

Lake Chemung to be Part of a National U.S. EPA Study on Lakes in the U.S.

The U.S. EPA will be conducting a survey to statistically evaluate lakes, ponds, and reservoirs in the U.S. to determine their condition. The survey is designed to:

- Determine regional and national ecological integrity, trophic status, and recreational value;
- Promote collaboration across jurisdictional boundaries;
- Build state and tribal capacity for monitoring and analyses;
- Achieve a robust, statistically-valid set of lake data for better management;
- Develop baseline information to evaluate progress.

The EPA selected a total of 909 lakes throughout the United States to participate in the lakes survey. The water bodies that will be a part of the survey are comprised of natural and man-made freshwater lakes, ponds, and reservoirs greater than 10 acres in size and at least one meter in depth. In order to examine potential trends in water quality, a representative subset of lakes from EPA's 1972 National Eutrophication Survey (NES) is included. Lakes were selected to represent five size class categories as well as to provide relatively even spatial distribution across the lower 48 states. As part of the study, approximately 30 lakes in Michigan are to be studied – Lake Chemung is one the selected lakes.

The survey will involve sampling for the following indicator parameters:

Trophic Indicators

- In situ temperature and dissolved oxygen profiles
- Water chemical quality and nutrient concentrations
- Chlorophyll a, Secchi disk depth, turbidity, and color

Ecological Integrity Indicators

- Sediment diatoms
- Phytoplankton
- Zooplankton
- Shoreline physical habitat conditions
- Macroinvertebrates (pending funding)

Recreational Indicators

- Pathogen indicator (enterococci)
- Algal toxin (microcystins)

Activities:

2006	2007	2008	2009	2010
Study Design	Field Work	Laboratory Work	Report	Research
<ul style="list-style-type: none"> • Target population • Indicators • Field/lab practices • Quality assurance plan 	<ul style="list-style-type: none"> • Training • Site reconnaissance • Sample collection • Field quality assurance 	<ul style="list-style-type: none"> • Lab analysis • Lab quality assurance • Data entry • Data quality assurance 	<ul style="list-style-type: none"> • Data analysis • Presentations • Peer review • Final report 	<ul style="list-style-type: none"> • Scientific issues • Policy issues • Supplemental data analysis • Methods refinement

For more information visit: www.epa.gov/owow/lakes/lakessurvey/ or email the U.S. EPA at lakessurvey@epa.gov.