as easily as it has defied solution. Once the shining success of the environmental movement — Lake Erie was mocked as dead in the 1960s, then revived by clean-water rules — it has sunk into crisis again as urbanization and industrial agriculture have spawned new and potent sources of phosphorus runoff.

In Lake Erie's case, the phosphorus feeds a poisonous algae whose toxin, called microcystin, causes diarrhea, vomiting and liver-function problems, and readily kills dogs and other small animals that drink contaminated water. Toledo was unlucky: A small bloom of toxic algae happened to form directly over the city's water-intake pipe in Lake Erie, miles offshore.

Beyond the dangers to people and animals, the algae wreak tens of billions of dollars of damage on commercial fishing and on the recreational and vacation trades. With conservationists and utility officials like Mr. Moline, representatives of

those industries have for years called for some way to limit the phosphorus flowing into waterways.

There are practical and political reasons, environmental activists and other say, why it has not happened. The biggest, perhaps, is that the government has few legal options to impose limits — and voluntary limits so far have barely dented the problem.

The federal Clean Water Act is intended to limit pollution from fixed points like industrial outfalls and sewer pipes, but most of the troublesome phosphorus carried into waterways like Lake Erie is spread over thousands of square miles. Addressing so-called nonpoint pollution is mostly left to the states, and in many cases, the states have chosen not to act.

Beyond that, the Supreme Court has questioned the scope of the Clean Water Act in recent years, limiting regulators' ability to protect wetlands and other watery areas that are not directly connected to streams, or that do not flow year-round.

Wetlands, in particular, filter phosphorus from runoff water before it reaches rivers and lakes. A federal Environmental Protection Agency proposal to restore part of the Clean Water Act's authority has come under fire in Congress, largely from Republicans who view it as an infringement on private rights and a threat to farmers.



Mayor D. Michael Collins of Toledo drank tap water at a news conference on Monday to emphasize that it was safe to do so. Paul Sancya/Associated Press

Some efforts to control pollution have found powerful opponents in agriculture and the fertilizer industry, which, for example, has fought limits on lawn fertilizers in Florida towns and on overall pollution of the Chesapeake Bay. The principal industry lobby, the Fertilizer Institute, is part of a coalition of industry and agricultural interests that are opposing federal efforts to restore some coverage of the Clean Water Act.

With Lake Erie in peril, both Ohio and federal authorities have taken some steps to rein in phosphorus pollution. Some of the \$1.6 billion that Congress has allotted for a Great Lakes Restoration Initiative has gone to create wetlands and teach farmers ways to reduce fertilizer use and runoff. The Ohio government runs a Lake Erie Phosphorus Task Force that brings together interests from conservation to agriculture to industry to devise solutions to rising pollution.

But as in many places, Ohio has stopped well short of actually ordering the sources of phosphorus runoff to cap their production. A hefty Nutrient Reduction Strategy paper issued last year cites sheaves of demonstration projects, voluntary

phosphorus reduction goals and watershed plans, but makes no mention of enforceable limits on pollution.

A spokesman for Gov. John R. Kasich, a Republican, did not return a call seeking comment on the state's phosphorus initiatives.

The legislature this year passed a law requiring farmers and other major fertilizer users to apply for licenses and undergo certification, but limits control of pollution to voluntary measures.

All mention of one contributor to the pollution problem — so-called confined animal feeding operations, the industrial-size feedlots that produce manure en masse — was stripped from the version that was enacted.

Environmental advocates say they agree that voluntary measures to limit phosphorus pollution, such as targeting fertilizer to precisely the locations and amounts that are needed, are a big part of any solution.

“We’ve worked with farmers, and we know it works,” said Jordan Lubetkin, a Great Lakes spokesman for the National Wildlife Federation. “Voluntary programs will take you so far. But at the end of the day, you need numeric standards. You’ve got to limit the amount of phosphorus coming into the lake. That’s why you see what we’re seeing in Toledo.”

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