

Ohio State water-related assets

Aquatic Ecology Lab • Byrd Polar and Climate Research Center • Environmental Professionals Network • Environmental and Social Sustainability Lab • Global Water Institute • Infectious Disease Institute • Ohio Sea Grant • Ohio Water Resources Center • Olentangy River Wetlands Research Park • OSU Extension • Soil Water and Environmental Lab • Stone Lab • Sustainability Institute • Waterman Agricultural and Natural Resources Laboratory

Examples of statewide research and outreach on water priorities

● Making our waters healthier

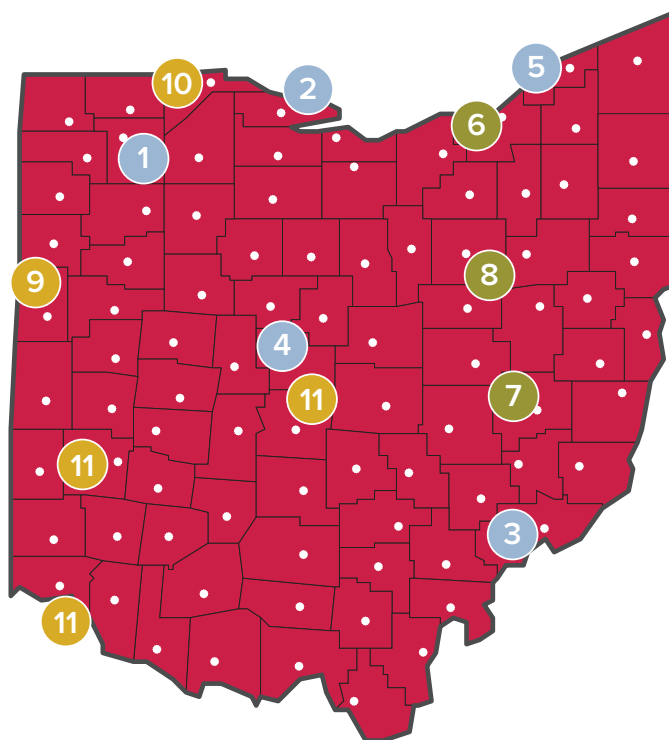
1. Evaluating conservation strategies with stakeholder collaboration, watershed modeling, and edge of field monitoring to reach nutrient reduction goals
2. Developing a protocol to measure cyanotoxins in fish for human consumption
3. Understanding how “forever chemicals” (PFAS) spread to water systems
4. Tracking antibiotic resistance from “hotspots” to agricultural settings
5. Identifying *E. coli* contamination sources to improve beach water quality

● Sustaining new economic growth and jobs

6. Researching the safe reuse of dredged materials in urban and agricultural settings
7. Repurposing products from wastewater treatment to be valuable raw materials
8. Designing and implementing an effective nutrient credit trading program

● Accelerating innovation, technology, and partnerships

9. Testing new methods to maximize the capture and use of manure nutrients on croplands
10. Advising water utilities on activated carbon use to remove cyanotoxins from drinking water
11. Evaluating green Infrastructure to help manage excessive storm water in urban areas
12. Using satellite remote sensing to monitor for harmful algal blooms in Ohio’s lakes and rivers (statewide)



● Ohio State University Extension has offices in all 88 counties

Federal funding of water research at Ohio State

Centers for Disease Control • Department of Agriculture • Department of Energy • Great Lakes Commission • International Joint Commission • National Aeronautics and Space Administration • National Institute of Environmental Health Sciences • National Oceanographic and Atmospheric Administration • National Science Foundation • U.S. Environmental Protection Agency • U.S. Fish and Wildlife Service • U.S. Geological Survey

Ohio State research is...

Making our waters healthier



17,500 FERTILIZER APPLICATORS trained and certified across Ohio on best practices for nutrient stewardship

MORE THAN 300 ON-FARM RESEARCH STUDIES to determine the most effective practices for preventing nutrient runoff



Development of stormwater management and water treatment guidance for **8 LARGE MUNICIPALITIES** that can be used by dozens of smaller communities

Sustaining new economic growth and jobs



40,000 PROFESSIONALS educated and trained to help them advance their careers or keep their jobs

OVER 500 STUDENTS graduate from Ohio State each year with majors that include a focus on water



Approximately **\$5.5 MILLION IN ECONOMIC SERVICES** provided by protection and restoration of 2,100 acres of water habitats

Accelerating innovation, technology, and partnerships

AT LEAST \$10 MILLION invested in public-private partnerships with industry, agriculture, and communities for clean water and economic growth

MORE THAN 150 FACULTY AND STAFF conducting water research, the largest concentration of expertise in Ohio

15 INNOVATIONS to track algal toxins and reduce human health risks developed in partnership with the University of Toledo and others



Ohio State research and outreach contributes to clean water for drinking, industry, and enjoyment.