THE HARMFUL ALGAL BLOOM RESEARCH INITIATIVE



After the Toledo water crisis in August 2014, the Ohio Department of Higher Education allocated close to \$4 million to Ohio universities for research to solve the harmful algal bloom problem in Lake Erie and protect safe drinking water for Ohio residents.

Led by The Ohio State University and the University of Toledo, and managed by Ohio Sea Grant, the Harmful Algal Bloom Research Initiative (HABRI) includes researchers from seven Ohio universities and more than twenty partners as far-flung as South Dakota and Japan.

Input from agency partners ensures that results address known management needs to protect sustainable water for future generations.

PROJECT SPOTLIGHT: AN EARLY-WARNING SYSTEM FOR LAKE ERIE ALGAL BLOOMS

Two complementary projects are developing warning networks for Lake Erie's western basin, where harmful algal blooms are most common. The networks provide basin-wide data coverage of bloom-affected areas by streaming information from water quality buoys and sensors near water treatment plant intakes to an online database.

The early warning system in Sandusky Bay already demonstrated its potential in 2015, when a rapid increase in algae was detected at the primary water intake for Sandusky's Big Island Water Works.

While the rise in algae happened too quickly to keep the water from entering the treatment plant, operators had enough warning to adjust treatment to prevent water supply problems for more than 100,000 residents.

This type of system ultimately will lead to a better understanding of how to prevent harmful algal blooms altogether.



A new early warning system in Sandusky Bay protected the water supply for 100,000 residents from an algal bloom in July 2015.





