International Joint Commission Recommendations from its Twelfth Biennial Report on Great Lakes Water Quality

PHYSICAL INTEGRITY: The Impact of Urban Areas on Great Lakes Water Quality **Recommendation**

- 1. The Parties take binational actions to address the impact of urban land use on Great Lakes water quality by:
 - evaluating under what circumstances best management practices are effective in managing urban runoff;
 - ensuring that information on urban best management practices reaches local authorities and implementers; and
 - assessing the cumulative effects of management actions to minimize the impacts of urbanization on the Great Lakes, using the Lake Erie basin as an example.

BIOLOGICAL INTEGRITY: Impacts of Aquatic Invasive Species **Recommendations**

The IJC recommends the following measures to eliminate the threat and impacts of aquatic invasive species in the Great Lakes.

- 2. Take immediate action to:
 - in the United States, pass the National Aquatic Invasive Species Act (NAISA) reauthorizing the National Invasive Species Act (NISA) of 1996;
 - in Canada, implement the National Action Plan to address the threat of aquatic invasive species and finalize mandatory ballast water management practices; and
 - ratify and implement the International Maritime Organization's Convention for the Control and Management of Ships' Ballast Water and Sediments, and pursue stringent measures and rapid timelines.
- 3. Issue a reference to the International Joint Commission to:
 - help identify the most effective ways to coordinate binational prevention efforts and harmonize national plans, particularly those dealing with residual ballast water and sediment in ballast tanks;
 - · evaluate the effectiveness of current institutional arrangements;
 - assist with the establishment of a regional standard stronger than the minimum required by the International Maritime Organization Convention;
 - ensure that economic analyses carried out for projects with potential environmental effects include the
 environmental and societal costs of invasive species control, damage, and mitigation, and the costs and
 benefits of prevention measures; and
 - assist with public education and communications.

BIOLOGICAL INTEGRITY: Impacts of Pathogens **Recommendation**

4. All levels of governments should create and implement coordinated planning actions to fully protect drinking water sources from increased pressures from industry, urban expansion, aging infrastructure and agriculture, including ecosystem and human health protection from large-scale animal operations.

CHEMICAL INTEGRITY: The Example of Mercury **Recommendations**

The Commission recommends the following to the two federal governments, in conjunction with the states and provinces and institutions.

- Undertake retrospective and prospective epidemiological studies, in Areas of Concern and other pertinent locations of the Great Lakes basin, to better understand potential neuro-developmental effects associated with methyl mercury and PCBs.
- 6. Make fish advisories clear, simple, and consistent, and ensure that they are reaching the intended audiences.
- 7. Select and promptly implement programs in both the United States and Canada that would substantially reduce the deposition of mercury in its reactive gaseous form in the Great Lakes region; also pursue multilateral strategies for further control of this persistent toxic substance on a global basis.

ECOSYSTEM INTEGRITY: The Changing Lake Erie Ecosystem **Recommendation**

8. The Commission recommends that Governments continue to fund binational research efforts begun in 2002 and 2003 to better understand changes in the Lake Erie ecosystem. The institutional model provided by the Lake Erie Millennium Network should be considered for adaptation and adoption on the other Great Lakes to foster enhanced binational cooperation and communication.