

## What are the Emerging Issues in the Great Lakes Ecosystem?

Fact Sheet

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The integrity and future of the Great Lakes ecosystem is threatened not only by the familiar problems but also by the impact of a number of new and emerging issues. These issues will have significant impacts on the quality of the Great Lakes ecosystem, as well as causing damage to wildlife and human populations.

The viability of the Great Lakes will require a coordinated effort by all levels of government to address the emerging and past problems. Below is a list of major issues affecting the Great Lakes.



### ▪ Toxic substances

Toxic chemicals, produced and released into the Great Lakes, have been a source of concern for many decades. Health warnings are still being issued because of PCBs, DDT and mercury in fish, and now new toxics are being found in the Great Lakes. Brominated flame retardants, used in many consumer products such as electrical equipment, televisions, clothing and upholstery material, are being detected in human breast milk. The levels of these chemicals have been on the rise in Canada since 1990s. As well, other new chemicals have been found - perfluorosulfonates (used to coat Teflon, as a grease and water repellent in leather, carpets, and paper, and as a paint additive), chlorinated paraffins, naphthalenes used in mothballs, pharmaceuticals, and pesticides. The list goes on and on...

### ▪ Climate change

Climate change will increase the frequency of droughts and cause other extreme weather conditions. It can reduce water levels, which in turn affect water quality, sediments, hydroelectric generation, agricultural practices, shipping and recreational activities.

### ▪ Urban sprawl

Development and sprawl within the Great Lakes basin means habitat loss for wildlife, as well as increased car emissions and contaminated runoff polluting the Lakes.

### ▪ Exotic species

Exotic species like lamprey eels and zebra mussels entering the Great Lakes compete for resources and habitats with native species, and cause economic losses.

- **Areas of Concern**

Contaminated sediments and other problems in designated hot spots have not yet been cleaned up.

- **Water Diversion Projects**

Proposals for water pipelines and water taking in the Great Lakes will affect water levels and water quality. A major revamping of the navigation system in the Great Lakes under study now could also cause serious damage to the Lakes.

### **What needs to be done?**

- ✓ Increase capacity of all levels of government (federal, provincial and municipal) to address Great Lakes issues.
- ✓ Enhance and increase joint efforts between Canada and the United States to restore and protect the Great Lakes Basin, including effective participation by all levels of government, the Aboriginal community, stakeholders and citizens in these efforts.
- ✓ Implement a precautionary approach to identification, assessment and management of toxic substances.

To effectively address impacts to the Great Lakes from these problems, a vision for the Great Lakes must be developed and implemented jointly by Canada and the United States. All levels of government, the Aboriginal community, stakeholders and citizens will have a role to play in these efforts.

### **Great Lakes for the Future**



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