

Restoring Lake Erie in Ohio

Beach Health

August 2012

lakeerie.ohio.gov/GLRI



A group of graduate students collects water samples at Euclid Beach to use with a new rapid beach health test.

Selected Accomplishments:

The Cuyahoga County Board of Public Health led an in-depth study of bacterial contamination in the Portage Creek watershed, which discharges near Huntington Beach in Bay Village.

Several researchers studied better and faster methods for measuring beach health.

Sea Grant partners have developed a region-wide survey to determine needs for Great Lakes Observing System (GLOS) products and services. This includes demonstration videos to stimulate ideas for potential products. Work underway includes Interviews and focus groups.

The State of Ohio Department of Health conducted comprehensive contamination sampling at 62 beach locations across Ohio's Lake Erie shore. The sanitary surveys identified point sources of beach pollution, and have offered solutions for remediation. They also generated enthusiasm at the local level and started conversations with stakeholders about improving beach health.

The State of Ohio Department of Health developed multiple products to communicate beach conditions to the public:



A Facebook page at: facebook.com/ohiohealthybeaches

A Beach Poster contest for kids (see winners in the Facebook photo album).

An Android smartphone app: **myBeachCast** at <http://beachcast.glin.net> or scan the barcode at left.



Beach Health & Near-shore Projects

Projects targeted beach health and improved communication about beach conditions along the Lake Erie shore. State and local health agencies developed better communication strategies to inform the public about beach health, and about times when beaches are contaminated and should be avoided. Other work included best management practices to reduce beach contamination and public education campaigns.

Other researchers worked to improve rapid identification for fecal contamination at beaches. Future research should connect algal toxins, bacterial contamination, and human health to improve public health and safety even more.

Public Benefits

Faster and more accurate water testing will make information about beach health more timely. Better public information access through Facebook and the smartphone app will result

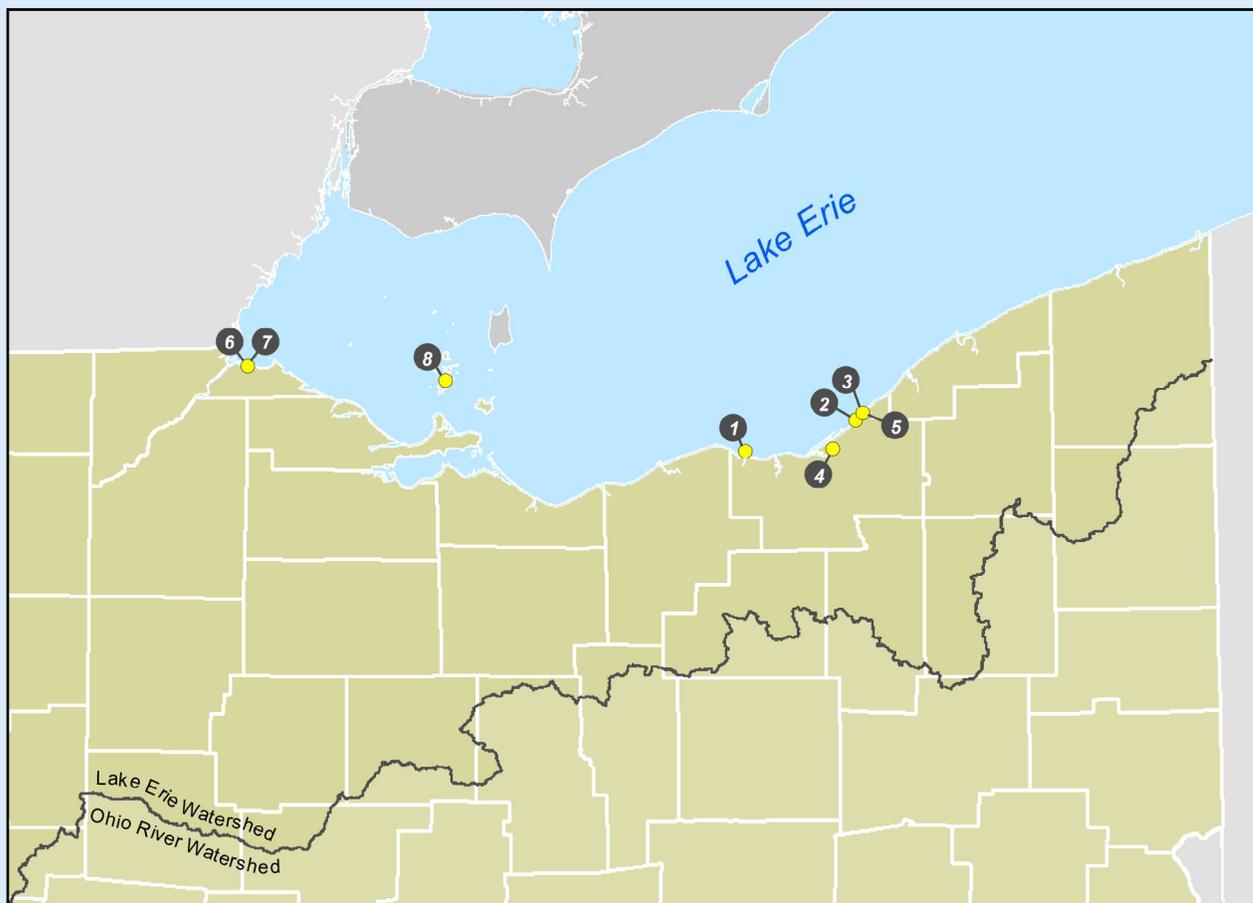
in fewer illnesses due to polluted water. As a result, people will have more enjoyable use of Ohio's Lake Erie beaches.

The GLOS needs identification will allow the group to work on priority information needs of key user groups in the Great Lakes, providing more and better environmental information for decision makers. Current focus is placed on fisheries, public health, and Lakewide Management Plans (LaMPs), which aim to improve the general health of Lake Erie.

Economic Benefits

An informed public sees a significant near-term health benefit from fewer contaminants on affected beaches, reducing health care needs and costs. Resource managers will be able to create management plans for "hot spots" of beach contamination to help reduce public health hazards. In the long term, beach monitoring can find locations where remedial actions will be more efficient in making water and nearby beaches cleaner.





Project Map

Projects shown on this map are identified by number and correspond to the numbered projects listed below.

For clarity, only one location is listed for each project. For some projects that occur across the basin or at multiple points (such as the Ohio Dept. of Health beach monitoring), the location shown may indicate the location of the researcher or a single point within the area covered.

Details for individual projects are located at: <http://lakeerie.ohio.gov/GLRI/SynthesisTeam/SynthesisTeamReports.aspx>.

Beach Health Projects:

- 1 - Cuyahoga County Board of Health – Watershed Health at Huntington Beach
- 2 - Northeast Ohio Regional Sewer District – Predictive Urban Beach Models
- 3 - Ohio State University College of Public Health – Rapid Identification of Fecal Sources
- 4 - Northeast Ohio Regional Sewer District – Comparison of Methods to Assess Bacterial Levels at Beaches
- 5 - Northeast Ohio Universities College of Medicine – Rapid Bacteria Detection at Cleveland Beaches
- 6 - Ohio Department of Health – Improving Communication About Ohio Water Quality
- 7 - Ohio Department of Health – Sanitary Surveys to Reduce Pollution in Lake Erie

- 8 - Great Lakes Observing System – Adaptive Management Needs Assessment (GLOS, Inc.)



For a list of public access points to Lake Erie, including public beaches, see the Lake Erie Public Access Guide multimedia resource produced by the Ohio Department of Natural Resources - Office of Coastal Management at: http://www.ohiodnr.com/Coastal_Main_Menu/PublicAccess/tabid/21033/Default.aspx.