

**LAKE ERIE COMMITTEE**  
**POSITION STATEMENT**

**On**

***Phosphorus Management in Lake Erie***

The Lake Erie Committee of the Great Lakes Fisheries Commission recognizes:

- a) the many water quality and fisheries benefits achieved in Lake Erie from the phosphorus controls implemented under the auspices of the Great Lakes Water Quality Agreement,
- b) that elevated phosphorus concentrations in some nearshore waters and tributaries of Lake Erie continue to contribute to problems of over-enrichment in some localized areas of the watershed,
- c) that scientific understanding of the role of phosphorus in the food-web, fish production, fish community structure and other ecosystem dynamics of Lake Erie is currently inadequate to reliably predict the outcomes and consequences of changes in phosphorus management, and
- d) that target loadings of phosphorus established within the Great Lakes Water Quality Agreement appear to have been achieved for Lake Erie, and that in some recent years loadings have been well under the target.

Given the incomplete scientific understanding of the role of phosphorus in the Lake Erie ecosystem, and the many problems that arose from over-enrichment of the lake during the 1960s and 1970s, the Lake Erie Committee suggests that it would be irresponsible to advocate adding phosphorus to Lake Erie until there is clear scientific evidence that this would be an appropriate strategy.

The Lake Erie Committee:

- e) remains concerned over the rapid changes in the Lake Erie ecosystem and the unknown consequences of these changes to fish production and to the fish community structure of the lake,
- f) remains concerned over the current incomplete scientific understanding of the ecosystem changes within the lake (the roles of exotic species and phosphorus in these changes are particularly poorly understood),
- g) remains concerned over the potential consequences of further reductions in phosphorus loadings to the production and composition of Lake Erie's highly valued fish communities,
- h) remains committed to its goal of managing walleye as a keystone species within a harmonic percid community,
- i) remains committed to its objective of high quality mesotrophic conditions (and the associated phosphorus concentrations) in the western basin, central basin and nearshore waters of the eastern basin of Lake Erie, and
- j) remains concerned over the inability of agencies to find resources that can be directed in

a concentrated fashion towards developing a sound understanding of the relationships of phosphorus to fish community dynamics in Lake Erie.

Given the incomplete scientific understanding of the relationships of phosphorus to fish production and fish community structure in Lake Erie, the Lake Erie Committee does not support deviation from the phosphorus targets established within the Great Lakes Water Quality Agreement until a thorough scientific review of target phosphorus concentrations for Lake Erie has been carried out in an ecosystem (rather than control) context. The Lake Erie Committee strongly encourages all relevant agencies to commit resources and work together to undertake such a review of phosphorus management on Lake Erie; this review must consider both water quality and fisheries issues.

**Adopted:**

Annual Lake Erie Committee Meeting  
March 25-26, 1998  
Niagara Falls, ON