What's Next?

The Lake Erie Work Group, assisted by the Forum, has been putting together information to be used to inform basin residents about the LaMP and about Ecosystem Alternatives

Workshops will be scheduled so that the public may join us to learn about the LaMP, and to indicate the general direction we should aim for and priorities for improvements. These suggestions will, in turn, help identify where management actions around the lake should be focused.

Over the coming months, more information on these workshops will become available.

If you would like to learn more about them, please check our web site periodically, or contact one of the individuals listed below.

Photo: USDA Natural Resources Conservation Service

Lake Erie is the warmest and most biologically productive of the Great Lakes, boasting a significant sport and commercial fishery.

For More Information

The full **Lake Erie LaMP 2000** is accessible at www.on.ec.gc.ca/glimr/lakes/erie/ or at www.epa.gov/glnpo/lakeerie/. You can also find general information as well as all final Lake Erie LaMP background documents on the binational web sites listed above.

If you wish to receive a copy of the report (either paper copy or on CD) or join our mailing list, please contact either:

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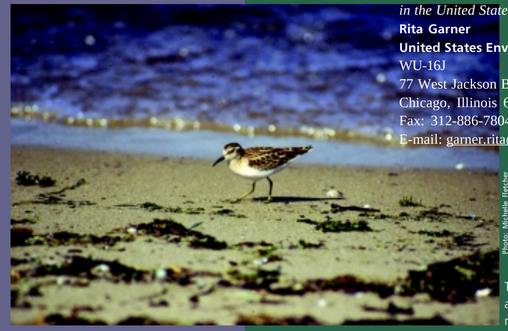
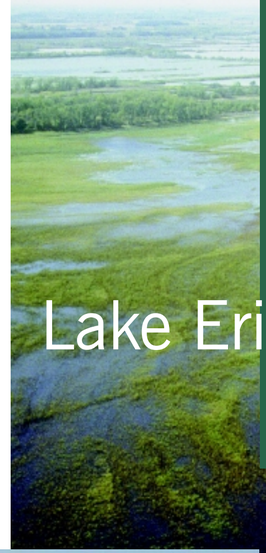


Photo: Michelle Fletcher

There are over 143 species of fish in the Erie basin, as well as abundant bird, mammal, amphibian, reptilian, invertebrate and plant species.

FOCALerie
1424 Clarke Road
London, Ontario
N5V 5B9



LAKE ERIE
LAKEWIDE
MANAGEMENT
PLAN

Lake Erie LaMP
Update 2001

It's a fact. Lake Erie is cleaner than it's been in 50 years – and we're shouting the good news from the rooftops!

In our first edition of **Update**, you learned how governments in Canada and the United States responded to a greater public awareness of water quality issues by joining together and with the private sector and the public to look for ways to work towards a co-ordinated lakewide approach to save a dying Lake Erie.

It's obvious by the improved health of the lake to date that progress has been achieved through research, government action, and the work of various programs such as the Lake Erie Lakewide Management Plan (LaMP).

But while some success has been realized in accordance with provisions of the Great Lakes Water Quality Agreement (GLWQA), a treaty between governments of the two countries concerning the stewardship of the Great Lakes basin, much more is required in the restoration process.

Photo: John Cooper

LAKE ERIE LaMP **UPDATE**
LAKE ERIE LaMP **UPDATE**

Of all the Great Lakes, Lake Erie is exposed to the most stress from urbanization and agriculture.

Up the Pace!

Canadian and U.S. government leaders believe the rehabilitation pace needs to be quickened, along with the release of more timely information to basin residents, pointing to issues of concern and remedial actions to be implemented.

To accomplish this, terms and guidelines for all Great Lakes' LaMPs have been adjusted. The original time-consuming, four-stage reporting, discussion, planning and implementation process has been streamlined, resulting in a single stage program aimed at addressing problems of the lake, selection of remedial and regulatory measures, and concluding with their swift implementation.

As a result of this decision, a LaMP report will be prepared every two years, based on the lakes' current status, and the remedial actions suggested for immediate implementation.

Biennial Report

The first biennial report, **Lake Erie LaMP 2000,** was released in the spring of 2000. It is a working document providing a common baseline to measure Lake Erie beneficial use protection and restoration progress. Some sections and background reports have been extensively reviewed, while others have not.

LaMP 2000 focuses primarily on problem definition, identification of data gaps, and remedial actions we can implement now. The history of the issues of concern in Lake Erie over time is presented, primarily to highlight that Lake Erie is constantly changing as human uses of the land and water in the watershed change.

The overview section describes where the lake has been and what is happening now. It notes the physical characteristics of Lake Erie that make it unique and why they are important to how the whole lake system functions.

The overall message is that Lake Erie is continually changing and must have a monitoring and surveillance program that can adapt to adequately assess ongoing and emerging issues.

Goals for the Future

A chapter on Ecosystem Objectives talks about the process of selecting a desired state for Lake Erie. But to establish ecosystem objectives for Lake Erie, we must first identify a preferred ecosystem alternative. Ecosystem Alternatives are descriptive statements of the combination of conditions that makes up a desired future state of the lake and are scenarios we can achieve through actions that address:

- Contaminant loading
- Phosphorus management
- Changes in land use
- Control of fish and wildlife harvesting, and
- Protection and restoration of natural land

While the **LaMP 2000** report stresses that protection of natural undeveloped land in the Lake Erie basin is the most effective way to return Lake Erie to a more pristine state, decisions on the management actions required to go in that direction will need to be made, as well as a determination of how far to go towards that goal.

To this end, a consultation process to assist in the selection of a preferred ecosystem alternative is in the works, involving discussions and input from the public, as well as agencies responsible for the LaMP program.

The Lake Erie LaMP's largest accomplishment thus far has been in problem definition, specifically determining the status of beneficial use impairments. **LaMP 2000** integrates results of the beneficial impairment assessments by linking impairment conclusions, causes and trends.

Beneficial use impairments are then grouped into three broad categories – human use impairments, impairments due to chemical contaminants, and ecological impairments – based on primary areas of public interest. Ongoing research, data gaps and potential emerging issues are listed for the impairments in each category.

Pollutants of Concern

Numerous chemicals, metals, nutrients, bacteria and suspended solids have been identified as Lake Erie LaMP pollutants of concern. Mercury and PCBs have been designated critical pollutants for priority action by the Lake Erie LaMP.

Existing databases on these substances were reviewed to determine their use in tracking concentrations of pollutants in fish tissue, sediment and the water column. Once the most seriously contaminated areas and major sources are identified, resources and remedial actions will be focused on those trouble spots.

The GLWQA requires that LaMPs define the threat to human health posed by critical pollutants. Several beneficial use impairments, such as drinking water impairment, fish consumption advisories, and recreational water quality use, directly address human health. But the agencies involved in the Lake Erie LaMP felt additional information needed to be addressed.

LaMP 2000 describes pathways of exposure, the weight of evidence linking environmental exposure to health effects, and suggests a preliminary suite of indicators to measure human health impacts.

Information, already compiled under Remedial Action Plans (RAPs), the Great Lakes Fishery Commission, the Great Lakes Binational Toxics Strategy, the North American Waterfowl Management Plan and others, has been used for problem definition and goal setting. Stronger connections with these programs must be cultivated, particularly to ensure widespread and effective implementation of management actions to protect and restore Lake Erie.

Action Plans

Action plans were included in the **Lake Erie LaMP 2000** for habitat restoration and reduction of mercury and PCBs in the Lake Erie ecosystem.

The report proposes developing a habitat conservation and restoration strategy. Preliminary screening criteria were created to compare existing and proposed habitat projects to the goals and objectives of the Lake Erie LaMP.

The action plan for mercury outlines ongoing activities to reduce mercury in the environment now being implemented by many LaMP agencies through education, proper collection and disposal, pollution prevention and implementation and enforcement of regulatory standards and programs.

For PCBs, the action plan focuses more on cleanup and removal of PCBs from the ecosystem, particularly the remediation of contaminated sediments. Since PCBs have been banned and most jurisdictions no longer permit their discharge, existing PCBs are mainly due to sources from past production or disposal practices.

In addition to the above issues of concern, the **Lake Erie LaMP 2000** also addresses significant ongoing and emerging issues. Exotic species now making their home in the lake and playing a strong role in influencing plant and animal populations in the Lake Erie basin top the problem list.

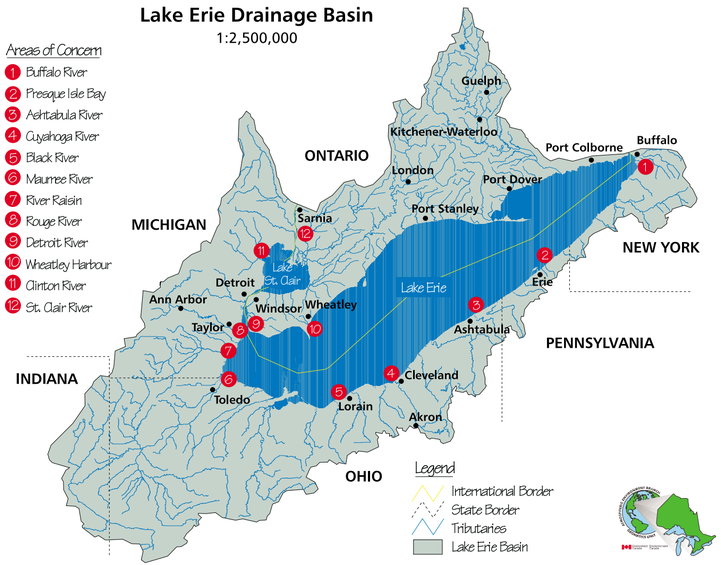
Emerging issues include climate change impacts, long range transport of pollutants and endocrine disrupters.

Zebra and quagga mussels alter food webs, increase water clarity and change habitat.

Photo: Center for Great Lakes and Aquatic Sciences

Photo: John Cooper

A summary report will be published on the LaMP every two years, to describe progress on restoring the beneficial uses of Lake Erie.



Public Participation

Throughout the LaMP 2000 process, input from the Binational Public Forum has been solicited and considered. The Forum has actively participated in document review, information sharing and outreach. They have also completed a number of projects and activities, described in the **LaMP 2000**. The Forum's website may be found at www.erieforum.org

The Binational Public Forum meets three times annually, at locations around the Lake Erie basin.