

WHAT WE HOPE TO SEE IN THE  
***GREAT LAKES PROTECTION  
ACT***

## **GREAT LAKES BEACHES**

### Great Lakes Protection Act Alliance Backgrounder Series

Canadian Environmental Law  
Association, Ecojustice,  
Environmental Defence, Great  
Lakes United, Huron Centre for  
Costal Conservation,  
Lake Ontario Waterkeeper

#### ***Why are Great Lakes beaches important?***

Great Lakes beaches are important treasures that connect people to the lakes, physically and culturally. They are assets that help to support waterfront economies. And they create unique habitat that supports diverse life on the Lakes.

Great Lakes beaches are also hallmarks of Great Lakes health. Many people evaluate the health of the lakes based on their experiences at the beach. When beaches are polluted, people stay away and, over time, become disconnected from their watershed. When beaches are clean and inviting, people come out in droves, helping to stimulate interest in their watershed and support for other restoration and protection initiatives.

#### ***→ Recreation & Culture***

- There are approximately 1500 official beaches on the Great Lakes. Nearly 200 of those beaches are in Ontario.<sup>i</sup>
- Every year, an estimated 8-million swimmers flock to Great Lakes beaches.<sup>ii</sup>
- Enhancing and promoting beaches and shoreline activities is the best way to strengthen public connection to the Great Lakes<sup>iii</sup>.

#### ***→ Economic Prosperity***

- The average beach user spends up to \$50 per day at the beach.
- The value of Ontario's Great Lakes beaches is as much as \$262 million.<sup>iv v</sup>
- A 20% reduction in bacteria and other contamination at beaches could add more than a billion dollars in value to Great Lakes beaches in Canada and the USA.<sup>vi</sup>



#### ***→ Environmental Health***

- Beaches provide a critical link between aquatic and terrestrial life. They provide breeding grounds, habitat, and food to crustaceans, benthic organisms, fish, birds, and other wildlife.
- Great Lakes beaches cover nearly 4800 kilometres of shoreline.

- Diversity of nearshore habitat on the Great Lakes is unique on a global scale. Nearshore areas offer the greatest biological productivity.<sup>vii</sup>

### ***Signs of success at Great Lakes beaches***

When Lake Ontario Waterkeeper launched **Swim Guide** in summer 2011, 26,000 people used this smartphone app to find nearby beaches. The fact that people are eager to swim at Great Lakes beaches in locations formerly considered dangerously polluted reflects successful Great Lakes restoration efforts.

People can swim safely where sewage treatment has improved.<sup>viii</sup> Some persistent toxic chemicals have been restricted or banned since the 1970's, lowering those toxic chemical levels.<sup>ix</sup>

The **Blue Flag**<sup>x</sup> program is an international eco-certification program that recognizes beaches and marinas which meet high standards for water quality, environmental education, environmental management, and safety and services. Ontario's 14 Great Lakes Blue Flag beaches are therefore among the cleanest in the world.

It is important that we promote programs like Blue Flag, Swim Guide, and the Lake Huron Centre for Coastal Conservation's Green Ribbon<sup>xi</sup>, to highlight where cleanup efforts reap results, and to connect people to their beaches and shorelines.

### ***Signs of trouble at Great Lakes beaches***

There were 6,189 water quality advisories at Great Lakes beaches in 2011.<sup>xii</sup> Advisories are issued by local agencies (i.e., municipal health units) when water quality samples fail to meet Ontario's Provincial Water Quality Guidelines. Every water quality advisory is an indicator that water and sand at the beach was unsafe for human contact and for aquatic life.

Great Lakes beaches are typically monitored for *Escherichia coli* (*E. coli*), which is found in the digestive system (or gut) of warm-blooded animals, such as mammals and birds. High levels of *E. coli* may be found at a beach if there is a nearby sewage treatment plant, combined sewage outfalls (which



dump untreated waste into water before it reaches the treatment plant), stormwater outfalls, agricultural runoff, faulty septic systems, or large populations of waterfowl.

When *E. coli* is found at the beach, it is a sign that the water is contaminated with human/animal waste and may contain bacteria

and pathogens (disease-causing organisms), as well as viruses and parasites.

If you swim or splash in waters contaminated with harmful pathogens, they may enter your body through cuts or openings such as your mouth, nose and ears. The most common effects are minor eye, ear, nose, or throat infections or stomach disorders. You may also develop a rash. More serious diseases and illnesses may also be contracted in heavily polluted waters, including typhoid fever, hepatitis, gastroenteritis, and dysentery.

While many beach-related illnesses are never reported, studies suggest that 78,600 Ontarians will get sick or face physical discomfort after swimming at polluted beaches. Across Canada and the USA, 3.5 million people will become ill after coming into contact with contaminated water at beaches.<sup>xiii</sup>

Water quality problems at beaches affect public health. They also affect the local economies. When beaches are posted, visitors stay away. Surveys show that this is happening all too frequently. In 2011, 4 out of 5 Ontario beach-goers (4-million people) were inconvenienced by beach closures or poor water quality conditions.

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<sup>i</sup>Swim Guide. (2012).

[www.theswimguide.org](http://www.theswimguide.org)

<sup>ii</sup> Austin, J., Anderson, S., Courant, P., and R. Litan. (2007). *Healthy Waters, Strong Economy: The Benefits of Restoring the Great Lakes Ecosystem*. Accessed at: [http://www.brookings.edu/metro/pubs/20070904\\_gleiecosystem.pdf](http://www.brookings.edu/metro/pubs/20070904_gleiecosystem.pdf)

<sup>iii</sup> Great Lakes and St. Lawrence Cities Initiative, *At the Shoreline: a Mayors' Collaborative Action Plan to Protect the Great Lakes*, (2009). p.18. Accessed at: <http://www.glslcities.org/documents/MC/APReportV6.pdf>

<sup>iv</sup> Austin, J., Anderson, S., Courant, P., and R. Litan. (2007). *Healthy Waters, Strong Economy: The Benefits of Restoring the Great Lakes Ecosystem*. Accessed at: [http://www.brookings.edu/metro/pubs/20070904\\_gleiecosystem.pdf](http://www.brookings.edu/metro/pubs/20070904_gleiecosystem.pdf)

<sup>v</sup> Rang, Sarah. (2010). *Great Lakes Beaches and Coasts: 2010 to 2020*. p.7. Accessed at: [http://www.glslcities.org/great-beaches/Great%20Lakes%20Beaches%20and%20Coasts\\_Summary.pdf](http://www.glslcities.org/great-beaches/Great%20Lakes%20Beaches%20and%20Coasts_Summary.pdf)

<sup>vi</sup> Austin, J., Anderson, S., Courant, P., and R. Litan. (2007). *Healthy Waters, Strong Economy: The Benefits of Restoring the Great Lakes Ecosystem*. Accessed at: [http://www.brookings.edu/metro/pubs/20070904\\_gleiecosystem.pdf](http://www.brookings.edu/metro/pubs/20070904_gleiecosystem.pdf)

<sup>vii</sup> Environment Canada and United States Environmental Protection Agency. (2009). *State of the Great Lakes 2009*. Accessed at: <http://www.epa.gov/solec/sogl2009/sogl2009complete.pdf>

<sup>viii</sup> Environment Canada, *Our Great Lakes* (2004).p.9.

<sup>ix</sup> Environment Canada, *Our Great Lakes* (2004).p.12.

<sup>x</sup> [www.BlueFlag.ca](http://www.BlueFlag.ca)

<sup>xi</sup> Green Ribbon Program. <http://lakehuron.ca/index.php?page=green-ribbon>

<sup>xii</sup> Swim Guide. (2012).

[www.theswimguide.org/reports](http://www.theswimguide.org/reports).

<sup>xiii</sup> Fears, D. (2012) *Americans love the beach, but should watch out for bacteria*. [http://www.washingtonpost.com/national/health-science/americans-love-the-beach-but-should-watch-out-for-bacteria/2012/02/24/gIQAciObcR\\_story.html](http://www.washingtonpost.com/national/health-science/americans-love-the-beach-but-should-watch-out-for-bacteria/2012/02/24/gIQAciObcR_story.html)