



**Great Lakes Beaches and Coasts: 2010 to 2020**  
**Workshop Summary**



# Great Lakes Beaches and Coasts: 2010 to 2020

## Workshop Summary

*"Working together to improve Ontario's Beaches and Coasts"*

April 15<sup>th</sup>, 2010

Black Creek Pioneer Village

Toronto, Ontario

Workshop Presentations and Summary available at

<http://www.glsocities.org/representing-cities/coa-moc/beaches-workshop.cfm>

Workshop presented by:

The Ontario Ministry of Natural Resources

The Ontario Ministry of Environment

Great Lakes and St. Lawrence Cities Initiative

## Executive Summary

Living in Ontario, we are fortunate to have thousands of kilometres of coasts (including islands) and exceptional beaches. This natural and cultural heritage requires our combined focus and increased efforts to ensure that our coasts and beaches continue to provide healthy and diverse experiences and opportunities---our connected, community and coastal resources.

Ministers of Environment, Natural Resources, Agriculture, Food and Rural Affairs and the Great Lakes-St. Lawrence Cities Initiative entered into a Memorandum of Cooperation to enhance cooperation and collaboration related to the implementation and renewal of the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem. Beaches and coastal areas were identified by the Great Lakes-St. Lawrence Cities Initiative as a priority needing more collective attention given the social, cultural and economic importance of beaches and coastal resources.

On April 15<sup>th</sup>, 2010, the Ontario Ministry of Natural Resources, the Ministry of the Environment, and the Great Lakes and St. Lawrence Cities Initiative hosted a one day workshop in Toronto, Ontario on working together to improve Ontario's beaches and coasts. More than 90 individuals from municipal and regional governments, Conservation Authorities, non-government agencies, and a variety of Provincial, Federal and bi-national government agencies participated in the workshop.

This workshop was designed to bring together provincial, federal municipal groups and experts with the goal to increase provincial and municipal collaboration to better protect, restore, enjoy and promote our coasts and beaches, and to begin discussing the components of a potential beach and coastal strategy in Ontario.

### **Presentations:**

A series of presentations took place during the day, to provide a sense of the current state of Ontario's beaches and coasts, the important role of tourism and trails, opportunities to improve beaches and coasts, and inspiring beach and coastal success stories from around the province. These presentations are summarised below and available online at <http://www.glsocities.org/representing-cities/coa-moc/beaches-workshop.cfm>

### **Discussion themes:**

Following the presentations, the participants discussed and reported back on three questions related to 1) identifying needed tools, 2) ways to increase beach and coastal promotion and 3) key barriers, challenges and opportunities for improvement of Ontario's beaches and coasts.

On the first question on needed tools, participants identified four main areas where tools were needed: i) tools to increase coordination and collaboration, ii) tools that promote stewardship, iii) tools that support environmentally sustainable coastal development, and iv) tools that support public health protection at the beach and along coastal areas (see discussion in section 3.1)

On the second question, participants identified specific ways to increase both beach and coastal education and also promotion (see discussion in section 3.2)

On the third question, participants identified a number of barriers to increased beach and coastal including i) lack of funding, ii) lack of coordination and communication, iii) lack of vision and conflicting values and iv) challenges of climate change and science gaps ( see discussion in section 3.3)

**Key findings that emerged from the workshop included:**

***1) Building partnerships and collaborating across the board***

- There are a wide and inspiring variety of beach and coastal activities currently underway that are not always connected into a broader whole
- Beach and coastal managers have a large interest in better communication and coordination on beach and coastal activities so we can better connect and learn from each other
- A centralized Great Lakes beaches/coasts hub should be considered to provide coordination, communication and accountability for the health of Ontario's beaches and coasts

***2) Acknowledging and supporting the need for improvement on beaches and coasts***

- Acknowledging the need for increased focus on Ontario's beaches and coasts in light of current and emerging challenges
- Recognising the increasing pressure on our beaches and coasts from increased population, changing demographics, invasive species and climate change
- Recognising the need to allocate stable, comprehensive funding for beach and coastal management and development of projects and innovative research
- Responding to the need to improve methods of beach monitoring and beach water quality communication
- Recognising that beaches and coasts can be important economic drivers for a local regional and provincial economy
- Working to quantify beach and coast values in economic terms as way to drive investments in beaches and coasts

***3) Increasing communication and promotion of beaches and coasts***

- Fostering a perception shift in seeing beaches and coasts as vital community treasures
- Promotion of beaches and coasts through several different processes such as the media, signage, success stories, etc. should be considered
- The importance of working together to increase beach and coastal tourism and promotion, in ways that promote sustainable development and stewardship to ensure what attracts us to the coast is protected (e.g. natural and spectacular views, wildlife viewing, productivity of fisheries, swimmable and safe beaches, vibrant waterfronts)

***4) Increasing strategic planning for our beaches and coasts***

- Interest in increasing adaptive management and integrated coastal zone planning
- Improving planning processes to better incorporate stewardship and to account for regional nature of some coastal areas
- Fostering existing coastal initiatives and moving towards creative community based collaborative coastal management in more areas in the lakes
- Collaborating to make the most of the opportunities presented by several new policy areas : including the negotiations associated with the Great Lakes Water Quality Agreement and the

Canada Ontario Agreement Respecting the Great Lakes Basin Ecosystem, the potential review of the Planning Act Provincial Policy Statement, progress made in the US and others

**The workshop hosts committed to:**

- Provide a workshop presentations and a workshop summary report to participants and make accessible online
- **The Ministry of Natural Resources and the Ministry of Environment** will explore using the workshop findings to potentially influence the Provincial Policy Statement Review. MNR will explore natural heritage and hazards elements of the Provincial Policy Statement to see how coastal and beach system management needs could be better considered or addressed. MNR will consider ways to improve coordination on beach and coasts, and look at ways to encourage integrated coastal management.
- **The Ministry of Environment** stated that they would continue their work on promoting better beach monitoring techniques, review the recreational Provincial Water Quality Objectives, and publish a beach quality report in 2010.
- **The Great Lakes and St. Lawrence Cities Initiative** stated that many of the Great Lakes Mayors are keen to work together to improve Ontario's beaches and coast and will be:
  - Increasing and encouraging best management plans and related success stories,
  - Developing resolutions for their annual June Cities conference on COA, GLWQA, invasive species and coastal management ,
  - Suggesting beaches and coasts are discussed at the June Great Lakes Mayors and Ministers Summit.
  - Continuing to work towards greater provincial and municipal collaboration on Ontario's beaches and coasts, to encourage the development of a provincial municipal beach and coastal network and encourage the development of a beach strategy in Ontario.

# Table of Contents

## Executive Summary

<b>1.0 Background</b>	<b>1</b>
1.1. Workshop Participants	1
1.2. Introductory Comments	3
<b>2.0 Workshop Presentations</b>	<b>3</b>
<b>2.1 Southern Georgian Bay Coastal Initiative –</b>	<b>4</b>
Greg Mayne and Janette Anderson, Environment Canada	
<b>2.2 Great Lakes Coastal Environmental Scan –</b>	<b>5</b>
Eric Boysen, Ministry of Natural Resources	
<b>2.3 State of Great Lakes Coasts –</b>	<b>5</b>
John Marsden, Environment Canada	
<b>2.4 Working Together Towards Improving Ontario’s Beaches and Coasts –</b>	<b>7</b>
Sarah Rang, Great Lakes and St. Lawrence Cities Initiative	
<b>2.5 Beach Quality in Ontario: Recent MOE Projects –</b>	<b>8</b>
Tim Fletcher, Ministry of the Environment	
<b>2.6 Blue Flag Program –</b>	<b>9</b>
Sarah Winterton, Environmental Defence	
<b>2.7 Wasaga Beach and Ontario Parks –</b>	<b>10</b>
John Fisher, Ministry of Natural Resources	
<b>2.8 Toronto’s Successes –</b>	<b>10</b>
Ted Bowering, City of Toronto	
<b>2.9 Ontario Provincial Trails Strategy –</b>	<b>11</b>
Carol Oitment, Ministry of Health Promotion	
<b>2.10 Promoting Great Lakes Beaches and Coasts –</b>	<b>11</b>
Linda Ashley-Crane, Ministry of Tourism and Culture	
<b>2.11 Grand Bend Beach –</b>	<b>12</b>
Peggy van Mierlo-West, Municipality of Lambton Shores	
<b>3.0 Knowledge Cafés and Discussion of Results</b>	<b>13</b>
3.1 Question 1: What tools would you like to see developed to better support coastal and beach management and experiences?	13
3.2 Question 2: How could we better promote our coasts and beaches?	15
3.3 Question 3: What do you see as key challenges or barriers and opportunities for improving our coasts and beaches?	16
<b>4.0 Facilitated Discussion</b>	<b>18</b>
<b>5.0 Summary of Key Findings</b>	<b>18</b>
<b>6.0 Next Steps</b>	<b>19</b>
<b>7.0 Workshop Evaluation</b>	<b>20</b>

## Great Lakes Beaches and Coasts: 2010 to 2020

### 1.0 Workshop Background: Scope and Objectives

The Ontario Ministries of Natural Resources and the Environment and the Great Lakes and St. Lawrence Cities Initiative, a bi-national coalition of mayors and other local officials, co-hosted a one day workshop to bring together federal, provincial, and municipal groups working on Ontario's coasts and beaches. The objectives of the day were to:

- Increase awareness about the state of our Great Lakes coast and beaches
- Scope out needs for better supporting Great Lakes beach and coastal zone management
- Identify ways to promote Great Lakes beaches and coasts
- Identify potential barriers and opportunities for working together to improve Ontario's Great Lakes beaches and coasts
- Highlight additional potential interests to include in the network for improving Great Lakes beaches and coasts

A Steering Committee that planned and implemented the workshop included:

- Tim Fletcher, Ministry of Environment (MOE)
- Sarah Rang, Great Lakes and St. Lawrence Cities Initiative (GLSLCI)
- Bev Ritchie, Ministry of Natural Resources (MNR)

The workshop was facilitated by Jim Mackenzie of the Ministry of Natural Resources. A large cast of volunteers drawn from MNR, MOE, GLSLCI, and Environmental Defence were critical to the success of the event and their contributions are greatly appreciated.

### 1.1 Workshop Participants

The following list includes all members present for the workshop, including the members who helped facilitate the Knowledge Cafés.

Participants	Affiliation
Larry Allison	Town of Saugeen Shores
Janette Anderson	Environment Canada
Ellen Anderson (Mavor)	Town of The Blue Mountains
Ilze Andzans	Niagara region
Linda Ashley-Crane	Ministry of Tourism
Vance Badawev (Mavor)	City of Port Colborne
Jeff Borisko	Lower Trent Conservation Authority
Ted Bowering	Toronto Water
Eric Boysen	Ministry of Natural Resources
Marilee Chase	Ministry of Natural Resources
Anthony Colaco	Halton Region Health Dept.
John Cotterill	Grey Sauble Conservation Authority
Marsha Covne	Region of Chatham-Kent
Phil Courtice	Department of Fisheries and Oceans

Valerie Cromie	Niagara Region
Allan Crowe	National Water Research Institute
Ken Cunningham	Ministry of the Environment
Dai Hing Yong	Chatham-Kent
Jody Davis	Township of Terrace Bay
Conrad de Barros	Ministry of the Environment
Edwin Debruvan	Department of Fisheries and Oceans
Shawn Everitt	Town of The Blue Mountains
Mike Fair	Township of Huron-Kinloss
John Fisher	Ministry of Natural Resources
Tim Fletcher	Ministry of the Environment
Bonnie Fox	Conservation Ontario
Adele Freeman	Toronto and Region Conservation
Randy French	Lake Huron Southeast Shores Working
Nancy Gaffney	Toronto and Region Conservation
Sue Gilpin	City of Hamilton RAP
Mark Green	City of St. Catherine's
Jennifer Haley	St. Lawrence River Institute of Environment
John Hall	City of Hamilton RAP
Frank Hamilton	Ministry of Natural Resources
Kate Hayes	Credit Valley Conservation Authority
Rick Hornsby	Killbear Provincial Park
Glen Hudgin	Niagara Region Public Health
Megan Ihrig	Carolinian Canada Coalition
Gail Jackson	Parks Canada
Ann-Marie Jesupillai	Ministry of the Environment
Rimi Kalinauskas	Environment Canada
Matthew Kerwin	International Joint Commission
Jennifer Keves	Ministry of Natural Resources
Bickram Kissoosingh	Region of Peel
Marlaine Koehler	Toronto Waterfront Regeneration Trust
Burke Korol	Ministry of Natural Resources
Dan Kraus	Nature Conservancy of Canada
Laura Kucev	Ministry of Natural Resources
Teresa Labuda	Halton Region
Wendy Leger	Environment Canada
Jim Mackenzie	Ministry of Natural Resources
Umar Malik	City of Burlington
John Marsden	Environment Canada
Tom Mates	Presqu'ile Provincial Parks
Laud Matos	Environment Canada
Bernard Maver	York Region Public Health
Greg Mayne	Environment Canada
Andy McKee	Ministry of Natural Resources
Bev Middleton	Grev Buce Health Unit
Eva Nowak	Environment Canada
Carol Oitment	Ministry of Health Promotion
Kurt Oldenburg	Ministry of Natural Resources
Carolyn O'Neill	Ministry of the Environment
Makesh Patel	City of Toronto
Geoff Peach	Lake Huron Centre for Coastal
Jacques Perreault	Durham Region Health Department
Brian Potter	Ministry of Natural Resources
Zsuzsanna Raida	Ministry of Health and Long-term Care
Sarah Rang	Great Lakes and St. Lawrence Cities
Jeff Ridal	St. Lawrence River Institute of
Nick Rolfe	Environmental Defence

## Great Lakes Beaches and Coasts: 2010 to 2020

Arif Shahzad	City of Burlington
Howard Shapiro	City of Toronto
Kelly Shields	Ministry of Energy and Infrastructure
Albert Simohon	Ministry of the Environment
Jonathan Staples	Ministry of Natural Resources
Lainie Tessier	Bay Area Restoration Council
Jean Francois Thibault	Great Lakes and St. Lawrence Cities
Andy Todd	Ministry of Natural Resources
Kevin Tryon	Town of Ajax
Peggy van Mierlo-West	Municipality of Lambton Shores
Darrel Vossen	City of Toronto
Robert Wagner	City of Hamilton RAP
Jennette Walker	Town of Goderich
Bev Walpole	Elgin St. Thomas Public Health
Dawn Walsh	Ministry of Natural Resources
Garv Ward	Ministry of Natural Resources
Rod Willis	Town of The Blue Mountains
Mitch Wilson	Ministry of Natural Resources
Sarah Winterton	Environmental Defence
Brent Wisken	Ministry of the Environment
Kathy Woeller	Ministry of Natural Resources
Liz Yellowman	Union of Ontario Indians

## 1.2 Introductory Comments

*Eric Boysen of the Ministry of Natural Resources* welcomed participants, noted the Ministry's interest in ideas on enhancing beaches and coasts and welcomed increased collaboration.

*Mayor Vance Badaway of Port Colborne*, on behalf of the Great Lakes and St. Lawrence Cities Initiative thanked everyone taking part in the day's workshop. He emphasized that the workshop presents a great opportunity to bring like-minded people to discuss the importance of developing policy and collaboration for improving Ontario's beaches and coasts. However, he stressed that we need to "walk the talk" and, we must apply the day's outcomes to good use.

*Sarah Rang of the Great Lakes and St. Lawrence Cities Initiative* discussed the importance of the day's workshop and how it can take advantage of new opportunities in improving the health of the Great Lakes' beaches and coasts such as: the importance of the ongoing negotiation of the bi-national Great Lakes Water Quality Agreement and renewal of the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem, the record amount of stimulus funding on infrastructure investments, which has led to the end of primary wastewater treatment plants on the Great Lakes, and the tremendous amount of funding in the United States towards addressing impacts to the Great Lakes, \$475 million this year and \$310 million next year.

Furthermore, as part of the Great Lakes and St. Lawrence Cities Initiative, the Great Lakes Mayors and Chairs Committee created the "At the Shoreline: A Mayors' Collaborative Action Plan to Protect the Great Lakes", which included a 5 point action to protect and promote the Great Lakes ( [www.glslcities.org](http://www.glslcities.org)).

We must build momentum from these opportunities and collaborations among various groups and governments to improve our Great Lakes' beaches and coasts.

## 2.0 Workshop Presentations

This section contains brief summaries of each presentation from the workshop. The entire presentations and this workshop summary can be found at the Great Lakes and St. Lawrence Cities Initiative website at:

<http://www.glslcities.org/representing-cities/coa-moc/beaches-workshop.cfm>

### 2.1 Southern Georgian Bay Coastal Initiative-- Greg Mayne and Janette Anderson, Environment Canada

Janette Anderson and Greg Mayne presented the need for community based coastal planning, the successes and future directions concerning Southern Georgian Bay Coastal Initiative. In Southern Georgian Bay one of the main areas of concern is urban and coastal development around the shoreline. The desire for housing along the coast is high and there is currently no comprehensive planning that incorporates land use planning, ecosystem management, biodiversity and enforcement. Yet there is tremendous energy and enthusiasm to work together. The Southern Georgian Bay Coastal Initiative, a community based planning process, has begun to work on an Adaptive Management Framework plan that will work towards conservation and reducing impacts on beaches and coastal health.

Their plan is based on an inclusive model requiring collaboration among many interests – our fragmented jurisdictional landscape for planning does not align with how coastal zone planning and management should be done. Their objectives are : to provide a harmonized, one window regulatory approach in land-use planning and coastal conservation, to promote an understanding of the coastline and the impacts of shoreline alterations, and to enhance partnerships and increase stakeholder engagement in the conservation of the Southern Georgian Bay Coast.

Some of the key accomplishments include the creation of a multi-jurisdictional/multi-partnership initiative, a council resolution that was supported by many municipalities, and development of a work plan with short- and long- term objectives and actions.

Mayor Ellen Anderson from the Town of The Blue Mountains also added her perspective that this initiative started with concerns over dredging and has spread to involve many people and agencies. About half of the councils have passed resolutions supporting the initiative, with more in progress. The Initiative needs to be seen as the work of the community and to reflect community values to protect the bay.

For more information please contact Greg Mayne at [greg.mayne@ec.gc.ca](mailto:greg.mayne@ec.gc.ca) or Janette Anderson at [janette.anderson@ec.gc.ca](mailto:janette.anderson@ec.gc.ca)

## **2.2 Great Lakes Coastal Environmental Scan --Eric Boysen, Director of Biodiversity Branch and Renewable Energy Branch, Ministry of Natural Resources**

Eric Boysen's presentation examined potential avenues for improving Ontario's coasts and beaches by looking at existing initiatives and leading edge coastal management strategies in other parts of Canada and the world. The Great Lakes are a vital part of the lives of Ontarians, 98% of Ontarians reside in the Great Lakes Basin and they derive considerable environmental, social, economic, cultural, and spiritual benefits from the Great Lakes.

One approach is Integrated Coastal Zone Management (ICZM) described by the United Nations Environmental Program (UNEP) as a continuous, proactive and adaptive (dynamic) process of the sustainable management and use of coastal zones taking into account physical, social and economic conditions, the fragility of coastal ecosystems and landscapes and the constraints of legal, financial and administrative systems and institutions.

It is not a substitute for existing planning/program initiatives, but focuses on the links between them to achieve more comprehensive goals.

Integrated coastal management is a comprehensive look at sustainable development of coastal zones by ensuring that the environment and landscapes are taken into account in harmony with economic, social and cultural development. About 100 countries are now involved with some form of integrated coastal management.

Some integrated coastal management approaches include Canada's Oceans Strategy/Oceans Act (1997), the Nova Scotia Coastal Management Framework (2008), and Australia's National Cooperative Approach to Integrated Coastal Zone Management-Framework and Implementation Place (2006).

Mr. Boysen noted that we can learn from these projects and we can also build upon existing programs in Ontario such as the Lakewide Management Plans & Committees, the Lake Huron Binational Partnership, and the Lake Huron Centre for Coastal Conservation, Southern Georgian Bay Coastal Initiative, Conservation Authorities planning, the Blue Flag Program, and several others. He noted that MNR was interested in working with partners to build integrated coastal management in Ontario.

For more information contact Eric Boysen at [eric.boysen@ontario.ca](mailto:eric.boysen@ontario.ca)

## **2.3 State of Great Lakes Coasts --John Marsden, Environment Canada**

Coastal zones refer to coastal waters and adjacent shore land, which includes islands, wetlands, and beaches. There are many benefits that come from the Great Lakes coastal zones, such as recreation, assimilation of tributary inputs by wetlands, habitat for fish and wildlife, and water intakes and wastewater assimilation. The health of the coastal zones impacts several areas such human health, fish and wildlife, and socio-economic factors such as tourism, property values and costs related to water intake clogging and drinking water treatment. The Great lakes coasts are the longest freshwater coast in the world- stretching over 28,000 kilometers- the distance of a return trip from Buffalo to Beijing.

Based on State of the Lakes Ecosystem Conference (SOLEC) which provides indicators of Great Lakes beaches and coasts:

- Lake Erie has the highest percentage of its shoreline hardened
- Lake Ontario's plant species diversity is poor in comparison to other Great Lakes. This could be attributed to the regulation of water levels. It has been shown that alteration of natural lake level fluctuation significantly impacts nearshore and coastal vegetation.
- The importance of: maintaining healthy alvars (distinctive plants growing on flat limestone-SOLEC status mixed), cobble beaches, the 22,000 acres of Ontario's sand dunes (SOLEC status unassessed), the 31,000 Great Lakes islands (SOLEC status mixed) and coastal wetlands (SOLEC status mixed and deteriorating) which are all integral parts of the coastal zone, and many host plants and animals considered globally rare.
- Long term data on lake levels and the work of Upper Great Lakes IJC study which provide evidence for regulating water levels in a way that promotes healthy aquatic habitats and coastal processes (erosion, sedimentation, storm events) that are required to protect and restore wetlands, islands, alvars, cobble beaches, sand dunes, and aquatic habitats.
- Phosphorus loadings may be increasing again in some locations. The Great Lakes Water Quality Agreement goals are: to maintain an oligotrophic state in Lake Superior, Lake Huron and Lake Michigan; to maintain algal biomass below that of a nuisance condition in Lakes Erie and Lake Ontario; and to eliminate algal nuisance growth in bays and in other areas wherever they occur.
- Phosphorus trends differ in the nearshore waters compared to the offshore waters of each lake.

Whether a beach is swimmable or not depends on the amount of *E.coli*. Recent data has shown that the overall state of the Great Lakes beaches is mixed and the trend is unchanging. Lake Superior is considered in GOOD standing, Lake Huron is considered GOOD in the US and FAIR in Canada, Lake Erie is considered POOR, and Lake Ontario is considered POOR on the Canadian side, while FAIR on the US side. The US and Canadian differences in posting may account for some of these findings.

There are about 195 monitored Great Lakes beaches in Canada. About 54% of these beaches had some posting or advisory during the swimming season in 2007. However, some improvements are being made. Moreover, the Seasonal Water Monitoring and Reporting System (SWMRS) is a web-based data entry system that is being developed to collect and disseminate bacteriological information for swimming beaches on the Canadian-side of Great Lakes.

A number of Great Lakes coastal indicators are influenced by watersheds. Watersheds have the potential to impact the lakes through land use activities, land use modifications, resource utilization and the release of toxic substances, excessive nutrients and bacterial contamination. One collaborative initiative is the Lake Huron Southeast Shores Working Group, which was initiated in 2002 to respond to beach issues. It is composed of federal and provincial agencies, First Nations, Conservation Authorities, municipal planning and health units and local community groups. It is addressing deteriorated nearshore water quality by improving upstream watersheds between Sarnia and Sauble Beach, and is part of the Lake Huron Binational Partnership. It has been chosen as a priority focus area under COA

Due to the time tag between monitoring and getting results, Huron County is also working on predictive modelling to improve beach postings. Early results indicate a 50% success rate in predicting days with high *E.coli* levels. Most surveyed beachgoers indicated that they do not check beach posting before heading out to a beach, but 26% would go to a different beach if when they arrived, the beach was posted. An economic study indicates that on average, a person going to the beach spends \$65 a day in the local community.

## Great Lakes Beaches and Coasts: 2010 to 2020

John also highlighted several recent workshops and reports on climate change and coastal zone management, and noted opportunities to focus on these themes through upcoming negotiations of the Canada-U.S Great Lakes Water Quality Agreement and the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem.

Recent reports such as the **2009 Great Lakes and Climate Change Policy Workshop** have looked at many beach and coastal challenges. Found in [Appendix 1](#) are some of the key findings from that Workshop.

[www.binational.net](http://www.binational.net) - SOLEC 2009 State of the Great Lakes reports, GLWQA negotiations, Lakewide Management Plans (LaMPs)  
[http://www.iugls.org/en/home\\_accueil.htm](http://www.iugls.org/en/home_accueil.htm) - IJC International Upper Great Lakes Study  
<http://www.lakehuroncommunityaction.ca/> - Lake Huron Southeast Shore Working Group  
[http://www.conservationontario.ca/great\\_lakes\\_workshop/](http://www.conservationontario.ca/great_lakes_workshop/) - Managing Watersheds for Great Lakes Benefits: 2009 Technical Workshop on Nutrients in the Nearshore  
<http://meeting.ijc.org/> - IJC 2009 Nearshore Report

For more information contact John Marsden at [john.marsden@ec.gc.ca](mailto:john.marsden@ec.gc.ca)

## **2.4 Working Together Towards Improving Ontario's Beaches and Coasts – Sarah Rang, Great Lakes and St. Lawrence Cities Initiative**

Sarah Ring's presentation focused on building a case for improving Ontario's beaches and coast. She focused on three areas why beaches matter: environmentally, socially, and economically.

On an environmental level, beaches are important because they provide habitat for many species of plants, fish, and animals, and they are also an integral link in the chain of coastal processes.

Socially, beaches and coasts provide a "sense of place", they are a source of community pride and "personality", they encourage recreation, sports, and activity, and finally it is the key public perception measure of environmental quality of Great Lakes.

Beaches provide great economic benefits for communities. The recreational value of Ontario's Great Lakes beaches is \$200 to \$250 million a year. For example in Wasaga Beach, with estimated 2 million visitors annually, the beach provides an estimated \$80-100 million in revenue, 890 jobs, and \$25million in tax revenues. Moreover, providing a healthy, safe beach is important because it was estimated in Ontario that the mean cost of a person getting sick from gastro enteritis at the beach was approximately \$1,089.

In order to improve Ontario's beaches and coasts we must build on what we already have by establishing partnerships, identify gaps, increasing interest in nearshore science, and increasing public connection to the Lakes and improved conditions. Also we should consider developing a nested, multi-jurisdictional strategy for beach and coastal management, establishing a provincial beach hub, and a coordinated beach management strategy in Ontario.

For more information contact Sarah Rang at [srang@enveei.com](mailto:srang@enveei.com)

### **Great Lakes Beaches and Coasts: 2010 to 2020**

## 2.5 Beach Quality in Ontario: Recent MOE Projects – Tim Fletcher, Ministry of the Environment

Tim Fletcher's presentation focused on how we can continue to improve human health protection at the beach by further collaboration and research into science-based guidelines and predictive modelling. Tim noted that many agencies are involved in managing for safe recreational beach uses. In Ontario, the Provincial Water Quality Objectives (PWQOs) were created to "to ensure that the surface waters of the Province are of a quality which is satisfactory for aquatic life and recreation." The Objectives are strictly science-based and do not consider implementation issues (i.e. technological and economic feasibility). The PWQO for recreational water quality are 100 *E.coli* per 100mL of water (based on geometric mean of at least 5 samples). These are objectives, they are not legal standards.

New Canadian Recreational Water Quality Guidelines (2010) have recently been released for comment by Health Canada. Unlike the Provincial guidelines, Health Canada guidelines on *E.coli* levels for primary contact are less stringent, 200 per 100mL (based on a geometric mean of 5 samples) and 400 *E.coli* per 100 mL (Single Sample Maximum). There are also new federal guidelines being proposed for secondary contact (i.e. for areas where there is recreational activities such as boating, windsurfing, etc., but no swimming) of 1000 *E.coli* per 100 ml. In addition, they also proposed new guidelines for Cyanobacteria levels. The International Joint Commission is also continuing to develop their advice on standards for human health protection at the beach and addressing the issues that cause closures.

Public Health Units in Ontario and other agencies monitor beach areas and nearshore water quality from a local perspective, throughout the province. MOE sought to gain a province-wide perspective on beach water quality and to evaluate the implications of revising the *E.coli* PWQO. From the data received by the public health units, there are about 885 monitored beaches in Ontario, including 167 provincial park beaches. In general, beach water quality is higher in inland lakes than Great Lakes beaches. Currently about 85% percent of Great Lakes beaches meet the Cities Initiative goal of beaches open 80% of the swimming season. Tim looked at the effect of changing the PWQO on the number of beach postings. If the PWQO changed from 100 to the US guideline of 235 *E.coli* per 100 ml, then 95% of beaches are open 80% of the swimming season. Looking at changing the PWQO to the federal guideline of 400, then 98% of beaches are open 80% of the time.

Tim presented data that showed the difficulties with current beach monitoring methods as they relate to predicting beach water quality. These methods assume *E.coli* levels remain relatively constant from day to day, when in fact monitoring shows that *E.coli* levels can change quickly. In some cases, beaches are posted when *E.coli* levels are low and beaches are not posted when *E.coli* levels are high. This is a result of the two to three day time lag between taking a sample and getting results.

Tim reported on a MOE project with the City of Toronto, looking at predictive modelling. These models are used to predict when *E.coli* levels are likely to be high, and so provide a method to help decide when to post a beach more rapidly than solely relying on monitoring data. Using City of Toronto and other data, the study found that there were multiple hydrologic and meteorological parameters that affect beach water quality. However, prior rainfall and stream flow are important variables for many Toronto beaches, though there were no single set of parameters that predicted *E.coli* for all Toronto beaches.

Tim demonstrated that certain models were more accurate than the existing monitoring methods. Turbidity was not measured consistently but may be the best predictor of *E.coli*. This work will continue with the City of Toronto in summer 2010, and a report will follow on the results of the project.

The next steps for the Ministry of Environment is to complete the beach monitoring database with assistance from the public health units, to obtain Geospatial data for beaches in order to get a better sense of beach quality in all of Ontario, to continue to work with Toronto on forecasting and predictive modelling, and to work with the Ministry of Health and Long-term Care in assessing *E.coli* standards.

For more information contact Tim Fletcher at [Tim.Fletcher@ontario.ca](mailto:Tim.Fletcher@ontario.ca)

## **2.6 Blue Flag Program – Sarah Winterton, Environmental Defence**

Sarah Winterton of Environmental Defence described the international beach certification program called Blue Flag and how it could help achieve provincial objectives. The Blue Flag program is an international eco-certification program endorsed by the United Nations Environmental Programme (UNEP) and the United Nations World Tourism Organization. It promises annual maintenance of high quality standards and integrates different perspectives of the beach ecosystem.

There are 27 Blue Flag criteria that must be met in order to become a Blue Flag beach. They are grouped into 4 categories: water quality, environmental education and information, environmental management, and safety and service. Specifically Blue Flag beaches must deliver; excellent water quality for swimming, well-maintained, accessible washrooms, lifeguards or lifesaving equipment and first aid, adequate garbage and recycling bins, etc.

In Canada the Blue Flag program is operated through Environmental Defence. They administer the program and support applicants throughout the process. Moreover, they develop the program through promotion, marketing, fundraising, and partnerships.

The Blue Flag program also works to support the legislative mandates of provincial ministries such as the Ministry of Natural Resources, Ministry of Environment, and Ministry of Health Long-term Care. Such mandates include: dune restoration and protection, erosion and hazard management, community education, protection of habitat and species-at-risk, and promote action to protect water quality.

There are several Blue Flag beaches in Ontario in 2009 including City of Toronto, Grand Bend, Wasaga Beach, and several in the process of being certified.

For more information contact [Swinteron@environmentaldefence.ca](mailto:Swinteron@environmentaldefence.ca)

## **2.7 Wasaga Beach and Ontario Parks – John Fisher, Ministry of Natural Resources**

John Fisher's presentation focused on the importance of Ontario's provincial parks and the key accomplishments that have been made by the parks surrounding the Great Lakes.

Ontario Parks have a significant economic impact on the province. As John Fisher mentions, the 113 operating parks have over 10 million visitors a year. According to 2008 data, the total economic impact of the parks is \$972.5 million, with \$145.5 million in direct, indirect, and induced impacts as a result of park expenditures (capital and operating), and \$350 million is generated by visitor expenditures. They are responsible for creating 8,426 jobs.

Some of the key accomplishments of the 50 provincial parks around the Great Lakes are the development of species and habitat protection and strong partnerships with municipalities and stakeholders. Wasaga Beach is viewed as a centre of excellence on the success of managing Ontario's natural beaches. The beach has partnered with the Blue Flag program, which has a positive impact on tourism. It has taken on the problem of invasive species, such as Phragmites, and it is helping species at risk. For example, the birds Piping Plovers, which were thought to have disappeared, has returned to Wasaga Beach and are the source of community and international interest. Networks are an important part of sharing knowledge, ideas and remaining at the leading edge. Both hard and soft (education, stewardship, signage) protection are important. Beaches and coasts are dynamic, so be flexible and open to changes.

Despite the positive outcomes that Wasaga Beach and other Ontario Parks have seen, John Fisher believes challenges remain. Such as, "managing for ecological integrity and sustainable recreation in dynamic, ever-changing, sensitive, and highly desirable Great Lakes beach or coast."

For more information please contact John Fischer at [john.fisher@ontario.ca](mailto:john.fisher@ontario.ca)

## **2.8 Ted Bowering, City of Toronto – Toronto's Beach Program**

Toronto's beaches have always been a vital part of the city and there is tremendous interest in ensuring that the beaches are safe for swimming.

Health impacts from swimming in poor quality water have increasingly become an important issue since the early 1980s. In 1983, following the implementation of more stringent inspection protocols, initiatives were developed to improve Toronto's Shoreline water quality by Public Works, MOE, and Public Health. Since then, improvements were seen in beach water quality following the installation of tanks to intercept and treat combined sewer overflows in the Eastern beaches in 1990s and the Western beaches in 2002. In 1999 Public Health and Works and Emergency services formalized a beach Monitoring Agreement. In 2002 monitoring and testing at Toronto beaches began 7 days a week. In 2004, microbial source tracking studies began with Environment Canada. Many of Toronto's beaches have been qualified as Blue Flag beaches. However challenges remain for those beaches influenced by rivers. Toronto is trying a new curtain containment system with UV treatment at Sunnyside beach, and residents seem to be enjoying the now swimmable beach. Ted Bowering said the next key step in

improving Toronto's beaches is to work with the Ministry of Environment on developing Predictive Models to give a more timely indication of beach water quality to swimmers.

For more information contact Ted Bowering at [TBowerin@toronto.ca](mailto:TBowerin@toronto.ca)

## **2.9 Carol Oitment, Ministry of Health Promotion – Ontario Provincial Trails Strategy**

Carol Oitment presented the Ministry of Health Promotion's Trails Strategy, its key initiatives, and identified some major challenges that confront trails in Ontario.

The Ministry of Health Promotion is the lead ministry for trail coordination and planning matters and promotes the economic, health and environmental benefits of trails. The Ontario Trails Strategy is important in the discussion of Ontario's beaches and coasts because the Strategy includes water trails such as canoe routes and all land trails that are near or follow the coasts. As Carol Oitment mentioned, waterfront trails link communities and attractions.

Currently the Ministry of Health Promotion have created several legislative proposals in order to improve trails across Ontario. For example, they are currently looking to develop the Ontario Trails Strategy into the Ontario Trails Act.

One of the challenges that the Ontario Trails Strategy faced is the lack of collaboration and coordination at the local, regional, provincial and federal levels. A solution to this was to create a coalition – a united voice that will effectively coordinate activities. Carol identified the different trail groups in Ontario and how they function. This creation of coalitions has helped to bring a voice for trails in many forums. Another problem is the relatively weak research, policy and legislative framework for trails. A possible solution to this problem is to have a stronger policy voice for parks, beaches and waterfront trails.

For more information contact Carol Oitment at [Carol.Oitment@ontario.ca](mailto:Carol.Oitment@ontario.ca)

## **2.10 Linda Ashley-Crane, Ministry of Tourism and Culture – Promoting Great Lakes Beaches and Coasts**

Linda Ashley-Crane's presentation focused on the tourism benefits of the Great Lakes. The Great Lakes system is seen as one of the world's natural wonders and it can support a wide variety of tourism-related activities, such as: cruise ships, fishing, camping, hiking, aquatic sports, and boating.

In February, 2009, Ontario Tourism released its report "Discovering Ontario: A Report on the Future of Tourism". In this report recommendations were made in 4 key areas: change how government and industry work together, set standards for success, invest in private and public tourism products, and reach out to the consumers before they get here and make it easy for them once they arrive. Research found that the outdoors is one of Ontario's greatest tourism assets with greatest growth potential. This report hoped to engage Ontario as a whole in a process to consider the future of tourism in Ontario.

In regards to the Great Lakes, the Ministry of Tourism and Culture (MTC) oversees the activities and accountabilities of many attractions and agencies that promote tourism, economic growth and job creation. The MTC believes that is imperative to maintain the health of the Great Lakes in order to promote tourism, economic opportunities and recreational enjoyment (i.e. water levels, water quality, ecosystem changes affecting fisheries, changing shoreline and submerged lands that impact cultural and coastal heritage). In terms of the Great Lakes region, Linda Ashley Crane (MTC Investment Development Office) is working to increase opportunities for cruising, improving the quality and quantity shore excursions, and continuing development of the Waterfront Trail (Erie to Quebec). New Regional Tourism Organizations will need to be engaged to incorporate emphasis on Great Lakes.

For more information contact Linda Ashley Crane at [Linda.Ashley-Crane@ontario.ca](mailto:Linda.Ashley-Crane@ontario.ca)

### **2.11 Peggy van Mierlo-West, Municipality of Lambton Shores – Grand Bend Beach**

Peggy van Mierlo-West's presentation described the evolution of the Grand Bend Beach. Despite the enormous popularity of the beach, the municipality of Lambton Shores felt that there was still room for improvement. Their work focused on 4 areas of improvement.

First they wanted to unite the community and create a more user friendly, sustainable design to the beach. They received over \$1.2 million in grants from various community groups and local businesses. The new design of the beach includes increased accessibility, use of sustainable products, a play area that was created with recycled material, and LED lighting along the boardwalk. Moreover, they restored and created new sand dunes, as well as re-introduced trees and perennial gardens around the beach.

The next element was the introduction of the Swimming Water Information Monitor (SWIM). The SWIM Monitor is a device used to collect data on turbidity, water temperature, wave height, PH levels, salinity, solar radiation, and oxidation reduction potential.

The third element was to create a safer beach. They wanted to maximize the safety of public who use the beach and to identify steps to minimize drowning or serious water-related injuries.

Finally, the last element they sought to achieve was to Blue Flag status. Peggy van Mierlo-West mentioned that Blue Flag status was important because it represents improvement, environmental stewardship, education, safety, and it unites the community. After meeting the detailed criteria, Grand Bend Beach was awarded Blue Flag status in 2009.

For more information contact Peggy van Mierlo West at [pvmwest@lambtonshores.ca](mailto:pvmwest@lambtonshores.ca)

### 3.0 Knowledge Cafés and Discussion of Results

Following the presentations, participants moved into discussions in 6 self selected groups. This section summarizes the key ideas discussed throughout the Knowledge Café groups. Each Knowledge Café discussed the three following questions. The workshop participants, after the allotted time, reported back their main points on each of the three questions.

#### 3.1 Question 1: What tools would you like to see developed to better support coastal and beach management and experience?

Key Themes:

- 1) More coordination and collaboration,
- 2) Tools that promote stewardship,
- 3) Tools that support environmentally sustainable coastal development, and
- 4) Tools that support public health protection at the beach and along coastal areas

Here are points raised during the knowledge cafes organized by theme:

##### ***Theme One: Tools that Increase Coordination and Communication***

- Need for enhanced information sharing, technical and science transfer and creating partnerships—much room for enhanced efficiency and effectiveness
- We need a beach and coastal network to share ideas and experiences and to celebrate successes—lots of initiatives but little coordination
- A coordinating body could include provincial, local governments and NGOs or a centralized agency or office (e.g. Great Lakes Commission This would help access to information, create partnerships, avoid duplication and “recreating the wheel”
- The web portal that could enable adaptive management by clarifying roles and providing: best management practices, a guide to community-based planning, monitoring and data-tracking, (e.g. Ont. Nature’s EAC, provincial “clearing house”, Message boards such as Ontario Parks Association)
- We need to disseminate timely information and resources from provincial ministries to local management and vice versa, as well as, to the public. This could be done through an information portal/learning house, or an intra-provincial liaison
- We need a beach manager or person in charge of a beach

##### ***Theme Two: Tools that Promote Stewardship***

- Enhance the awareness and understanding the social, cultural, environmental and economic value of our coastal and beach resources and assets to motivate action (locally, regionally, provincially)
- We need a beach and coast stewardship guide geared at property owners, to help inform and educate and provide practical ideas ( see recent guide from Lake Huron Centre for Coastal Conservation)
- We need a beach managers guide outlining best management practices
- Vision statement and policy identifying public access on Great Lakes as a priority (include in policy)
- Complete safe harbours/accessible marinas on Lake Superior

- We need a stewardship program focussed on beaches and coasts
- We need to support and encourage additional beaches to become Blue Flag
- We need two beach certification programs- one for major beaches such as Blue Flag and one for rural or private beaches such as Green Ribbon program on Lake Huron. These two programs could then work together to help set a spectrum of standards to improve both major beaches and more rural beaches

***Theme Three: Tools that Support Environmentally Sustainable Coastal Development***

- Need a legal basis (provincial or federal) for Great Lakes coastal planning and management
- Update some of the current legislation (e.g. Public Lands Act, Fisheries Act)
- We need to develop a designation system for coasts based on a classification system
- More consistent shoreline categorization, harmonization of standards, and integrated nearshore management plans
- We need to better understand and model coastal processes
- We need to better link improvements in beaches to improvements in watershed practices
- Need to tie in provincial policy statement to coastal planning
- Phragmites is a real problem on many beaches and coasts and we need to develop and share practical solutions that work
- We also need to know more about the sources and control of algal blooms which are a growing problem on many beaches and coasts
- Have a panel identify the top three beach and coast science needs and work at these
- Need to identify more native species, restore more coastal areas, such as dunes, alvars, etc

***Theme Four: Tools that Support Enhanced Public Health Protection at the Beach and Along Coasts***

- We need standardized public health protection tools (collection, risk assessment, interpretation, reporting) that work for highly urbanized/use areas and for broader ecosystem approach for natural areas
- Best Management Practices to be developed and communicated
- Need more predictive modelling for beach water quality, and more weather and water quality monitoring, and more frequent monitoring
- We need standard methods of assessment, monitoring, and beach posting protocols
- We need a rapid detection method for beach water quality, real time and advanced public warning - we would not put up with delays in existing system in any other area such as drinking water
- We need better tools to measure and reduce bacteria in beach sand
- We need to learn from each other how to deal with ongoing issues such as gull and geese control on beaches and also deal with new issues that are popping up such as invasive plant species and pesticides
- We must be innovative with new technology – implement pilot projects without having to go through lots of red tape and five agencies. Need a process that promotes/fast tracks pilot projects
- We need to start beach sanitary surveys to help assess beaches and identify sources of contamination
- We need tools to identify where the *E.Coli* is coming from- either seagulls or other birds or sewage or animals- so we need additional microbial source tracking to figure out source of contamination

- If we had a common understanding of the source of contamination, this would help us design better solutions to remediate sources of contamination
- We need to better identify the actual risk of illness from different levels of recreational water quality and pathogens
- We need to know if the risk of illness from *E.coli* which is mainly from birds is greater or less than the risk of illness from *E.coli* that is mainly from humans- in other words, not all *E.coli* maybe the same in its ability to cause illness – so we really need a way to know how to focus our efforts and limited dollars on efforts that deliver the best results to reduce illness
- Information management – can we develop instant notification of beach postings to reach out via web applications, “iPhones”, etc.
- We need better controls on effluent quality
- We need additional enforcement and accountable and expert beach managers

### 3.2 Question 2: How could we better promote our coasts and beaches?

Key Themes:

- 1) Increase Beach and Coast Education
- 2) Increase Beach and Coast Promotion

#### ***Theme One: Need to Increase Beach and Coast Education***

- Educate and inform on coastal process and trail system – develop school curriculum to inform students on coastal processes
- Need messaging such as “its everyone’s responsibility to protect Great lakes beaches and coasts”
- Model on City of Toronto and other campaigns “it all ends up in the lakes”
- Use signage on beaches/coasts/trails as way to educate about coastal processes, native grasses etc.
- Create shared language and definitions
- Need to create awareness of problems- garbage, feeding birds etc.
- Create a lake centre for all Great Lakes with a certification and award program for re-naturalisation efforts
- Increase funding for community outreach and hands on work
- Package coastal science so is easy to understand and accessible
- Consider having NGOs or Blue Flag program help deliver environmental education programs

#### ***Theme Two: Ways to Increase Beach and Coast Promotion***

- More widely communicate success stories and cleanup, such as Grand Bend Beach and Wasaga beach
- We could position Ontario as a beach and coast destination for local and international tourists
- Must continue to improve our beaches – can’t promote unpleasant beaches, need to combine a good product with good promotion
- We need to be mindful of trends- both in changing Ontario makeup and also how people are communicating and receiving information- use new media methods

- We need to develop other things for people to do after the beach- such as heritage sites and rainy and cloudy day activities such as playgrounds
- We need to increase communication and promotion ideas between provincial and local tourism offices
- Trails form a vital part of beaches and coasts- and driving tours are also popular
- We could develop a Great Lakes trail and tour that builds upon existing efforts in many communities
- Create events (trail wide walking, canoeing, biking, etc) and water festivals – to promote better understanding of the Great Lakes
- We could link beaches to water festivals and other heritage festivals
- We could create a beach festival
- Increase signage on beaches, coasts, and coast trails
- Use Blue Flag as beach branding program to encourage local and international tourists and Green Ribbon program on Lake Huron
- Promote Green Ribbon program for smaller, private beaches that may not be able to achieve Blue Flag status – take initiative from work being done on Lake Huron
- Develop and expand upon existing guides to market beaches and coasts towards specific niche audiences (shipwrecks guides to divers, bird watchers, lighthouse tours, etc.)
- Review Ontario tourism sites in order to improve access and information
- Use Weather Channel to promote and inform about beaches
- Recognise the marketing power of a “comeback” of species on beaches such as piping plover and the draw that this has already on international birdwatchers
- Could translate beach and coast educational materials and try to capture different values
- Increase Marketing such as
  - Commercials with Great Lakes coasts (promoting tourism on Great Lakes coasts)
  - Great Lakes Shorelines brochures
- Have a web site with easily accessible province wide information about beaches-link to US sites

### **3.3 Question 3: What do you see as key challenges or barriers and opportunities for improving our coasts and beaches?**

Key themes:

- 1) Lack of funding
- 2) Lack of coordination and communication
- 3) Lack of vision and conflicting values
- 4) Challenges of climate change and science gaps

#### ***Theme One: Barrier is Lack of Funding***

- There is a definite lack of funding for coast and beach issues. In comparison to the United States, Canada is far behind in supporting these issues
- We need funding to better support beach and coastal efforts
- The ability to raise funds from beachgoers is limited- only get revenue from one in four Wasaga beach goers, but all four people use facilities (washrooms, leave garbage)
- Can generate some funds from parking

- Need to build a better business case. In order to get more funding, need to make a good economic case for improvements in parks and beaches. Need broad support for improving beaches
- Need to increase funding for research programs at universities
- Need sufficient penalty to deter poor building practices etc.
- Incorporating beach and coasts into provincial policy statement can increase resources
- Agencies loathe to approach businesses for improvements in beach and coast

***Theme Two: Barrier is lack of coordination***

- Who do you call in order to locate proper beach or coastal expertise? Public is confused whether to call MOE, PHUs, MNR, etc.
- Need someone to take the lead in communicating and coordinating efforts
- Need way for beach and costal managers to communicate and learn new methods
- Need more consistent beach water quality standards and data between the US and Canada – need beach standards to be on the same level in Canada and the US
- More monitoring and access to information
- Need to figure out how to better share expertise that we do have- i.e. work with town GIS department on mapping

***Theme Three: Barrier is lack of vision and conflicting values***

- Need a change in perception on value of beaches and coasts- traditionally taken for granted and undervalued
- We lack a clear vision for our beaches and coasts
- Traditional thinking and practices such as having a green lawn and bulldozing dunes leads to problems with algae and sand movement
- Changing demographics with cottages becoming year round residences, earlier retirees increases ecological pressures on beaches and coasts
- There seems to be divide in values between different areas of the Great Lakes (e.g. Urban vs. Rural, North vs. South, etc.) and also water front vs. backlot values

***Theme Four: Challenge is climate change and science gaps***

- Climate change will change many aspects of our beaches and coasts
- The uncertainly related to lake levels will pose big challenges to managing our coasts and beaches
- It is hard to understand and communicate the vulnerabilities of our shores
- We really need to make improvements in our current method of beach monitoring and standards
- We have poor bathymetric data in many areas
- We need to pool resources to fill the science gaps- IJC trying to do this on beaches but needs more follow-up
- There are opportunities to work together on provincial policy statement

## 4.0 Facilitated Workshop Discussion

Following the reporting of the Knowledge Café questions, a general discussion ensued in which several key themes of the day were once again brought up. Here are some of the interesting points:

- Incorporate use of Regional Tourism Offices (RTOs) – they are a great way communicate and promote local beaches and coasts.
- Lake Wide Trails – often forgotten as part of coastal recreation
- The need for an office to share a community of practice to expand knowledge and clear identification of who to be called depending on the question
- Sustainable funding including discussion of stimulus funding with reference to Toronto and Chicago as leading examples
- Need for policy at provincial level that better integrates Great Lakes provincial interest
- Climate change is causing very quick changes in the Great Lakes basin and therefore adaptation and mitigation needs to become common place
- Fill in research gaps – more funding for projects such as predictive modelling, etc – but make sure there are sustainable funding solutions
- Must outreach and educate – a number of ways to do this but often poorly funded
- Incorporate idea of trickle down affect – initial interest in beaches and coasts must be supported and promoted by the Province, this will have large impact on the local/regional interests

## 5.0 Key Workshop Findings

We discussed the four major findings of the day's workshop:

### **1) *Building partnerships and collaborating across the board***

- There are a wide and inspiring variety of beach and coastal activities currently underway that are not always connected into a broader whole
- Beach and coastal managers have a large interest in better communication and coordination on beach and coastal activities so we can better connect and learn from each other
- A centralized Great Lakes beaches/coasts hub should be considered to provide coordination, communication and accountability for the health of Ontario's beaches and coasts

### **2) *Acknowledging and supporting the need for improvement on beaches and coasts***

- Acknowledging the need for increased focus on Ontario's beaches and coasts in light of current and emerging challenges
- Recognising the increasing pressure on our beaches and coasts from increased population, changing demographics, invasive species and climate change
- Recognising the need to allocate stable, comprehensive funding for beach and coastal management and development of projects and innovative research
- Responding to the need to improve methods of beach monitoring and beach water quality communication
- Recognising that beaches and coasts can be important economic drivers for a local regional and provincial economy

- Working to quantify beach and coast values in economic terms as way to drive investments in beaches and coasts

### **3) Increasing communication and promotion of beaches and coasts**

- Fostering a perception shift in seeing beaches and coasts as vital community treasures
- Promotion of beaches and coasts through several different processes such as the media, signage, success stories, etc. should be considered
- The importance of working together to increase beach and coastal tourism and promotion, in ways that promote sustainable development and stewardship to ensure what attracts us to the coast is protected (e.g. natural and spectacular viewsapes, wildlife viewing, productivity of fisheries, swimmable and safe beaches, vibrant waterfronts)

### **4) Increasing strategic planning for our beaches and coasts**

- Interest in increasing adaptive management and integrated coastal zone planning
- Improving planning processes to better incorporate stewardship and to account for regional nature of some coastal areas
- Fostering existing coastal initiatives and moving towards creative community based collaborative coastal management in more areas in the lakes
- Collaborating to make the most of the opportunities presented by several new policy areas : including the negotiations associated with the Great Lakes Water Quality Agreement and the Canada Ontario Agreement Respecting the Great Lakes Basin Ecosystem, the potential review of the Planning Act Provincial Policy Statement, progress made in the US and others

## **6.0 Next Steps**

All speakers thanked the participants for their contributions, and noted that immediate next steps were to post workshop presentations on line and to develop a workshop summary.

The **Ministry of Natural Resources** stated that they would consider the findings as input into the provincial policy statement review process, consider ways to improve coordination on beach and coasts, look at ways to encourage integrated coastal management and report back to their minister.

The **Ministry of Environment** stated that they would continue their work on better beach monitoring techniques, review the recreational Provincial Water Quality Objective, publish a beach quality report in 2010 and look at ways to improve Ontario's beaches and coasts.

The **Great Lakes and St. Lawrence Cities Initiative** stated that many of the Great Lakes Mayors are keen to work together to improve Ontario's beaches and coasts. The Cities Initiative is looking to increase and encourage best management plans and beach success stories, they are developing resolutions for their annual June Cities conference on COA, GLWQA, invasive species and coastal management , that they are suggesting beaches and coasts be discussed at the June Great Lakes Mayors and Ministers Summit. The Cities will continue to work towards greater provincial and municipal collaboration on Ontario's beaches and coasts, to encourage the development of a provincial municipal beach and coastal network and encourage the development of a beach strategy in Ontario.

## **7.0 Workshop Evaluation**

- The organizers have received very positive feedback regarding the value of the workshop. Generally, strengths were networking among government and non-government interests from across the Great Lakes to broaden awareness of challenges and solutions being developed and employed by coastal and beach managers, locally and provincially.
- The most discussed weakness of the workshop was that there was not enough time for discussion, an indication that the content and relevancy was strong but a one day workshop format was not sufficient.

**Appendix 1: Key Findings of the Great Lakes Climate Change and Policy Workshop, 2009 (Report prepared by W.F. Baird and Associates Coastal Engineers Ltd. And Planning Solutions Inc. for OMNR and Environment Canada. For further information contact Jonathan Staples, Ontario Ministry of Natural Resources, Great Lakes and Waters Policy Section, Peterborough, Ontario (705-755-1219).**

This collaborative, results-oriented workshop's findings will be of significant interest given the insights and recommendations developed to inform a "future of change for planning and management in the land-water interface of the Great Lakes Basin in light of climate change and other drivers/stressors."

A total of 49 individuals from a broad cross-section of government, academia, and the private sector attended the two day workshop in Burlington, Ontario on April 8 and 9, 2009. The agenda included 10 technical presentations to highlight the state of climate change science, policy application for natural hazard and resource protection, and ongoing management issues for our shorelines.

Key workshop findings are summarized in five sub-categories: policy, research, integration, implementation, and communication and awareness and include an action plan of short, medium and long term priorities to address key needs.

The key opportunities for change were similar to those discussed at the April 15, 2010 Great Lakes Beaches and Coasts 2010-2020 Workshop: GLWQA negotiations, COA Respecting Great Lakes Basin Ecosystem anticipated renewal; Planning Act's Provincial Policy Statement review in 2010; Premier McGuinty's Expert Panel on Climate Change; Great Lakes restoration and protection a priority for U.S. administration.

Eleven recommendations are presented based on the shorter term priorities identified in the action plan:

Commission a White Paper on shoreline management to support "Mainstreaming" climate change risk into our planning/regulatory policies for both ecological and hazard considerations, to document the cumulative impacts associated with shoreline development, and adopt a sustainable approach for natural resource protection and shoreline development

Undertake an Integrated climate change impact and vulnerability assessment for the GLB under projected changes

Binational vision and implementation of integrated and adaptive shoreline development through Lakewide Management Plans

Collaboration for integrated shoreline management plan, that address:

Range of projected changes in climate variability as it affects natural hazards and terrestrial/nearshore ecosystems in the Great Lakes,

Adaptation strategies to build resilience for the developed/human shoreline and ecological communities; and

Interrelationships between watersheds, shorelines, ecosystem functions, water quality, habitat and native species that rely on the land-water interface.

Undertake innovative and holistic approaches for hazard zone planning and recognize the permanent risks associated with developing on eroding shorelines. new ideas and zoning tools are required,

Update the Provincial Policy Statement based on the White Paper findings and new bi-national objectives for shoreline management,

Update the Littoral Cell Definition to support development of Integrated Shoreline Management Plans at a littoral cell scale,

Update MNR report and technical guide for flood levels/shorelines including climate change guidance (a focus for White Paper),

A coordinated, multi-agency, data acquisition plan for the coastal zone of the Great Lakes is required along with additional monitoring capability to forecast climate change impacts and make products freely available

Capacity building and continuous education for staff responsible for shoreline planning and natural resource protection in Ontario.

Shoreline Stewardship Program for land owners at the land-water interface in Ontario



## Great Lakes Beaches and Coasts: 2010 to 2020

Black Creek Pioneer Village, 1000 Murray Ross Parkway, Toronto

April 15, 2010

### Agenda

*“Working together to improve Ontario’s Beaches and Coasts”*

#### ***By the end of the day, you will...***

- *Meet 60 other people interested in improving Great Lakes beaches and coasts and have a better understanding and appreciation of their challenges and successes,*
- *Increase your awareness of Great Lakes coastal and beach quality trends introduced through presentations and case studies,*
- *Scope out needs for better supporting Great Lakes beach and coastal zone management,*
- *Identify ways to promote Great Lakes beaches and coasts,*
- *Identify potential barriers and opportunities for working together to improve Ontario’s Great Lakes beaches and coasts,*
- *Highlight additional potential interests to include in the network for improving Great Lakes beaches and coasts.*

8:15-9:00 Registration and Refreshments

9:00-9:15 Welcome, Introductions, Workshop Objectives (Eric Boysen, MNR)

New Developments and Opportunities for Enhancing

## Great Lakes Beaches and Coasts (Sarah Rang, GLSLCI)

### *“Connecting”*

- 9:15-9:30 Participant Connection to Great Lakes (Jim Mackenzie, Facilitator)
- 9:30-9:45 Success Story #1: Southern Georgian Bay Initiative (Greg Mayne, Environment Canada)

### *“State of our Beaches and Coasts”*

- 9:45-10:30 Great Lakes Coastal Environmental Scan
- Context (Eric Boysen, MNR)
  - State of Great Lakes Coasts (John Marsden, Environment Canada)
  - Discussion
- 10:30-10:45 BREAK
- 10:45-11:15 Beach Health in Ontario
- Working together towards improving Ontario's beaches and coasts (Sarah Rang, GLSLCI)
  - Beach Quality in Ontario, Recent MOE Projects (Tim Fletcher, MOE)
- 11:15-11:30 Success Story #2: Blue Flag Program (Sarah Winterton, Environmental Defence)
- 11:30-11:45 Discussion: Beach Health in Ontario
- 11:45-12:00 Success Story # 3: Wasaga Beach and Ontario Parks (John Fisher, MNR)
- 12:00-12:40 Lunch (provided)
- 12:45- 13:00 Success Story #4: City of Toronto (Ted Bowering)

### *“Promoting Our Beaches and Coasts”*

- 13:00-13:15 Success Story #5: Ontario Provincial Trails Strategy (Carol Oitment, Ministry of Health Promotion)
- 13:15-13:45 Promoting Great Lakes Beaches and Coasts (Linda Ashley-Crane, Ministry of Tourism and Culture)
- Discussion

**13:45-14:00 Success Story #6: Grand Bend (Peggy van Mierlo-West, Municipality of Lambton Shores)**

**14:00-14:15 BREAK**

### ***“Identifying Key Opportunities”***

#### **2:15-3:30 Knowledge Cafes**

Cafe 1: What tools would you like to see developed to better support coastal and beach management and experiences?

Café 2: How could we better promote our coasts and beaches?

Café 3: What do you see as key challenges or barriers and opportunities for improving our coasts and beaches?

- Each Café will have a facilitator/reporter and a record-keeper and will help promote understanding of suggestions and...
  - What would you do now?
  - What would you do within 5 yrs?
  - What would you do longer term?
  - How can we best work together?

#### **15:45-16:15 Overview of Café Results**

- Café Facilitators (6) to report to whole group
- 

#### **16:15-16:40 Facilitated Discussion**

**16:40-17:00**

- Next Steps and Wrap Up (Jennifer Keyes, MNR; Sarah Rang, GLSLCI)

**17:00 Close (Jim Mackenzie)**

***Safe Travels Home and thank you for participating***

*Workshop Steering Committee*

*Tim Fletcher, MOE*

*Sarah Rang, GLSLCI*

*Bev Ritchie, MNR*

