

A Global Treasure - Protecting and Restoring Lake Erie

Lake Erie is a global treasure—it sustains millions of people, thousands of communities, a vibrant economy and a truly remarkable ecosystem. Unfortunately, harmful and nuisance algal blooms caused by excess nutrient runoff are threatening the lake, and posing risks to drinking water supplies, quality of life, and economic vitality. Addressing this threat will be critical to sustaining a healthy future for the lake.

Lake Erie's algal blooms are increasing in size and frequency. The 2015 bloom was the largest one ever recorded - covering more than one fifth of Lake Erie's surface. In 2014, Toledo, Ohio declared a state of emergency, warning 400,000 residents to avoid drinking tap water due to the presence of high levels of algal toxins in the water supply. Similarly, in Canadian waters, the beaches of Pelee Island were closed and residents were warned not to use lake water for almost a week.

Algae blooms can have serious implications for the health of the region's people and economy. If swallowed, toxins from algae can damage the kidneys and liver, and can cause nausea, vomiting, diarrhea, paralysis, and potentially death. Even superficial contact with toxins in the water can threaten the health of anglers, boaters, and swimmers. In such a way, algae blooms limit the enjoyment of our famous Lake Erie beaches and other recreational activities on and in the water. Local tourism, and commercial and residential property values may be negatively impacted as well as Lake Erie's world class commercial and recreational fishing industry.

The Canadian and U.S. federal, provincial and state governments have recognized the severity of the threat and have taken steps to address the problem, including making a series of commitments to reduce algae-causing phosphorus pollution by 40 per cent. Canada and Ontario will be co-releasing a draft Domestic Action Plan (DAP) early in 2017. Entitled the *Canada-Ontario Action Plan for Lake Erie*, it will outline proposed actions to meet the reduction target. It is expected that there will be a 60-day public comment period.

A strong and effective *Action Plan* needs to include:

- specific tactics that focus on addressing the major sources of pollution
- detailed and transparent funding plans for the actions proposed
- plans for ensuring that laws are followed by everyone
- a comprehensive monitoring plan that can adequately define current conditions, track progress, and guide future policy and program investments

- analytics that demonstrate the effectiveness of the proposed actions, and how they will together, achieve a 40 per cent reduction in nutrient loading
- a commitment to working alongside municipalities, First Nations and Metis, farming organizations and other members of the public to develop and implement solutions. This means engagement throughout the process of finalizing the plans, and through to implementation
- regular progress reports that track progress on various fronts and clearly communicate how well the plan is working to achieve the targets

Restoration and protection of Lake Erie needs to be approached with the greatest sense of urgency by all those responsible for dealing with this matter. Lake Erie is part of the Great Lakes St. Lawrence Basin - an area that has a [GDP of \\$5.8 trillion USD](#) (2014), accounting for 30 per cent of combined Canadian and U.S. economic activity and 31 per cent of its employment. The basin supports over 50 per cent of Canada's manufacturing output, 25 per cent of Canada's Agriculture and over \$350 billion annually in Ontario-U.S. trade. For Canada, this global ecosystem is both a tremendous gift, and a great responsibility. Without effective action plans that work to clean up Lake Erie, we risk our drinking water, economic health, and recreational opportunities.

More information:

- [Expectations for Domestic Action Plans under the Great Lakes Water Quality Agreement - Summary](#)
- [Clean, Not Green: Tackling Algal Blooms in the Great Lakes](#)
- [Summary of work under Nutrients Annex in the Great Lakes Water Quality Agreement](#)