

Pic and White 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 that are contributing to lakewide biodiversity goals. To contribute an update to this Regional Plan, please contact: greatlakes-grandslacs@ec.gc.ca

3. Pic and White



This region can serve as a baseline for high environmental integrity and conservation in the Great Lakes ecosystem. The region contains the largest stretch of undeveloped coastline on the Great Lakes. Seventy percent of the coast is protected by Pukaskwa National Park. The region contains important fish spawning habitat (e.g. Lake Sturgeon), coastal bird habitat (e.g. Peregrine Falcon),

sand dunes (e.g. Pitcher’s Thistle), and habitat for disjunct arctic plants. Woodland Caribou can also be found. At least 37 species and communities of conservation concern have been documented in this regional unit, including Northern Brook Lamprey and Bald Eagle^{2,3}. The region is culturally significant for many First Nation and Métis communities.

Report Card ¹ , Overall Grade: A		
Conservation Target	Grade	Conservation Target Notes
Nearshore	B	The north border is adjacent to the Peninsula Harbour Area of Concern, where remediation projects have recently been completed and monitoring of recovery is underway.
Embayments and Inshore	A	The mouth of the Pic River has been a First Nations centre for trade and settlement for thousands of years.
Islands	A	387 islands are scattered along the coast, providing excellent habitat for water birds.
Coastal Wetlands	A	Coastal wetlands are rare in this regional unit, but their excellent conditions make them hotspots for biodiversity.
Coastal Terrestrial Habitats	A+	96% is natural cover. There are very few sand beaches and dunes.
Tributaries & Watershed	A	Dominated by forests, with tributaries used by the threatened Lake Sturgeon and other species 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 included here were provided by the Ontario Ministry of Natural Resource and Forestry. Copyright Queen’s Printer for Ontario (2012).

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

Overview of Conservation Opportunities

The presence of Pukaskwa National Park, established in 1978, has safeguarded the excellent ecological condition of the region. Pukaskwa National Park offers unique opportunities for aquatic monitoring, research, and special conservation of important habitat areas, which will maintain conditions in the region and act as a scientific reference to areas outside the Park. The Pic River is a major spawning tributary; therefore, if a hydroelectric project for this river is developed it should be designed and constructed to mitigate and minimize harmful impacts to native fish and their habitat. The future of region’s coastal Woodland Caribou population is uncertain, and conservation action is necessary to preserve the presence of this species. Forestry and mining occurs in the region; corresponding impacts should be monitored for long-term effects and identified for enhanced

conservation opportunities. Rare sand dunes in some areas could be protected from unsustainable recreational uses, offering an opportunity for education and outreach about these sensitive and unique features.



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 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	Lakewide Strategy ⁱ
Lakewide Strategy 1: Restore and protect a system of representative, high quality habitats.			
<i>Common Actions For All Region Plans</i>			
Protect the habitats of biological significance with special consideration of environmentally sensitive sites.	Identify potential additional rare, unique, or especially vulnerable habitats that may require special conservation management.	Multiple	1.1
	Update and implement the plan for naturally-mimicking controlled fire burns in Pukaskwa National Park.	Multiple	1.1
	Protect the integrity of the Lake Superior coast from Hattie Cove to Michipicoten Harbour.	Coastal Terrestrial	1.1

Regional Objective		Next Step	Conservation Target	Lakewide Strategy ⁱ
Protect the habitats of biological significance with special consideration of fish spawning sites in the tributaries.	Identify and protect fish spawning habitats, such as locations near Kagiano Falls and Manitou Falls.		Tributaries & Watersheds	1.1
Increase people's awareness of, and challenges to, local habitats that are conserving Lake Superior's biodiversity, such as the sand beaches and dunes of Pic River and others sites.	Develop and promote a sustainable use plan for degraded sand beaches and dunes.		Multiple	1.8
Gain a greater understanding of coastal wetland conditions and trends.	Track conditions and trends in water quality, wetland species, marsh birds, invasive species, and other parameters in coastal wetlands, including Hattie Cove.		Coastal Wetlands	1.11
Gain a greater understanding of the ecological conditions and trends of Pukaskwa National Park.	Develop, operationalize, and report (in 2017) on indicators of the ecological integrity of Pukaskwa National Park.		Multiple	1.11
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
Achieve and maintain genetically diverse self-sustaining populations of Lake Trout that are similar to those found in the lake prior to 1940.	Identify any new potential Lake Trout restoration or protection actions from within the Pic and White Region.		Nearshore	2.4
	Conduct annual surveys to determine Lake Trout population status and trends.		Nearshore	2.3
Restore and protect self-sustaining Lake Sturgeon populations.	Identify and take the actions necessary to rehabilitate Lake Sturgeon in the White River.		Tributaries & Watersheds	2.4
	Identify and take the actions necessary to rehabilitate Lake Sturgeon in the Pic River.		Tributaries & Watersheds	2.4
Restore and protect self-sustaining Lake Whitefish populations at or above abundances observed in 1990-99.	Conduct annual surveys to determine Lake Whitefish population status and trends.		Nearshore	2.3
Restore and protect self-sustaining Caribou populations.	Recover Caribou populations residing from Hattie Cove to Michipicoten Harbour.		Coastal Terrestrial	2.4

Regional Objective		Next Step	Conservation Target	Lakewide Strategy ⁱ
	Determine if and what special protections can be applied to important Crown Lands outside of Pukaskwa National Park with regard to Woodland Caribou population rehabilitation.		Tributaries & Watersheds	2.10
Restore and protect self-sustaining water bird populations.	Determine why the populations of Herring Gull and Great Blue Heron are significantly declining in the Pic and White Region.		Multiple	2.10
Protect and restore self-sustaining Brook Trout populations and other cold water species.	Determine why Brook Trout populations are low to absent in tributaries adjacent to Lake Superior.		Tributaries & Watersheds	2.4
	Assess and rank potential restoration action, the locations where historically Brook Trout populations did occur.		Tributaries & Watersheds	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 and terrestrial species, including continued control of Sea Lamprey.			Multiple	3.2
Prevent the introduction and spread of aquatic invasive species in the Pic and White Region.	Determine the risk-level of different pathways of potential invasive species introduction.		Multiple	3.1
	Continue annual AIS early detection assessments and develop rapid response protocols to deal with new invasives.		Multiple	3.1
	Implement a citizen science invasive species monitoring program.		Multiple	3.12
	Communicate to users of Pukaskwa National Park the importance of the area's native biodiversity, and what they can do to prevent the introduction and spread of invasive species.		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	Lakewide Strategy ⁱ
Gain a greater understanding of habitat and species vulnerabilities and management options due to climate change.	Identify and determine management options for the projected range expansion of White-Tailed Deer into the White and Pic Region.		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>				
<ul style="list-style-type: none"> - 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
Maintain flows on the Pic River to emulate natural conditions (i.e., magnitude, duration, timing, and pattern).	Ensure hydropower and potential future development proposals on the Pic River have a sustainable plan that adequately protects native fish species and other aquatic life.		Tributaries and Watersheds	5.4
Lakewide Strategy 6: Address other existing and emerging threat that may impact important habitat or native plant and animal communities.				
Conduct sustainable forestry practices in lands adjacent of Pukaskwa National Park.	Identify, recognize, and promote a best example of sustainable and responsible forestry from within the Pic and White region.		Multiple	6.10
Conduct mining operations using best practices and with regard to important habitat and species in the Pic and White region.	Review and continue to implement and promote pertinent mining operation management plans and results within the Pic and White region (i.e. rehabilitation, water, and energy efficiency).		Tributaries & 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 for conserving habitat and species in this region should continue to be implemented, including but not limited to:

- Pukaskwa National Park Management Plan
- Great Lakes Fishery Commission - A Lake Sturgeon rehabilitation plan for Lake Superior; A Brook Trout rehabilitation plan for Lake Superior; A rehabilitation plan for Walleye populations and habitats in Lake Superior; 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