

Beachgoers enjoy the Lake Michigan shoreline at P. J. Hoffmaster State Park, located near Muskegon, Michigan.



Healthy Great Lakes and St. Lawrence Beaches: A National Priority

The Status of Great Lakes and St. Lawrence Beaches

Ten thousand miles of shoreline with beautiful beaches surround the Great Lakes and St. Lawrence River and provide millions of residents and visitors a place to enjoy and appreciate the resource. Local governments are on the front lines in managing beaches, collectively investing an estimated \$138.7 million a year to make sure the region's beaches are clean and safe.

For many communities, the local beach is deeply ingrained in the identity of the community. In urban areas especially, the public beach offers all citizens a place to enjoy the shore and water and a way to appreciate and access the lakes and river. For these and many other reasons, beach management is a priority for local governments.

Local governments invest nearly \$139 million annually on beach and shoreline management in the Great Lakes-St. Lawrence region.

Despite these efforts, however, beach closings continue to occur and are on the rise. In 2008, beach closings and advisory days in U.S. Great Lakes states increased by 13 percent from 3,043 in 2007 to 3,437 in 2008¹. Harmful bacteria and other beach pollutants, the principal causes of beach closings and advisories, often come from sewer overflows, boats and storm-water runoff. Whether the increase in beach closures and advisories is a result of more frequent monitoring or wetter than usual weather patterns is uncertain. Regardless of the reason, local governments have a continuing imperative to ensure that Great Lakes and St. Lawrence beaches are clean and safe.



Jack Darling Park is located on the shores of Lake Ontario in Mississauga, Ontario. The park provides access to the Rattray Marsh, one of the few remaining lakefront marsh areas in the Greater Toronto Area.

In addition to water quality and public health concerns, closed beaches translate into a loss of revenue and other economic value for the Great Lakes-St. Lawrence region. A 2009 National Resources Defense Council report² estimates that in 2000, U.S. coastal tourism and recreation created 1.67 million jobs, earning workers \$13.8 billion

in wages. The Great Lakes region cannot afford to lose its portion of this important industry.

The U.S. side of the Great Lakes alone generates approximately \$800 million annually from the region's 8

A 20 percent reduction in Great Lakes beach closings and advisories provides an economic benefit of \$130 to \$190 million dollars a year.

million beach users, with an estimated \$200 to \$250 million in Canada³. A 2007 study by the Brookings Institution⁴ indicates that the economic benefit of reducing beach closings and advisories by 20 percent would total \$130 to \$190 million per year for the region.

Beaches are critical to the economic and environmental health of the Great Lakes-St. Lawrence region, and the quality of life for the millions of U.S. and Canadian citizens that live in the basin. Local government cannot carry the burden alone. U.S. and Canadian federal funding must match local government investments in beach management, and strong Canadian federal, provincial and local partnerships must be established.

Protecting Coastal and Public Health

In the United States, the Beaches Environmental Assessment and Coastal Health Act of 2000 (BEACH Act) requires coastal and Great Lakes states to adopt the U.S. Environmental Protection Agency's (EPA) recreational water quality criteria and to develop and implement beach monitoring and notification plans for bathing beaches in partnership with local governments. Although EPA provides technical and some financial assistance for beach monitoring and notification, local governments must often heavily supplement these federal funds by investing their own local tax dollars, particularly if they want to remediate sources of contamination at their beaches, an activity not currently funded by the BEACH Act.

In addition to the federal funding under the BEACH Act, the U.S. Coastal Zone Management Act provides federal funds to states to administer competitive grants that enhance and restore coastal resources. Local governments generally provide a 50 percent local financial match when they receive state coastal program funds⁵.

In Canada, there is no equivalent to the BEACH Act or the Coastal Zone Management Act. Conservation authorities in Ontario manage and protect coastal and beach areas as part of their overall watershed management mandate. Also, the federal government works with the provinces and others to develop national, voluntary guidelines for beach water quality, which the provinces use to create their own standards, objectives or guidelines. However, the financial responsibility for monitoring

public beaches and for other beach management activities often falls to local public health units – local agencies established by groups of urban and rural municipalities.

Local Investment

Data from a 2008 study by the Great Lakes Commission in collaboration with the Great Lakes and St. Lawrence Cities Initiative shows that local governments across the Great Lakes-St. Lawrence region invest \$138.7 million each year to ensure that beaches are clean and safe. These investments extend well beyond water quality monitoring. They also support activities such as public education, beach sanitary surveys to identify sources of pollution, beach grooming, gull population control, trash and pet

Through remediation actions and better beach management, the city of Racine reduced its rate of beach closures and advisories at North Beach from 66% during the 2000 season to at or below 5% since 2005.

waste removal, and maintenance of storm sewers and catchment basins to prevent harmful bacteria from contaminating beaches. At local public beaches, facilities such as recreational buildings and boardwalks are constructed and usually maintained by local

governments⁶. Most importantly, local governments invest in activities to remediate pollution problems to ensure that beaches meet public health standards and remain open.

Moreover, the nearly \$139 million estimated annual local investment does not reflect local investment in related activities, such as land or easement acquisition to create or expand public beaches, or infrastructure to separate sewers and operate wastewater treatment plants which would make the total local investment much greater.

Annual Local Government Investments in Beach and Shoreline Management

(Estimates in millions of U.S. dollars)

United States
\$132.8 | 96%

Canada
\$5.9 | 4%

Grand Total
\$138.7



Kites fly, boats drift and people frolic on the beautiful Lake Erie beachfront in Presque Isle State Park, Erie, Pennsylvania.





From left: skipping rocks on Lake Ontario (Toronto, Ontario); buried in sand at Ashbridges Bay Park on Lake Ontario (Toronto, Ontario); hopping in Long Point Provincial Park on Lake Erie near Port Rowan, Ontario; digging and splashing on Lake Huron's northern shore in Michigan's Upper Peninsula.

Great Lakes and St. Lawrence Beach Funding Needs

United States

Congress has steadily funded the BEACH Act at about \$9.8 million per year since 2005 — only 7 percent of what local governments are investing each year, and only about one third of the federal authorized appropriation level of \$30 million. In 2009, the U.S. House of Representatives passed and the Senate introduced legislation to re-authorize the BEACH Act which would increase the authorized annual appropriations for the program.

U.S. and Canadian federal support for beach health is only a small fraction of what local governments are investing from their own revenue sources. A more equitable partnership is needed to protect Great Lakes beaches.

In addition to the BEACH Act, U.S. federal funding for the Great Lakes Restoration Initiative (GLRI) in FY2010 allocates \$15.6 million for beach management activities including developing beach forecasting models and improving bacteria monitoring, conducting beach sanitary surveys, communicating to the public,

and remediating sources of pollution. Local governments appreciate Congressional support for the GLRI which will help implement some much needed beach management work. However, the GLRI funds for beach management are still only a small fraction of the investment in beach health made each year by local governments. A more equitable partnership is needed to protect Great Lakes beaches.

Canada

The funding of beach and shoreline management programs in Canada falls largely on the shoulders of local governments. No formal federal mechanism exists to support such activities. Federal, provincial and local governments must work together to strategically invest in improving the monitoring and management of the beaches that dot the Great Lakes-St. Lawrence shoreline⁷.

However, progress is being made. As a result of the Great Lakes and St. Lawrence Cities Initiative-led Canada-Ontario

The Canadian federal and provincial governments need to join with local governments to recognize the environmental, social and economic benefits of greater investments in beaches.

Agreement Memorandum of Cooperation process, municipalities are working with the province to encourage more coordinated management of beaches in Ontario. A more coordinated approach to beaches will help improve monitoring and management as well as promoting beaches to the public.

Conclusion

Restoring beach health is of critical importance to maintaining the environmental and economic health of the Great Lakes-St. Lawrence region and the quality of life for its citizens. Leadership and action is needed to:

- Increase U.S. and Canadian federal funding to match local government investments in the management and protection of Great Lakes-St. Lawrence beaches.
- Create strong federal, provincial and local partnerships to better manage Canadian Great Lakes-St. Lawrence beaches.

- 1 Testing the Waters: A Guide to Water Quality at Vacation Beaches, 19th edition. Natural Resources Defense Council. 2009. Retrieved from <http://www.nrdc.org/water/oceans/ttw/ttw2009.pdf>.
- 2 Ibid.
- 3 *Healthy Waters, Strong Economy: The Benefits of Restoring the Great Lakes Ecosystem*. The Brookings Institution. 2007. Retrieved from http://www.brookings.edu/metro/pubs/20070904_gleiecosystem.pdf. An evaluation of ecological services in the Laurentian Great Lakes basin, with an emphasis on Canada. Krantzberg, G. and de Boer, C. 2008. Journal. AWWA. p 100-106
- 4 *America's North Coast: the benefit cost of a program to protect and restore the Great Lakes*. The Brookings Institution. 2007.
- 5 State coastal programs are supported by federal funding from the National Oceanic and Atmospheric Administration as authorized under the federal Coastal Zone Management Act of 1972.
- 6 *Local Investment in the Great Lakes and St. Lawrence*. Great Lakes Commission. 2008. Retrieved from <http://gle.org/glinvestment/pdf/local-investment-report-final-sm.pdf>. Survey results in this study reflect responses from 143 local governments across the binational region.
- 7 *At the Shoreline: A Mayors' Collaborative Action Plan to Protect the Great Lakes*. Great Lakes-St. Lawrence Cities Initiative. 2009. Retrieved from <http://www.glslicities.org/documents/MCAPReportV6.pdf>.