

Michipicoten-Magpie and Agawa 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.

2. Michipicoten-Magpie and Agawa



The Michipicoten-Magpie and Agawa regional unit contains numerous rivers that provide habitat for warm and cold water fish species. The Michipicoten River was historically a spawning tributary for Lake Sturgeon. A number of tributaries, including the Montreal and Dog Rivers are host to a unique stock of river spawning Lake Trout. The nearshore waters contain important habitat for Lake Trout and Lake Whitefish. Michipicoten Bay is regarded as important habitat for Lake

Sturgeon. At least 44 rare species and communities of conservation concern have been documented in this regional unit, including Peregrine Falcon and Bald Eagle^{1,2}. More than 88% of the regional land mass is forested, and 98% of the coastal zone is in natural cover. Lake Superior Provincial Park and other parks and protected areas cover 23% of the regional landmass and 62% of the coast. There are several known sites from Ojibwa and pre-Ojibwa times within Lake Superior Provincial Park, on or near the shoreline. The Pukaskawa pits, depressions dug into cobble beaches which may have been used as 'vision pits' or shelters, are believed to be more than 2000 years old. Ancient rock paintings, or pictographs, can be seen in the park at Agawa Rock and also in areas north of Lake Superior.

Report Card³, Overall Grade: A

Conservation Target	Grade	Conservation Target Notes
Nearshore	B	The rehabilitation of lean Lake Trout in nearshore waters has not progressed to the same extent as the remainder of the lake because of high exploitation rates and unregulated fisheries.
Embayments and Inshore	B	Portions of the South Michipicoten River – Superior Shoreline Conservation Reserve are subject to mining claims and leases.
Islands	A	Many islands in this regional unit provide excellent habitat for Great Blue Heron and Herring Gulls.
Coastal Wetlands	A-	Less than one percent of the coastal area is made up of wetlands.
Coastal Terrestrial Habitats	A+	Over 97 percent of the coastal zone is in natural cover, largely characterized by rocky shores and cliffs.
Tributaries & Watershed	A	This area contains a number of rivers that are host to both warm and cold water species.

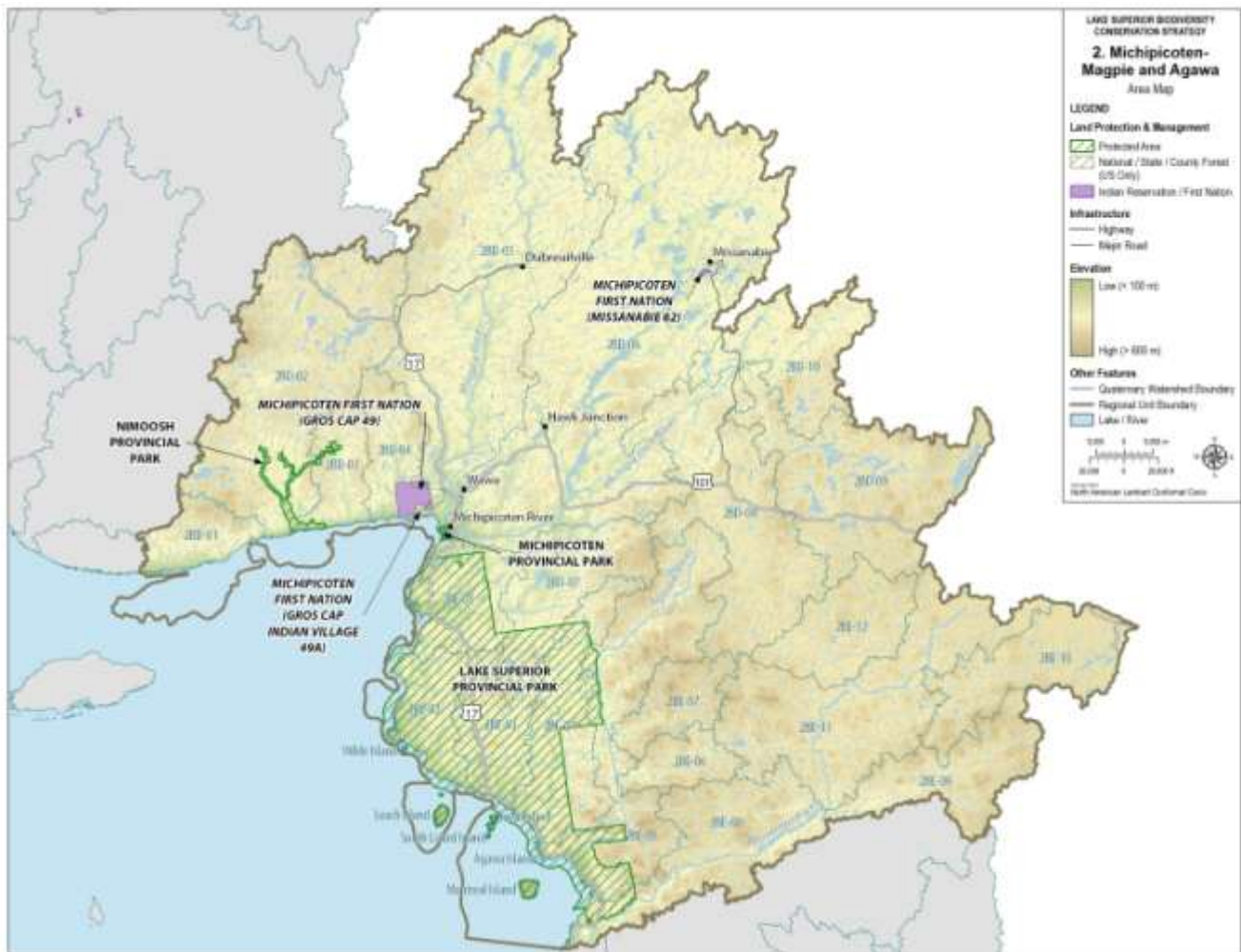
¹ Data provided by the Ontario Ministry of Natural Resources and Forestry. Copyright Queen's Printer for Ontario, 2012.

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

³ 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 conditions 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.

Overview of Conservation Opportunities

The Michipicoten, Magpie, and Montreal River systems provide spawning habitat for many native species. Species such as Lake Sturgeon would benefit from enhanced spawning habitat if improvements to water management agreements were made in these river systems. Hydro power generation benefits society, and losses to biodiversity in riverine habitats can be mitigated when stable and critical flows are identified and implemented through water management plans. The shoreline and nearshore conditions that exist between Michipicoten Harbour and Michipicoten Island are in excellent condition; to maintain the current conditions, future development proposals should be carefully considered. Monitoring and management of fish harvests by commercial fishermen along the eastern shoreline is recommended. The nearshore environment in Michipicoten Harbour and riverine habitat in the Michipicoten, Magpie, and Montreal River systems offer several restoration opportunities, which may best be pursued following the development of management agreements.



Conservation Actions

The Lake Superior community has a strong an ongoing history of taking action to restore and protect the lake’s extraordinary biodiversity. Actions are 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 ⁱ
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. Preserve sites that have high species diversity and/or critical habitat for fish or wildlife.		Multiple	1.1
Protect areas of natural and cultural significance at the mouth of the Michipicoten River.	Protect natural and cultural sites that fall outside the boundaries of Michipicoten Post Provincial Park.	Tributaries & Watersheds	1.6
Identify actions and groups to help protect pristine shoreline conditions and nearshore environment from Michipicoten River westward.	Seek protection of pristine shoreline, inshore, and nearshore areas that are not currently being protected.	Multiple	1.6

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy ⁱ
Promote education about the sensitivity and importance of Driftwood Beach and the coastal forest in Michipicoten Post Provincial Park.	Identify current education and outreach actions and assess effectiveness. Determine best practices to promote sustainable use of Driftwood Beach and Sandy Cove.	Coastal Terrestrial Habitats	1.8
Restore the nearshore environment in Michipicoten Harbour.	Develop restoration plan to remove the decommissioned government loading docks and monitor sediment conditions.	Nearshore	1.1
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.	Continue assessments to better understand the population dynamics of Lake Sturgeon in the Michipicoten River.	Embayments and Inshore	2.3
	Identify and protect Lake Sturgeon spawning and juvenile habitat in the Michipicoten River.	Tributaries & Watersheds	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
Protect and restore self-sustaining Brook Trout populations and other cold water species.	Identify and protect Brook Trout spawning habitat in tributary streams within this regional unit.	Tributaries & Watersheds	2.3
	Identify and protect terrestrial groundwater recharge areas that provide cold groundwater upwellings to Brook Trout spawning sites.	Tributaries & Watersheds	2.3
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 Woodland Caribou populations.	Implement Woodland Caribou recovery actions from Michipicoten Harbour to Hattie Cove (Pukaskwa NP) by 2016.	Coastal Terrestrial Habitats	2.3
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	3.3
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
Lakewide Strategy 5: Reduce the negative impacts of dams and barriers by increasing connectivity and natural hydrology between the lake and tributaries.			
<i>Common Actions For All Region Plans</i> Address barriers to fish passage created by dams, hydroelectric generation, or misplaced or wrong sized culverts. Maintain flows and water levels on managed streams, rivers, and lakes that emulate natural conditions (i.e., magnitude, duration, timing, and pattern).		Tributaries and Watersheds	5.2

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy ⁱ
Maintain flows and water levels on the Michipicoten, Magpie, and Montreal Rivers that emulate natural conditions.	Develop water management plans that will ensure optimal flows and water levels are implemented to support spawning, nursery, and rearing habitats for fishes.	Tributaries and Watersheds	5.3
	Develop restoration plans for habitat in the Michipicoten, Magpie, and Montreal River systems, and implement once water management agreements address any outstanding issues (e.g. peaking hydroelectric facilities on the Michipicoten/Magpie River systems and spawning of native species such as Lake Sturgeon).	Tributaries and Watersheds	5.3
Lakewide Strategy 6: Address other existing and emerging threat that may impact important habitat or native plant and animal communities.			
Maintain the integrity of the South Michipicoten River - Superior Shoreline Conservation Reserve.	Determine likelihood that mining claims and leases will be surrendered and added to South Michipicoten River - Superior Shoreline Conservation Reserve.	Tributaries and Watersheds	6.1

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 a 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 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

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