STATE OF THE GREAT LAKES 2003

The Great Lakes are a priceless resource; a resource whose ecological importance was overlooked for a long time. Many of us living in the region may remember Lake Erie being declared dead in the 1960s, or the C*ryptosporidium* outbreaks in Milwaukee, Wisconsin, and Collingwood, Ontario, in the 1990s.

These events and many others raised awareness around the Great Lakes basin. We quickly realized that our Lakes, although vast and deep, could only withstand so much negative human impact. Human society and the health of the Great Lakes are intricately intertwined.

What's Enclosed...

THE GREAT LAKES TODAY
- Current Conditions

CAN WE DRINK THE WATER?
- Drinking Water Quality
- Water Use

CAN WE SWIM AT THE BEACH?
- *E. coli* and Fecal Coliform Levels

CAN WE EAT THE FISH?
- Fish Tissue
- Atmospheric Deposition
- Sediment Quality
- Offshore Water Quality

The Great Lakes Water Quality Agreement, signed in 1972, expressed the commitment of the United States (U.S.) and Canada to restore and maintain the chemical, physical, and biological integrity of the Great Lakes basin ecosystem. Every two years, the U.S. Environmental Protection Agency, Environment Canada, and their many Great Lakes partners assess the current condition of the Lakes and progress toward the goals established under the Agreement using key indicators.

These indicators, tools to monitor change over time, are presented in the State of the Great Lakes reports and at the State of the Great Lakes Ecosystem Conference (SOLEC). A sub-set of these indicators is presented here to answer the human health questions most commonly asked by those living in, and around, the Great Lakes basin. Other indicators will be available separately to address commonly asked ecological health questions. With the enclosed fact sheets, we report the latest status and trends associated with these topics. Further details and reference citations can be found in two additional SOLEC products---the ***State of the Great Lakes 2003*** and ***Implementing Indicators 2003, A Technical Report***---available at www.binational.net. It is hoped that this information helps you better understand our region's most precious resource.

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CURRENT CONDITIONS

Environmental indicator data are assessed over time to better understand the state of our Great Lakes. Experts analyze indicator data and determine, in their best professional judgement, the overall status of the ecosystem. Five broad status categories are used:

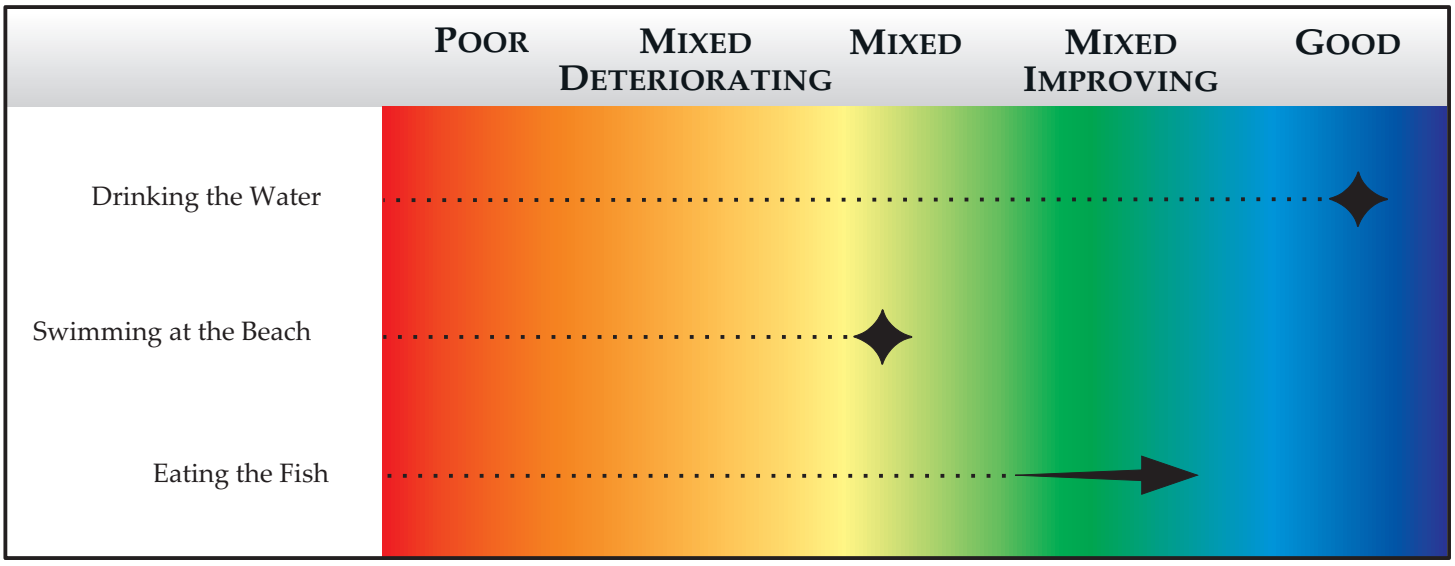
- *Good.* The ecosystem component is presently meeting ecosystem objectives or otherwise is in acceptable condition.
- *Mixed, Improving.* The ecosystem component displays both good and degraded features, but overall, conditions are improving toward an acceptable state.
- *Mixed.* The ecosystem component has some features that are in good condition and some features that are degraded, perhaps differing among Lake basins.
- *Mixed, Deteriorating.* The ecosystem component displays both good and degraded features, but overall, conditions are deteriorating from an acceptable state.
- *Poor.* The ecosystem component is severely negatively impacted and it does not display even minimally acceptable conditions.

Great Lakes drinking water, beaches, and fish contamination are evaluated with these criteria every two years at SOLEC. The results for the latest reporting year are summarized in the graphic below.

Drinking water quality is considered "good," thanks to our improved public water treatment systems. Great Lakes waters are currently of good quality and quantity to serve as a drinking water source for most of the region's major metropolitan areas.

Beach water quality is evaluated as "mixed," since beach closures or postings still occur periodically in the summer months due to bacterial contamination. Many of the basin's municipalities are working on long-term control plans to limit these events.

Finally, fish consumption is ranked as "mixed, improving." Great Lakes fish are exposed to contaminants that may be present in sediment, the water column, or other biological organisms. Contaminants accumulate in the food chain, affecting larger species more severely. Fish consumption advisories are currently present in all five Lakes, although many of the most persistent chemicals found in fish are decreasing (e.g., PCBs). New chemicals and their unknown effects are of concern for future advisories and human health.



Please read the enclosed fact sheets and visit www.binational.net for more detailed information. 12/03