

Goulais Regional Plan

This is one of twenty Regional Plans that support implementation of the Lake Superior Biodiversity Conservation Strategy (Strategy). The Strategy, prepared and overseen by the Lake Superior Partnership, contains information and 62 sub-strategies to provide guidance to restoring and protecting biodiversity (www.natureconservancy.ca/superiorbca).

Regional Plans are intended to be adaptive documents that support and respond to local conservation efforts and contribute to lakewide biodiversity goals. To contribute an update to this Regional Plan, please contact: greatlakes-grandslacs@ec.gc.ca.

1. Goulais



The coastline of this regional unit is characterized by sand and cobble beaches, including some of the longest sand beaches on the Ontario side of Lake Superior. Goulais Bay contains one of the largest remaining populations of the threatened Lake Sturgeon; therefore, it is a critical management area for this species. Important habitat for Lake Trout and Lake Whitefish are found in the Goulais region, along with

island shoals, bays and tributaries used by Walleye and Brook Trout. Muskellunge have also been found in Goulais Bay. Their presence in the Ontario waters of Lake Superior is unique and exhibits the profound biodiversity that is found in this region. Nearly 75% of the regional unit is forested, providing habitat for rare plants and animals. At least 39 species and communities of conservation concern have been documented in this regional unit, including Bald Eagle, Wood Turtle and Peregrine Falcon^{2,3}. Over 8.5% of the regional unit landmass is preserved as parks land and protected areas, including islands and a number of wetland types.

Report Card ¹ , Overall Grade: B+		
Conservation Target	Grade	Conservation Target Notes
Nearshore	B	Nearly 23% of the nearshore waters in this regional unit are corridors for movement of Lake Sturgeon.
Embayments and Inshore	B	Batchawana Bay and Goulais Bay used to support significant Walleye populations, and both are important areas for Lake Sturgeon.
Islands	A	Ile Parisienne and the islands of Sandy Islands Provincial Park offer important habitat areas for Lake Trout and Lake Whitefish.
Coastal Wetlands	B	Coastal wetlands account for approximately 7.5% of the Goulais coastal area; Goulais River wetland complex provides habitat for a wide diversity of fish and wildlife species, including several threatened species.
Coastal Terrestrial Habitats	A	Nearly 94% of the coastal zone is in natural cover. The southeast coast of Lake Superior is geologically diverse, ranging from the scenic, rugged, windswept topography typical of the Canadian Shield to lower lying agricultural and wetland zones.
Tributaries & Watershed	B	Almost 97% of the land cover is forest, of which almost a third is privately owned. Several fish species use the Goulais and Batchawana rivers for spawning.

¹ Report Card grades are intended to denote relative (within Lake Superior basin) condition/health and stresses for each biodiversity target in the region based on available condition and stress indices. A more detailed explanation and expert comments on grades are available in the Lake Superior Biodiversity Conservation Assessment – Volume 2: Regional Unit Summaries.

² Data provided by the Ontario Ministry of Natural Resources and Forestry. Copyright Queen’s Printer for Ontario, 2012.

³For a full list please see the corresponding [regional unit chapter](#) in Vol. 2 of the Lake Superior Biodiversity Conservation Assessment.

Overview of Conservation Opportunities

A decline in Lake Sturgeon, Lake Trout and Walleye populations is tied to a combination of stressors including fish habitat degradation and fishing pressure. Future studies, stocking and rehabilitation efforts, and sustainable fisheries management will help conserve the aquatic biodiversity of this region. Recent surveys have found that a population of Muskellunge exists in Goulais Bay. As a top-level predator, Muskellunge provide an indication of nearshore/coastal wetland health. Tiger Muskellunge (a hybrid between Northern Pike and Muskellunge) have also been found in Goulais Bay and River. The Goulais region is the only region in the Ontario waters of Lake Superior where Tiger Muskellunge are known to exist (K. Rogers, pers. comm.). Ten percent of the region's

coastline is in a protected area; new and existing coastal developments can help conserve biodiversity by highlighting the importance of habitats and species in the planning process. Significant waterfowl habitat areas are located on the Crown land at the eastern end of Batchawana Island and around the mouth of the Goulais River. The land use intent of these waterfowl areas is one of protection, and as such, will not be developed. On private land, development that will have a negative impact on waterfowl populations should be discouraged.



Conservation Actions

The Lake Superior community has a strong and ongoing history of taking action to restore and protect the lake’s extraordinary biodiversity. Actions are already occurring at all scales – from national, state, provincial, tribal, First Nations, Métis, and municipal programs, to lakewide initiatives and local projects by communities, businesses, and households. Some important habitats currently have a conservation designation with a corresponding management strategy, and active supervision of these areas is essential to sustaining biodiversity. The table below presents next steps for conserving and protecting biodiversity in this regional unit. Other existing plans relevant to conserving habitats and species in this region should continue to be implemented. A list of existing plans relevant to the next steps presented below is presented at the end of this document.

Regional Plan Next Steps

There is some variation among Regional Plans in how future actions from existing plans were incorporated into this document, based on advice from the implementers of those plans in the region. Similarly, implementation approaches vary greatly among regional units. The Lake Superior Partnership serves an important role in facilitating cooperation among agencies to support on-the-ground action. Priority implementation actions developed through the Partnership are identified in the Lake Superior LAMP, Lake Partnership committee work plans, and agency specific action plans.

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy ^j
Lakewide Strategy 1: Restore and protect a system of representative, high quality habitats.			
<i>Common Actions For All Region Plans</i>			
	Maintain or enhance areas where large blocks of land with natural cover exist or could be expanded.	Multiple	1.1
	Preserve sites that have high species diversity and/or critical habitat for fish or wildlife.		
Protect the habitats of biological significance with special consideration of important fish spawning sites in the tributaries.	Identify and protect Lake Sturgeon spawning habitat in the Batchawana, Goulais, and Chippewa Rivers.	Tributaries & Watersheds	1.1
	Identify and protect Brook Trout spawning habitat in the Goulais and Batchawana Rivers.	Tributaries & Watersheds	1.1

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy ⁱ
	Identify and protect terrestrial groundwater recharge areas that provide cold groundwater upwellings to Brook Trout spawning sites.	Tributaries & Watersheds	1.1
	Identify and protect Walleye spawning habitat in Goulais and Batchawana Rivers and Bays.	Tributaries & Watersheds	1.1
Protect the habitats of biological significance at the mouth of the Goulais River and around the eastern end of Batchawana Island.	Goulais River mouth wetland complex contains a number of unevaluated wetlands; surveys need to be completed in order to provide protection.	Tributaries & Watersheds	1.1
Protect the habitats of biological significance to Chimney Swifts nesting and roosting within the City of Sault Ste. Marie.	Continue to monitor the use of chimneys and other manmade structures by Chimney Swifts within this regional unit in order to identify habitat sites for protection.	Coastal Terrestrial Habitats	1.2
Lakewide Strategy 2: Manage plants and animals in a manner that ensures diverse, healthy, and self-sustaining populations.			
<i>Common Actions For All Region Plans</i> Review lists of regional species of conservation concern and identify gaps in monitoring, planning, and related conservation actions.		Multiple	2.7
Restore and protect self-sustaining Lake Sturgeon populations.	Conduct acoustic and telemetry studies to pattern Lake Sturgeon movements within and outside Goulais and Batchawana Bays.	Embayments and Inshore	2.3
	Continue mark-recapture studies to determine status of Lake Sturgeon population in Goulais and Batchawana Bays.	Embayments and Inshore	2.3
Achieve and maintain genetically diverse self-sustaining populations of Lake Trout that are similar to those found in the lake prior to 1940.	Conduct annual surveys to determine Lake Trout population status and trends.	Nearshore	2.3
	Ensure commercial Lake Trout harvest levels in the region are sustainable and supportive for the long term.	Nearshore	2.4
	Consider stocking of Lake Trout with native brood stock when sustainable commercial harvest/management is confirmed.	Nearshore	2.2
Restore and protect self-sustaining Lake Whitefish populations at or above abundances	Ensure commercial Lake Whitefish harvest levels in the region are sustainable and supportive for the long term.	Nearshore	2.4

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy ⁱ
observed in 1990-99.	Conduct annual surveys to determine Lake Whitefish population status and trends.	Nearshore	2.3
Restore and protect self-sustaining Walleye populations in their historic range.	Determine population status of Walleye in Batchawana and Goulais Bays and take appropriate management action to protect and enhance Walleye numbers.	Embayments and Inshore	2.3
Restore and protect self-sustaining Muskellunge populations.	Initiate surveys to evaluate the overall health and structure of Muskellunge populations in Goulais Bay and River.	Embayments and Inshore	2.9
	Collect age and growth data to determine if minimum size limits beyond provincial standards for the recreational fishery (i.e. >36" (91.4 cm)) are required to enhance the population size. Size limit regulations larger than the provincial standard must conform to one of the five benchmark values (40, 44, 48, and 54 inches) and be supported by the appropriate biological information.	Embayments and Inshore	2.4
Lakewide Strategy 3: Reduce the impact of existing aquatic invasive species and prevent the introduction of new ones.			
<i>Common Actions For All Region Plans</i> Control high priority infestations of aquatic invasive species, including continued control of Sea Lamprey.		Multiple	3.2
Prevent the introduction and spread of aquatic invasive species.	Continue annual AIS early detection assessments and develop rapid response protocols to deal with new invasives.	Multiple	3.1
	Develop and implement education program for public, local tourist operators and commercial fishermen, on how to prevent the introduction and spread of AIS.	Multiple	3.11
Lakewide Strategy 4: Adapt to climate change.			
<i>Common Actions For All Region Plans</i> Incorporate climate change model projections and adaptive management measures into natural resource management plans.		Multiple	4.1

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy ⁱ
Lakewide Strategy 5: Reduce the negative impacts of dams and barriers by increasing connectivity and natural hydrology between the lake and tributaries.			
<p><i>Common Actions For All Region Plans</i></p> <p>Address barriers to fish passage created by dams, hydroelectric generation, or misplaced or wrong sized culverts.</p> <p>Maintain flows and water levels on managed streams, rivers, and lakes that emulate natural conditions (i.e., magnitude, duration, timing, and pattern).</p>		Tributaries and Watersheds	5.2
Lakewide Strategy 6: Address other existing and emerging threats that may impact important habitat or native plant and animal communities.			

Regional Plan Development

Regional Plans are informed by a technical assessment, including maps of: 1. Coastal and Watershed Features; 2. Condition, and; 3. Important Habitat Sites. This information is available at: www.natureconservancy.ca/superiorbca.

The public and stakeholders who are connected to these areas provided input to the Next Steps in each Regional Plan. Oversight was provided by a Steering Committee from the Lake Superior Partnership. All input was considered and incorporated whenever possible and when relevant to lakewide biodiversity conservation targets and threats. To contribute an update to this Regional Plan, please contact: greatlakes-grandslacs@ec.gc.ca.

Existing Plans

Other existing plans relevant to conserving habitats and species in this region should continue to be implemented, including but not limited to:

- Provincial Parks and Conservation Reserve Policy direction for the protection, development and management of provincial parks, conservation reserves and their resources
- Great Lakes Fishery Commission - Lake Sturgeon, Walleye and Brook Trout Rehabilitation Plans and Lake Trout Restoration Plan for Lake Superior
- Great Lakes Fishery Commission - Fish-community objectives for Lake Superior

- Ontario's Provincial Fish Strategy: Fish for the Future
- Lake Superior Aquatic Invasive Species Complete Prevention Plan
- Ontario Invasive Species Strategic Plan, 2012
- Regulatory Guidelines for Managing the Muskellunge Sport Fishery in Ontario, 2003

ⁱ To access the full Biodiversity Conservation Strategy, other Regional Plans and supporting technical information and maps, please visit the project website: www.natureconservancy.ca/superiorbca