

# Ohio River's huge algae bloom a warning for water suppliers

October 19 2015, by John Seewer

---



Algae coats rocks on the banks of the Ohio River overlooking downtown Cincinnati, Friday, Oct. 16, 2015, in Newport, Ky. A toxic algae outbreak that has snaked more than 600 miles down the Ohio River past four states is forcing drinking water utilities to reassess the threat from harmful algal blooms that are popping up increasingly around the nation. (AP Photo/John Minchillo)

A toxic algae outbreak that snaked more than 600 miles down the Ohio River past four states is forcing water utilities to reassess the threat from

harmful algal blooms that are popping up increasingly around the nation.

Treatment plant operators and researchers along the river were surprised by the large bloom and said it should be a warning to cities that get their water supply from lakes, rivers and manmade reservoirs.

"You need to be ready and have a plan in place," said Roger Tucker, who monitors algae sampling for the Louisville Water Co. in Kentucky. "The Ohio River is proof of that."

The bloom appears to be winding down now, two months after being detected in the middle of August. It made its way from Wheeling, West Virginia, and past Cincinnati and Louisville, setting off warnings about boating and fishing in the river. Organizers canceled a swim from Cincinnati to northern Kentucky.

What surprised many along the river was the unprecedented size and level of toxins detected in some areas—well above those found recently in algae-plagued western Lake Erie.

The last toxic bloom on the river came in 2008. But that one covered about 30 miles and lasted a couple weeks.

This year, toxins produced by the algae didn't contaminate any municipal supplies along the river, which provides drinking water to about 5 million people. But utilities did spend more money to fight off the toxins that can cause rashes, diarrhea, vomiting and breathing difficulty.

Cincinnati spent \$7,700 more per day in much of September to add chemicals to tap water. And the company that provides water to Huntington, West Virginia, brought in new testing equipment and temporary pumps and pipes just in case it needed to draw from another river.



A goose stands on a partially submerged rock bearing a layer of green algae in the Ohio River, Friday, Oct. 16, 2015, Newport, Ky. A toxic algae outbreak that has snaked more than 600 miles down the Ohio River past four states is forcing drinking water utilities to reassess the threat from harmful algal blooms that are popping up increasingly around the nation. (AP Photo/John Minchillo)

Researchers say conditions this year were just right for the outbreak: Heavy rains in the early summer washed algae-feeding pollutants into the river, and a dry late-summer slowed down the currents.

"When you have months without much rainfall, the river really becomes a series of lakes," said Jeff Swertfeger, head of water quality for the Greater Cincinnati Water Works.

Usually, the river flows too fast for algae blooms to develop. But as the river slows, it stirs up less sediment and allows more sunlight to

penetrate the water and fuel the algae growth.

"The river changes year to year. This is the worst anyone has ever seen it," Swertfeger said. "We don't expect it again and again. But we know it can happen."

Algae blooms are more common in lakes and reservoirs where the water is calm—a year ago one in Lake Erie fouled the drinking water in Toledo for more than two days.



Kimberly Curry, a laboratory technician at the Cincinnati Water Works, preps water samples as toxicity level testing, Friday, Oct. 16, 2015, in Cincinnati. A toxic algae outbreak that has snaked more than 600 miles down the Ohio River past four states is forcing drinking water utilities to reassess the threat from harmful algal blooms that are popping up increasingly around the nation. (AP Photo/John Minchillo)

Gina McCarthy, administrator of the U.S. Environmental Protection Agency, has said that harmful algal blooms are one of the nation's most serious and growing environmental challenges. Scientists say climate change and higher levels of nutrients such as phosphorus may be why they're seeing a rising number of algae contamination cases.

But not all blooms are toxic, said Gary Fahnenstiel, an algae expert with Michigan Technological University's Great Lakes Research Center. Still, a huge bloom on the Ohio River should be a wakeup call, he said. "What we've learned is these things are increasing," Fahnenstiel said.



The Ohio River flows past downtown Cincinnati as debris rests on the southern banks, Friday, Oct. 16, 2015, in Newport, Ky. A toxic algae outbreak that has snaked more than 600 miles down the Ohio River past four states is forcing drinking water utilities to reassess the threat from harmful algal blooms that are popping up increasingly around the nation. (AP Photo/John Minchillo)

At the outset of this year's outbreak on the river, one water utility was surprised, thinking toxic algae was a problem limited to lakes, said Greg Youngstrom, an environmental specialist with the Ohio River Valley Water Sanitation Commission, which watches over the river's health.

"That attitude has changed," he said.



Kimberly Curry, a laboratory technician at the Cincinnati Water Works, preps water samples as toxicity level testing, Friday, Oct. 16, 2015, in Cincinnati. A toxic algae outbreak that has snaked more than 600 miles down the Ohio River past four states is forcing drinking water utilities to reassess the threat from harmful algal blooms that are popping up increasingly around the nation. (AP Photo/John Minchillo)

Citation: Ohio River's huge algae bloom a warning for water suppliers (2015, October 19)  
retrieved 28 April 2024 from <https://phys.org/news/2015-10-ohio-river-huge-algae-bloom.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.