

LOCAL

Great Lakes, great problems

BY ERIC MCGUINNESS

We've been trying to clean the lakes for decades and spent millions doing so. Huge problems remain unsolved. A meeting tonight at City Hall asks the question: Where do we go from here?

Cleaner beaches, better sewage treatment, an end to toxic chemical dumping – what should be done to improve the Great Lakes in the next 10 years?

That's the question Gord Miller, Environmental Commissioner of Ontario, and Rick Findlay, water program director for Pollution Probe, will ask Hamiltonians in a public forum at City Hall this evening.

Miller, an independent official who reports directly to the legislature, says the two-hour, open-mike session on the future of the lakes will help him assess and comment on critical government decisions to be made in the next year or two.

In his 2005-2006 annual report, Miller said he worried the province was neglecting its obligations to protect and improve the Great Lakes.

With the International Joint Commission now reviewing the Canada-U.S. Agreement on Great Lakes Water Quality – signed in 1972 and last updated in 1987 – and the Canada-Ontario Agreement due to expire in March, Miller said in an interview that he wanted to hear directly from people living and working around the lakes.

There's no shortage of issues. In addition to beaches and toxic chemicals, there's concern over invasive species such as zebra mussels, warnings that climate change will lower water levels and new concerns about parts of Lake Erie being starved of vital oxygen.

Miller, who will meet privately with organizations such as the Bay Area Restoration Council and Hamilton Port Authority, said, "The long list of problems is growing, so I felt I should go out to some of the cities and talk to the experts and general public, to hear about their concerns and ideas."

If you go

What: The Great Lakes: Agenda for the Next Decade

Where: Council chambers, Hamilton City Hall

When: 6 to 8 p.m. today

Admission: Free

He called the Canada-U.S. agreement "profoundly important" to everyone living in the Great Lakes Basin, and said, "That sets the scene for the Canada-Ontario Agreement which expires in March, and assuming we get a new one, I will be reviewing that as part of my duties."

Teaming up with Miller is Pollution Probe's Findlay, who is pushing a new, bi-national vision for the lakes, a document he hopes will influence both the new Canada-U.S. and Canada-Ontario agreements.

The idea for such a vision sprouted at Pollution Probe's Managing Shared Waters Conference which drew more than 400 participants from 22 countries to Hamilton in 2002.

Findlay has since been meeting informally with groups on both sides of the border in a Great Lakes Futures Roundtable to draft the two-page statement that can be found at www.pollutionprobe.org/Reports/great-lakesvision.pdf.

Miller's most recent report (at www.eco.on.ca) alleges a number of shortcomings in the Canada-Ontario Agreement, including a lack of sufficient public consultation on projects it funds. emcguinness@thespec.com 905-526-4650

Great Lakes timeline Source: Environment Canada and Pollution Probe

1950s

■ Lake Erie is "dying" becomes one of the continent's biggest environmental news stories. Phosphorus from sewage and detergents spurred algae growth which when decomposing sucked oxygen out of the water, killing other forms of life.

■ Fish-eating birds such as bald eagles, double-crested cormorants and herring gulls were

failing to reproduce. Toxic chemicals, including the insecticide DDT, were later blamed.

■ The International Joint Commission (IJC) reports major concern over pollutants in the Niagara River. The St. Lawrence Seaway opens in 1959, allowing alien species to enter the lakes in ballast water carried by ocean going ships.



In the 1950s, 'dying' Lake Erie makes big news.

1960s

■ More wastes are discharged into the lakes and persistent toxic substances begin to accumulate in the food chain. Rachel Carson publishes Silent Spring, raising widespread concern about pollution's effects on human health and the environment.

■ 1965: The IJC recommends reduction of phosphorus, a move especially beneficial for lakes Erie and Ontario.

■ 1969: The oily surface of the Cuyahoga River in downtown Cleveland catches fire. University of Toronto students and faculty form Pollution Probe.



Cuyahoga River in downtown Cleveland catches fire.

1970s

■ The first major crisis over eating Great Lakes fish is triggered when toxic mercury contamination is found in fish from lakes St. Clair and Erie. The U.S. Environmental Agency is created.

■ 1971: Environment Canada is created, talks begin for a Canada-U.S. water quality agreement; Canada and Ontario sign a deal on the lakes ecosystem; manufacture of

toxic PCBs is halted.

■ 1976: Seepage of chemical wastes into neighbourhood basements from the Love Canal toxic chemical dump in Niagara Falls, N.Y. become a major environmental scandal.

■ 1978: The second Great Lakes Water Quality Agreement introduces the idea of zero discharge of toxic chemicals and of virtually eliminating persistent toxic substances.



Love Canal in Niagara Falls N.Y. is a toxic disaster.

1980s

■ Concern about chemicals in the lakes peaks with a series of scientific discoveries. Industries begin to show leadership in pollution prevention.

■ Scientists measure significant declines in many dangerous chemicals in birds and fish along with improved reproductive success in some birds, but a Burlington scientist reports presence of toxic dioxin in herring gull eggs.

■ 1982: The IJC identifies Hamilton Harbour and 38 other contaminated places around the lakes as Areas of Concern. The list is expanded to 42 in 1985.

■ 1987: Zebra mussels from Europe are discovered in the lakes, the Canada-U.S. water quality agreement is amended and the two nations agree to clean up the Areas of Concern.



Zebra mussels from Europe found in Great Lakes.

1990-2006

■ Levels of persistent toxics, while lower, are still high enough to threaten human health, particularly children's.

■ 1994: Collingwood Harbour is the first Area of Concern removed from the list of 42.

■ 1997: Canada and the U.S. sign a strategy supposed to lead to the virtual elimination of

persistent toxic substances.

■ 2000: E. coli bacteria from farm waste contaminate municipal water wells in Walkerton, Ont., sickening 2,300 and killing seven.

■ 2001: State of the Great Lakes report, says 25 per cent of indicators improved, 50 per cent are mixed and 25 per cent are worse.



Seven people die from E. coli bacteria in Walkerton.

Just the facts

■ Great Lakes: Erie, Huron, Michigan, Ontario, Superior

■ Comprise one-fifth of the world's surface fresh water

■ 30 per cent of Canadians, 10 per cent of Americans live in the Great Lakes basin, or 40 million people total

■ The basin covers 766,000 square kilometres. That's bigger than any of the prairie provinces

■ 24 million people drink water drawn from the lakes

■ About five million people fish in the lakes

■ Nearly one million boats, mainly pleasure craft, operate on the lakes

■ The basin supports more than 50 per cent of Canada's manufacturing output, 25 per cent

of Canada's agriculture and more than \$330 billion annually in Ontario-U.S. trade

■ The lakes are a chemical hot spot, containing more than 360 chemical compounds. Many are toxic, including alkylated lead, benzopyrene, DDT, mercury and mirex

■ More than half of Canada's 444 species at risk live in the basin

Source: Environment Canada