

Lake Huron-Georgian Bay Watershed
**A Canadian Framework
for Community Action**



People Working Together for a Healthy Environment

Acknowledgements

A Canadian Effort in Support
of the Lake Huron Binational
Partnership.



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Lake Huron Watershed Canadian Framework for Community Action.**

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Individuals, environmental and local community groups, businesses, municipal, provincial, federal and Aboriginal governments from all parts of the watershed are encouraged to work together and commit to the Lake Huron Charter.

Lake Huron Charter

We, the people(s) of the Lake Huron Watershed believe in a healthy, life sustaining ecosystem that provides our cultural, economic and spiritual fulfillment. Through this Charter we commit to working together to restore and protect the lands and waters of the Lake Huron Watershed for today and for all generations.

1 Canadian Vision for the Lake Huron Watershed

We see...

- clean air, clean water, healthy landscapes of forest and field;
- our community as a place where all people work together and reach positive solutions to environmental concerns; and
- doors opening for new partnerships, new opportunities, and increased environmental pride through community action.

We recognize...

- that our lands and waters have been degraded and our attitudes and actions must change;
- that by protecting our life sustaining food, air and water, we protect ourselves;
- that we must adapt to our changing world especially our changing climate;
- that efforts by many have begun to make a positive difference; and
- that we share the responsibility to sustain a healthy natural environment and as individuals, communities and government we are ready to take ownership and action.

We will take action...

- by becoming aware of the watershed's ecosystem and by identifying environmental issues and seizing opportunities for protection and restoration;
- by supporting the efforts of individuals, communities, businesses and government, to identify needs, goals and by promoting action; and
- by being part of a network to share information with all people of the Lake Huron watershed.

And, this will ensure...

- that degraded areas are restored and environmental health sustained;
- that our use of land and water is ecologically sound; and
- that our open waters, shorelines, farmlands, forests, rivers, streams and wetlands across the watershed, are protected today and for all future generations.



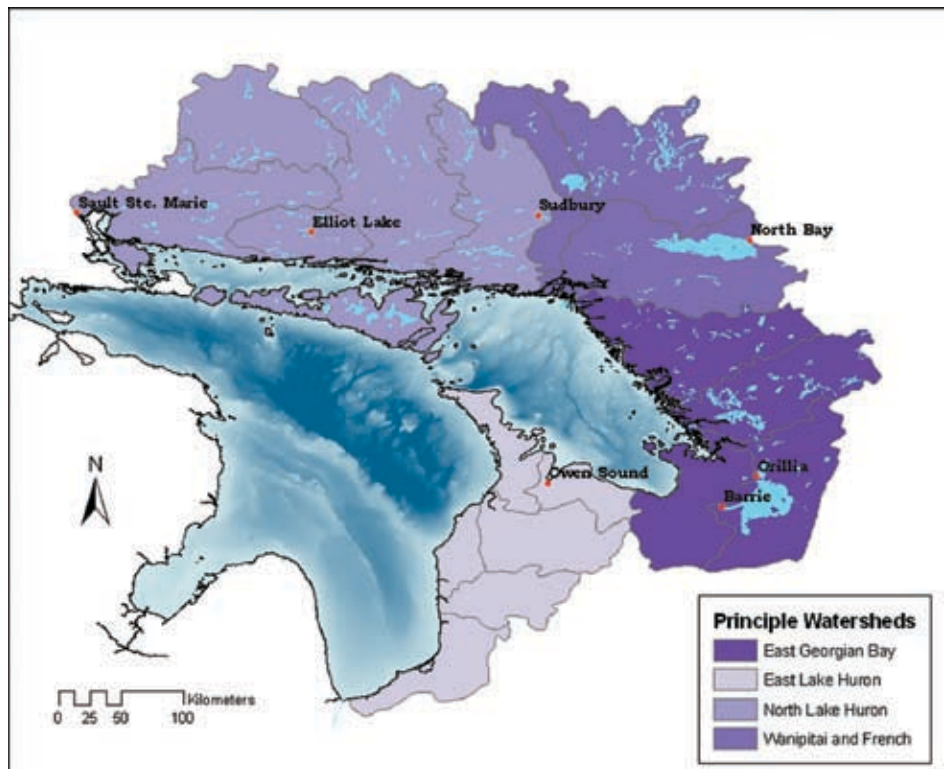
Introduction to the Watershed

Lake Huron was the first of the Great Lakes encountered by European explorers, who traveled up the Ottawa River to Lake Nipissing, then down the French River to Georgian Bay. At that time, French discoverers knew nothing of the other Great Lakes, and called Lake Huron "La Mer Douce" or the sweet- or fresh water sea.

Thousands of years ago, melting glaciers of the last ice age left us with a magnificent gift: a string of five precious freshwater seas collectively known as the Great Lakes. At the "hub" of the Great Lakes is Lake Huron. With its land and waterscapes evolving through the interacting forces of water, geology and climate, the watershed has been shaped into an area of global ecological significance. Lake Huron and its watershed is renowned for its beaches, dunes, rugged shorelines, coastal wetlands, diverse river systems, forests and for its expansive open waters and more than 30,000 islands.

Lake Huron with its three Canadian basins; Georgian Bay, North Channel and the Main Basin is in good health relative to the southern Great Lakes. Human activities and natural processes continue to shape the watershed's characteristics and some of these changes affect the health of the entire ecosystem and the well being of its inhabitants. The northern portion of the watershed is Canadian Shield, heavily forested and primarily consists of Crown lands with important mining and forestry industries. The southern portion is primarily private land dominated by agriculture including intensively cultivated field crops and livestock operations.

Four environmentally degraded Areas of Concern were identified in Lake Huron, in addition to St. Marys River at the inlet. Collingwood and Severn Sound have been restored and Spanish Harbour is an area in recovery. Remedial actions continue in the Saginaw Bay on the U.S. side of the lake, and in the St. Marys River.





Lake Huron Facts...

- Third largest freshwater lake in the world
- Second largest of the Great Lakes
- Over 30,000 islands
- Longest shoreline of any lake in the world
- Greatest amount of coastal wetlands of the best quality in the Great Lakes
- It takes 22 years for the entire volume of water in Lake Huron to be replaced

Canada and the United States endorsed a Lake Huron Binational Partnership in 2002 to meet the commitments of the Great Lakes Water Quality Agreement to protect and restore Lake Huron. The Partnership has focussed on priority issues such as contaminants, loss of fish and wildlife habitat and ecosystem change.

In 2005, representatives from Canadian provincial and federal agencies, First Nation, county, municipal and environmental/non-governmental organizations discussed the need for a unifying vision and strategy to improve collaboration and integrated ecosystem management for the Canadian portion of the watershed. There was an overwhelming consensus on the need to adopt an integrated domestic approach and to empower communities and individuals.

The Lake Huron Watershed Framework for Community Action responds to this need and will promote working relationships between individuals, communities and governments to manage the lake and its watershed in a healthy and sustainable way. Many community and government groups are already undertaking successful protection and restoration initiatives across the watershed and this Framework will help many others to build upon current achievements and to plot new actions that others will follow.

Environmental Concerns

More and more people are choosing to make the Lake Huron watershed their workplace, playground and home. As our society grows, this will put increased stress on the natural ecosystem, and it is increasingly important that we become aware of our activities and behaviours and become individually responsible for prevention, protection and restoration. The northern and southern portions of the Lake Huron watershed are diverse geological areas, and the associated land use and human activities present equally diverse environmental challenges. No matter where we live in the watershed, we are all part of the problem and the solution.

Contaminants in Water, Fish and Wildlife

Water is our keystone resource and while it is in relatively good condition across the watershed, there are some areas with degraded water quality which can result in beach postings, algae blooms and contaminated drinking water, fish and wildlife. Consuming contaminated fish threatens human health as does exposure to bacteria and pathogens in water when swimming and drinking. Improper use and maintenance of septic systems, poorly managed agriculture practices and other sources (including wildlife) all contribute to water quality problems.

Loss of Fish and Wildlife Habitat

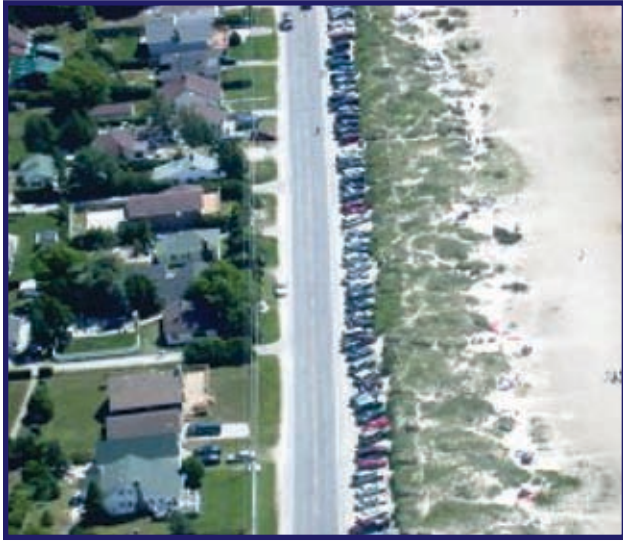
Past and present behaviours and land use practices continue to reduce the amount and quality of fish and wildlife habitats in the lake, streams and on land. Poorly planned development and poorly managed agriculture practices have caused pollution in watercourses and loss or degradation of important fish and wildlife habitat. In the southern portion of the watershed, many streams lack vegetation on their banks to naturally filter surface water runoff and provide shade for fish and habitat for wildlife. Forests and wetlands have been reduced and dams restrict fish from reaching their essential spawning areas in streams.



Outdated Farming Practices



Pollution from Stormwater



Unsustainable Development



Ballast Water Discharge

Loss of Biological Diversity

Lake Huron is experiencing changes in ecosystem structure and its web of life as a result of human behaviours and activities. Non-native species have disrupted the fish community in the lake, wetlands are being lost or degraded, shorelines are being altered and sensitive ecosystems such as dunes and alvars are being impacted and in some cases have suffered irreplaceable damage.

Other Environmental Concerns

Throughout the watershed people are also concerned about:

- climate change and its impacts on water levels, water availability and flows in streams and rivers and important coastal wetlands;
- new chemicals in our environment which may impact fish, wildlife and human health;
- new diseases such as botulism in fish and birds;
- species at risk; and
- population growth and human activities that are unsustainable.

It is important that everyone in the Lake Huron watershed collectively address air, land, water and fish and wildlife related concerns.



Shoreline Hardening

A Lake Huron Community Based Approach

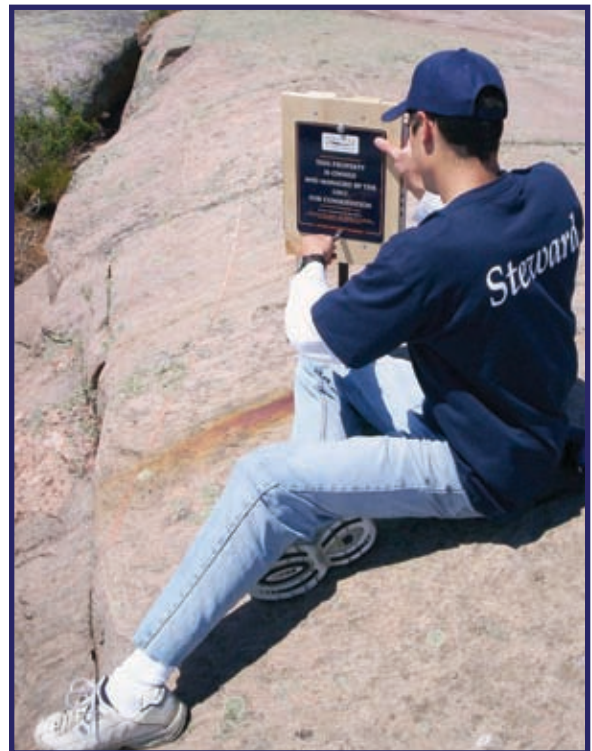
Our Community Involves...

- Individuals
- Residents
- Cities, Towns and Villages
- Aboriginal People
- Business and Industry
- Farmers, Fishers, Tourist Operators
- Non Government Organizations
- Interest Groups
- Ratepayer Associations
- Academic Institutions
- Municipalities, Townships and Counties
- Conservation Authorities
- Provincial and Federal Government Agencies

Currently, there are many individuals, property owners, business operators, community groups and governments across the watershed that are actively involved in promoting sustainable activities. The purpose of the Lake Huron Watershed Framework for Community Action is to work with these people and learn from and share their experiences with others to enhance a lake-wide commitment for a healthy and sustainable Lake Huron watershed.

Local communities, groups and individuals are among the most effective champions to achieve environmental sustainability in their own backyards and communities. A community based approach must engage and inform everyone so that they will participate and become involved in a collaborative problem solving process.

In a collaborative approach, local knowledge of ecosystems and concerns can be shared and the results of current science and monitoring projects can be put into community hands for their use. This approach will assist citizens in moving from the role of observer to active participant, and to find a place for themselves to initiate change and take active leadership roles.





The Framework for Community Action will:

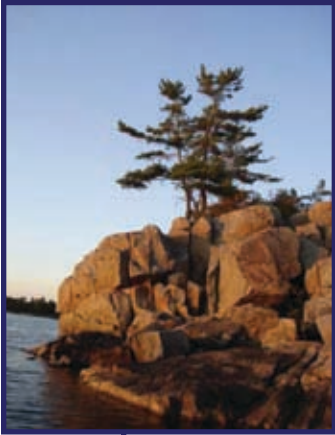
- Encourage active participation of individuals, groups and communities, in identifying common issues and the conservation and stewardship of natural resources;
- Promote environmentally responsible decisions and activities throughout the watershed;
- Establish a collaborative network of contact people and an inventory of environmental monitoring and technical information that can be shared and accessed by all people; and
- Promote restoration and protection initiatives that can be readily adopted and implemented.

The Lake Huron Framework for Community Action works on the principle that each individual, community and organization will operate independently, and are formally linked under the umbrella of Lake Huron Charter to represent a force stronger than the individual parts. Through the Charter everyone will share the same goals and vision. Through our individual actions we will strive to collectively work towards conserving, protecting and rehabilitating important ecosystem components throughout the watershed. The range of initiatives may include simple action oriented tasks such as wetland or fish habitat rehabilitation to comprehensive Community Action Plans.

Community Action is an investment in the overall watershed health...

...together we will achieve much more than any one partner could do on its own!

Our Principles and Approaches



To fulfill our vision for Lake Huron, we must employ an integrated process that is linked to a set of fundamental principles. These principles must promote and guide collaborative, science-based approaches that align individuals, communities and government agencies in taking the most effective conservation and protection actions to achieve lasting results.



Principle 1 - Build Awareness and Capacity

Communication: Create awareness about Lake Huron and its watershed, sustainable living and community action by communicating with people through a range of options such as fact sheets, posters, websites, newsletters and meetings.

Education and Knowledge: Provide educational opportunities to increase knowledge about the watershed's ecosystem and its stressors. Work with scientists from government, non-government organizations and academic institutions to translate current environmental knowledge and information and share with everyone. Integrate scientific-based knowledge, aboriginal traditional knowledge, and local knowledge and perspectives into management and policy to promote conservation of natural and cultural values.

Capacity Building: Build the capacity of community groups and people by providing tools and improving knowledge and skills. Hold meetings, workshops, conferences, and provide information and technology transfer opportunities to enhance local management of environmental issues.

Principle 2 - Support Community Involvement

Lake Huron Charter: Obtain support for the Charter from individuals, environmental and community groups, and municipal, provincial, federal and aboriginal governments. Seek a commitment to sustainable living practices and to value natural resources. Understand that economic activity and quality of life is made possible through our environmental assets and services. The Charter will help to ensure that our decision making considers all social, economic and environmental demands, and will remind us to balance the needs of the present without compromising the ability of future generations to meet their own needs.

Networks for Collaboration: Improve collaboration between agencies and community groups. Create networks to share information, approaches and facilitate partnership opportunities.

Involve and Engage People: Encourage and promote the involvement of individuals and groups in ongoing projects and new environmental initiatives. Establish pilot projects to demonstrate how individual and collective actions can improve our environment, grow into larger efforts, and attract interest and commitment from others.





Principle 3 – Take Action to Restore and Protect

Identify and Inventory: Use scientific research and monitoring information, local and traditional ecological knowledge to understand the environment, ecosystem structure and function and track trends over time. Seek consensus on issues, what needs to be done, priorities for action and seize opportunities for projects and initiatives when they arise.

Protect Natural Areas: Protect critical populations of fish and wildlife through species management and habitat conservation and stewardship. Work with landowners, communities and local governments on stewardship programs and plans and support projects aimed at preventing environmental damage. Work towards environmental sustainability, responsible decision making and effective planning.

Restore Degraded Areas: Where environmental quality has been degraded by human activity directly or indirectly, recommend and implement solutions to resolve problems, control or reduce sources of pollutants, rehabilitate shorelines, streams, wetlands and forests. Promote activities to restore or create new fish and wildlife habitat.





Principle 4 - Measure Success and Adapt

Measure Success: Identify targets and indicators and develop public friendly reporting mechanisms such as report cards to track and report ecological monitoring results, achievements of stewardship and protection initiatives and provide this information to the community.

Adapt: Use common sense, experience and scientific and technical expertise to modify targets and indicators when necessary.

Who is Involved and What Can Be Done?



Everyone of us can make a commitment to the Lake Huron Charter and take actions to support a healthy life sustaining ecosystem.

Individuals can make environmentally responsible decisions in their lives that collectively contribute to overall improvements in the watershed. Recycling, conservation of water and energy, planting trees, restricting livestock from natural watercourses, best management practices on farms, maintaining natural shorelines and land stewardship are all examples of how individuals can help. Collectively, actions of individuals contribute significantly to all efforts.



Industry, businesses, farmers and developers can provide leadership and innovation in the adoption of environmental values, green principles and the implementation of stewardship practices which will help to lessen their impacts on the environment.

Local committees, ratepayer groups and clubs can become more involved in initiating community based activities or by preparing and implementing plans that influence land use policy and promote stewardship actions in their neighbourhoods.



Non-government organizations can be environmental leaders and help others through education and communication programs and through planning inventories, restoration projects and the preservation of environmentally significant areas.

Researchers and schools can lead research programs, complete restoration projects and provide education programs to improve our understanding of the Lake Huron watershed ecosystem.



Aboriginal people can provide the collection and merging of traditional knowledge into science, research and monitoring, as well as identify environmental priorities and actions.

Municipalities, cities, towns, regions and counties can provide direction for development through their official plans and make wise land use planning decisions. Municipalities have a responsibility for storm and wastewater collection and treatment and the protection of shorelines and environmentally sensitive areas. They can provide forums for local community groups to influence land use and stewardship.

Conservation Authorities can provide leadership and guidance through watershed planning exercises and through stewardship, outreach, the provision of grant funding and land owner contact programs.

Federal and provincial governments can provide leadership, coordination, access to a wealth of scientific information and support various projects across the watershed and provide access to funding opportunities.

Examples of Communities in Action

There are many stories of communities in action across the Lake Huron Watershed. It is important to celebrate their achievements and share the knowledge gained so that others may build upon their successes. Here are a few of these stories:

The Lake Huron Centre for Coastal Conservation

Founded in 1998, the Centre's goals consist of protecting and restoring Lake Huron's coastal environment and promoting a healthy coastal ecosystem on a lakewide basis. It recognizes that its work has to include the economic and social dimensions of sustainability, as coastal communities cannot have a healthy economy unless they have a healthy environment. By helping people link with groups along other parts of the lake, the Centre serves as a vital bridge between local issues and the larger bioregion. All of its work is focused on caring for the coastal environment in practical ways that can improve the health of the lake, its coastlands and its people.



Huron County Water Protection Steering Committee

Huron County created a committee in response to concerns about bacterial pollution and algae blooms, and subsequent health warnings to swimmers at their beaches and in streams. The Steering Committee sets priorities and recommends remedial measures and coordinates activities amongst participating agencies (conservations authorities, provincial ministries of environment and agriculture, and county planning and health departments) and local groups and individuals. The Steering Committee has provided an opportunity for the expression of diverse community interests, focusing on actions and outcomes, and has fostered an appreciation of opposing views and an understanding of the complexity of the water quality issues. Efforts of the Huron County Water Protection Steering Committee and citizen's groups have also resulted in a Stewardship Guide for the Lake Huron Coastline. The purpose of the Guide is to engage lake-shore residents in the protection of the quality of our water.



Georgian Bay Littoral Biosphere Reserve

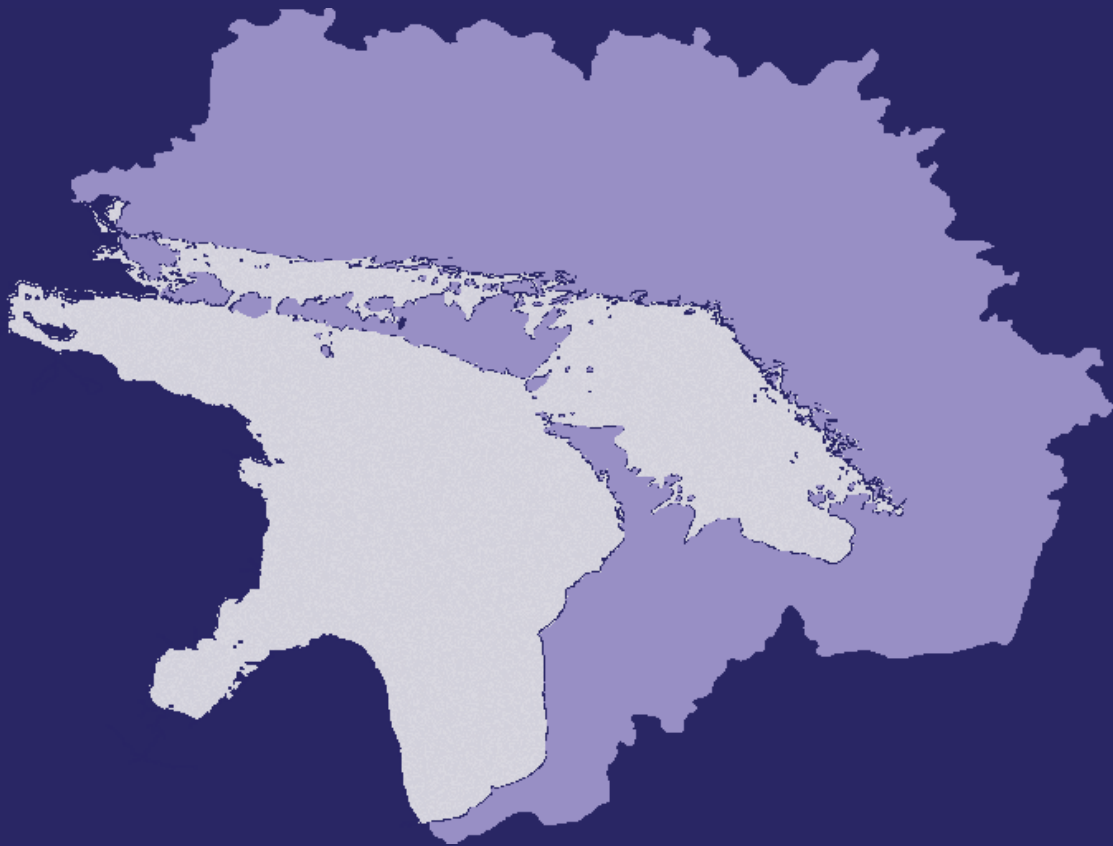
The eastern coast of Georgian Bay has been designated by UNESCO as a world biosphere reserve. The 347,000 hectares are considered the world's largest freshwater archipelago (the 30,000 islands). The area within the biosphere reserve includes extensive shoreline, open water and adjacent mainland that stretches 200 km from Port Severn to the French River. In addition to its many conservation objectives, the Georgian Bay Biosphere Reserve will encourage sustainable community development, tourism opportunities, research, monitoring and education.



Severn Sound Environmental Association

Severn Sound is no longer listed as a Canadian Great Lakes "Area of Concern" due to many successful restoration projects that addressed environmental problems. The Severn Sound Environmental Association continues its mission to sustain environmental quality and ensure continued protection through a legacy of wise stewardship of Severn Sound and its tributaries. Several programs are underway that address Source Water Protection, Water Quality and Environmental Monitoring, Healthy Habitat, Pollution Prevention, Stewardship and Public Involvement.





In a collaborative approach, local knowledge of ecosystems and concerns can be shared and the results of current science and monitoring projects can be put into community hands for their use. This approach will assist citizens in moving from the role of observer to active participant, and to find a place for themselves to initiate change and take active leadership roles.

For more information, please visit:

The Lake Huron Binational Partnership
<http://www.binational.net>