

14. Bad-Montreal

Bad - Montreal

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 which support and respond to local conservation efforts and contribute to lakewide biodiversity goals. To contribute an update to this Regional Plan, please contact superiorplans@glupo.net



The Bad-Montreal region extends along the shore east of Ashland, Wisconsin, to the mouth of the Montreal River, and encompasses the state boundary line between Wisconsin and Michigan. Most of the reservation of the Bad River Band of Lake Superior Tribe of Chippewa

Indians is located in this regional unit. The 25-mile Penokee-Gogebic Range is found in this area. The Penokee Range has extensive forests and unusual features, including high-gradient soft headwater streams and glades of open bedrock, and holds a substantial undeveloped ore deposit. Natural cover in the coastal zone of the Bad-Montreal regional unit is over 96%, primarily as forest, with some agricultural lands.

Over 45% of the coastal zone in this region is in coastal wetlands. Of particular interest is the Kakagon and Bad River Sloughs, a Ramsar Wetland of International Importance. This area is the largest freshwater estuary remaining on Lake Superior and is an important spawning region; it provides exceptional habitat for a variety of aquatic and wetland species and contains the largest wild rice bed on Lake Superior. At least 145 species and communities of conservation concern have been documented in this regional unit, including Piping Plover and Northern Flying Squirrel.^{1,2}

Piping Plover nest on Long Island/Chequamegon Point and the area contains rare plant and animal habitats. Trends in bird populations are noted as stable for woodland species, fairly good for wetland species

¹For the Michigan portions of this unit, data included here were provided by the Michigan Natural Features Inventory of Michigan State University, and were current as of August 1 2014. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area should not be construed to mean that no significant features are present.

For the Wisconsin portions of this unit, data included here were provided by the Bureau of Natural Heritage Conservation, Wisconsin Department of Natural Resources (DNR). Although the Natural Heritage Inventory database is the most up-to-date and comprehensive database on the occurrences of rare species and natural communities available, many areas of the state have not been inventoried. Similarly, the presence of one rare species at a location does not imply that all taxonomic groups have been surveyed for at that site. As such, the data should be interpreted with caution and an "absence of evidence is not evidence of absence" philosophy should be followed.

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

and declining for grassland species (Sauer 2014). Portions of the Chequamegon National Forest are located in this regional unit. The Rainbow Lake Wilderness Area contains old growth forest, representative plant communities, and rare plant and animal habitat. Although many waterbodies have been designated as Outstanding Resource Waters or Exceptional Resource Waters, others in the watershed are impaired by mercury and PCB contamination.

The Bad-Montreal regional unit is prone to erosion and sedimentation issues. Accelerated runoff and non-point source pollution affecting both in channel and nearshore habitats are major threats to biodiversity. The region’s soils, land form and land use (in particular the conversion of native forests to agricultural and open lands at the beginning of the 20th century), result in rapid runoff and increased peak flows. This altered hydrology increases erosion and sedimentation with significant effects on streams by smothering spawning habitat and simplifying stream channels. Mineral exploration has occurred in the upper watershed; mining would increase the amount of open land and likely affect hydrology regimes in addition to other watershed conditions.

Report Card³		Overall Grade: B
<i>Conservation Target</i>	<i>Grade</i>	<i>Conservation Target Notes</i>
Nearshore	C	Habitat degradation from sedimentation is a concern for nearshore habitats in this unit, however not uniformly. Chequamegon Bay is of particular concern, while other nearshore areas provide quality habitat.
Embayments	C	This unit contains portions of Chequamegon Bay. With shallow depths, the bay is vulnerable to increasing temperatures associated with climate change. Coastal development has hardened shorelines in the bay.
Islands	A	Islands in this unit are in excellent condition.
Coastal Wetlands	B	Kakagon and Bad River Sloughs generally provide outstanding habitat for a wide range of species. Sedimentation and small pockets of invasive species are a concern.
Coastal Terrestrial	A+	96% of this unit’s coastal zone is in natural land cover; however, the establishment of terrestrial invasive species is a concern.
Tributaries & Watersheds	C	The combination of soils, landform and land use result in flashy stream systems and heavy erosion in streams throughout the unit. Potential barriers to fish passage at the over 1,500 road stream crossings may limit aquatic populations. Some headwater streams are in excellent condition.

³Report 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.

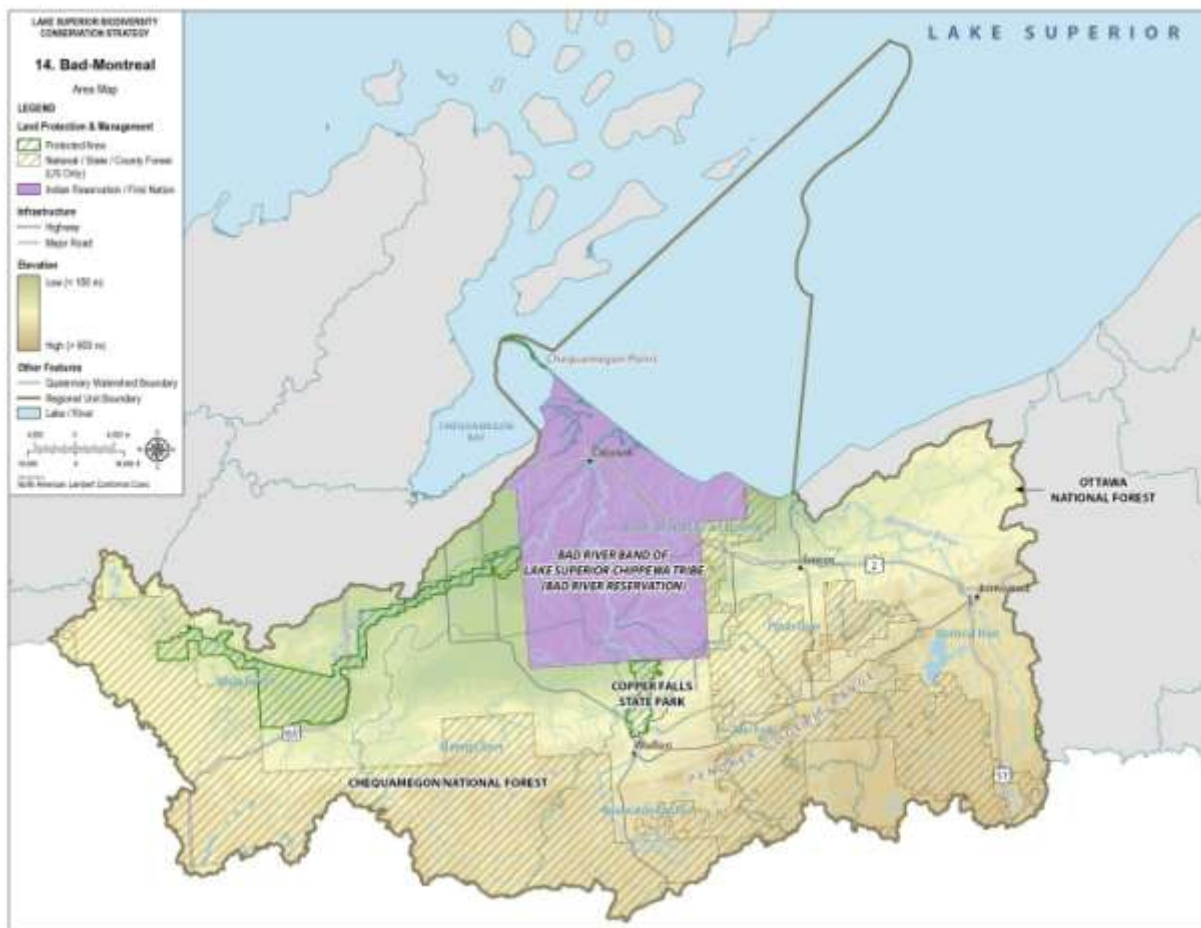
Conservation Opportunities

The Bad River is estimated to be one of the largest contributors of suspended sediment to Lake Superior during high flow events (Robertson 1996). Accelerated runoff and non-point source pollution affecting both in-channel and nearshore habitats are major threats to biodiversity by smothering substrates and simplifying stream channels.

Restoration opportunities exist on both private and public lands throughout this unit. In areas of private ownership (45% of the unit), any actions to conserve and promote biodiversity must invest and engage citizens about the importance of biodiversity and how their actions influence future conditions. In particular, educating people about how restoration and protection actions in important habitats relate to ecosystem services is a priority.

Invasive species are an ecological threat to habitats in the region, particularly the Kakagon and Bad River Sloughs. Preventing the introduction, establishment and spread of aquatic invasive species is an important protection action, including prevention of new introductions from ballast water.

Area Map: Bad-Montreal Regional Unit



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, to 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
Lakewide Strategy 1: Restore and protect a system of representative, high quality habitats.			
<i>Common Actions For All Regional Plans</i> Maintain or enhance areas where large blocks of land with natural cover exist or could be expanded, including natural travel corridors to connect these large blocks of land. Preserve sites that have high species diversity and/or critical habitat for fish or wildlife.		Multiple	1.1
Maintain or enhance large blocks of protected land with natural cover along the White River in the White River Wildlife Area, the White River Fishery Area and the Bibon Swamp State Natural Area.	Support consolidation of large blocks of public land through acquisition, strategic land exchanges or conservation easements.	Tributaries & Watersheds	1.2
Maintain or enhance large blocks of protected land with natural cover at the Kakagon/Bad River Slough complex for nursery and migration of fish species.	Support consolidation of large blocks of tribal land through acquisition, strategic land exchanges or conservation easements.	Tributaries & Watersheds	1.3
Maintain or enhance large blocks of protected land with natural cover in the Graveyard Creek watershed for nursery and migration of brook trout.	Support consolidation of large blocks of tribal and/or public land as appropriate through acquisition, strategic land exchanges or conservation easements.	Tributaries & Watersheds	1.3

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
Maintain or enhance large blocks of protected land with natural cover at the large wetland complexes in the Tyler Forks, Potato River and Upper Bad River watersheds of the Penokee Mountains.	Support consolidation of large blocks of public land through acquisition, strategic land exchanges or conservation easements.	Tributaries & Watersheds	1.2
Protect the habitats of biological significance with special consideration of environmentally-sensitive sites in the nearshore areas of the Bad River and Montreal River region.	Protect or restore sensitive habitat for Cisco from Marble Point to Oronto Bay.	Nearshore	1.1
	Protect the integrity of the Lake Superior coast from the Kakagon and Bad River Sloughs to Oronto Bay.	Coastal Terrestrial	1.1
Restore and enhance habitat of biological significance for Wild Rice.	Describe distribution of historic locations of Wild Rice, particularly in Sucker Creek and the upper mainstem of the Bad River.	Multiple	1.1
	Improve productivity of the Wild Rice habitats in the Kakagon/Bad River Sloughs.		
Protect the habitats of biological significance, with special consideration to promoting softened natural shorelines on inland lakes.	Focus restoration efforts on lakes that have completed management plans. Top priority lakes include Lake Owen and the Pike Lake Chain.	Tributaries & Watersheds	1.1
	Conduct shoreland inventories to identify restoration priorities when needed.		
	Restore in-lake woody habitat and multi layered, vegetated shoreline with native species.		1.1
Protect amphibian and reptile habitat in the Bad River watershed.	Identify high quality amphibian habitat, specifically permanent and semi-permanent wetlands and ephemeral ponds in forested areas without significant populations of fish.	Tributaries & Watersheds	1.9
	Identify turtle nesting/gestation sites and snake hibernacula.		1.9
Protect habitat of biological significance for Common Tern.	Maintain the structural integrity of Tern Island, a former wooden pier remnant that contains one of two colonies of this state-endangered species in Lake Superior.	Inshore & Embayments	1.1
	Ensure predator exclusion structures are functioning on Tern Island.		1.1

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
	Monitor Emerald Shiner and Spottail Shiner populations in Chequamegon Bay to evaluate prey base for terns.		1.1
Protect the habitats of biological significance for early successional species, in particular the Golden-winged Warbler.	Protect and restore deciduous forests and shrub communities near the Lake Superior shoreline.	Multiple	1.3
	Promote best management practices outlined in the Golden-Winged Warbler Working Group (2013).		
Promote landscape scale approaches to maintain or restore hydrology and water quality in catchments that contribute to peak flow increases (Wheeler et al. 2015).	Re-establish conifer forests.	Tributaries & Watersheds	1.1
	Disrupt flow paths in ditch networks associated with roads or agricultural lands, wetlands, dams, etc.		1.3
	Encourage cover crops and filter strips on agricultural lands.		1.3
	Establish a demonstration project at the appropriate spatial scale to evaluate slow the flow management practices under present day and future climate scenarios.		1.10
Promote landscape scale approaches to maintain or restore wildlife habitat, hydrology and water quality in wetlands.	In Wisconsin, target wetland restoration in areas identified by the “Potentially Restorable Wetlands” project.	Multiple	1.3
	In Wisconsin, target wetland restoration in areas identified by the “Functional Wetland Assessment” project.		
	Promote diverse wetland habitat by preventing development in wetlands.		
	Continue to monitor the biodiversity composition threats to estuaries and associated rare species along Wisconsin’s Lake Superior shoreline.	Coastal wetlands	
Promote landscape scale approaches to maintain or restore hydrology and water quality from non-point source pollution impacts.	Conduct outreach about effects on water quality from: Loading of salt/sand on road networks,	Tributaries & Watersheds	1.8
	Street cleaning programs, improved snow management and sediment traps in storm sewers in urban areas,		
	Agricultural best management practices such as vegetative buffers, cover cropping and manure management,		
	Acute/chronic sedimentation at road stream crossings.		

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
Gain a greater understanding of water quality conditions.	Conduct water quality monitoring in tributaries that may be affected by development, particularly in the Tyler Forks, Upper Bad River, and Potato River watersheds.	Multiple	1.11
	Conduct bacteria monitoring on the Marengo River to identify sources and target best management practices to prevent polluted runoff.	Tributaries & Watersheds	
	Continue and develop phosphorus/nutrient monitoring on the Bad River and its tributaries to estimate loading and identify priority watersheds for restoration.	Multiple	
Increase people's awareness of and challenges to conserving critical aspects of Lake Superior's biodiversity, with emphasis on describing the importance of cold water tributaries, wetlands and unique habitats.	Utilize existing GIS information and tools to encourage protection of biodiversity features and functions into local land use planning/zoning (e.g. conservation overlay).	Tributaries & Watersheds	1.8
Lakewide Strategy 2: Manage plants and animals in a manner that ensures diverse, healthy and self-sustaining populations.			
<i>Common Actions For All Regional 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 (Horns et al. 2003).	Conduct annual surveys to determine Lake Trout population status and trends.	Nearshore	2.4
	Continue Sea Lamprey population estimates and explore new techniques to trap for control in the Bad River.	Tributaries & Watersheds	3.2
	Suppress Sea Lamprey populations to levels that promote sustainable fisheries (Strategic Vision of the Great Lakes Fishery Commission 2011-2020).		3.2
	Identify any new potential Lake Trout restoration or protection actions in the region.	Multiple	2.3
Protect and restore self-sustaining Lake Sturgeon populations in each tributary they	Maintain current Lake Sturgeon distribution and access to in-stream spawning habitats in the White and Bad Rivers.	Tributaries & Watersheds	2.4

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
historically used to spawn (i.e. minimum 1500 adults).	Continue monitoring adult spawning population trends in the Bad/White Rivers.		2.3
Protect and restore self-sustaining Brook Trout populations in as many of the original, native habitats as is practical, with emphasis in priority areas (Quinlan et al. 2015).	Conduct barrier removal projects that do not expand available spawning habitat for Sea Lamprey.	Tributaries & Watersheds	2.4
	Install in-channel structures that increase cover and channel complexity in areas outside of hydrologically degraded catchments (Wheeler et al. 2015).		2.3
	Conduct barrier removal projects that do not introduce non-native salmonids into areas currently without them.		2.3
	Establish forested riparian areas for stream shade and long term wood recruitment.		2.2
	Incorporate protective harvest regulations in some streams.		2.4
	Continue stocking Lake Superior strain Brook Trout.		2.4
Protect and restore Wood Turtles with priority in the Marengo River, Tyler Forks, and Potato River watersheds.	Identify and protect nesting areas utilized by Wood Turtles.	Tributaries & Watersheds	2.9
	Create and maintain Wood Turtle nest sites in open sandy areas away from roads and within 200 feet of over-wintering streams.		2.3
	Determine if nest predators are having a significant effect on Wood Turtle populations and explore nest caging or lethal control of predators in the vicinity of nest sites during nesting season.		
	Determine where Wood Turtles are most vulnerable at road-stream crossings and install turtle crossings signs or underpasses for safe passage.		2.4
Inventory and monitor the distribution of and trends in herptile populations.	Increase usage of the Michigan and Wisconsin Herp Atlas to document locations of sensitive herptofauna, particularly Mudpuppies, Ring-Necked Snakes, Mink Frogs, and Four-Toed Salamanders in the Bad River watershed.	Multiple	2.9
	Conduct pre- and post-assessment of Mudpuppy populations to determine viability and assess the effects of TFM (piscicide used to reduce Sea Lamprey populations).		

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
	Continue and expand volunteer-based call surveys for frogs and toads.		
	Explore the performance of automated frog call loggers.		
	Survey herptile populations utilizing multi gear approaches (Hecnar and Casper 2009).		
Protect and restore Piping Plover and their biologically significant habitats on Long Island and other beaches.	Band all Piping Plover chicks within 7-10 days of hatching.	Coastal Terrestrial	2.3
	Install predator exclosures over Piping Plover nests to deter mammalian predation.		2.3
	Protect nesting Piping Plover from public disturbance on Long Island and other nesting sites.		2.3
	Remove large wood that can serve as cover for Piping Plover predators.		2.3
Protect and restore native mussels and their biologically significant habitats.	Resurvey the mussel population in the Kakagon/Bad River Sloughs complex to examine trends in population dynamics.	Multiple	2.10
	Investigate the health of the Eastern or Atlantic <i>Elliptio (Elliptio complanata)</i> , a State Special Concern mussel.	Tributaries & Watersheds	2.9
	Inventory mussels in un-surveyed streams and rivers, including small headwater streams.		
	Identify the presence, distribution and available habitat of threatened, endangered, and native mussels.		
Restore the inshore fish community.	Conduct an assessment of the inshore fish community.	Embayments & Inshore	2.4
Restore and protect a self-sustaining assemblage of preyfish dominated by indigenous species at population levels capable of supporting desired populations of predators and a managed commercial fishery (Horns et al. 2003).	Create a management/recovery plan for select prey species, i.e. Shortjaw Cisco, Cisco and Bloater Chub.	Nearshore	2.3
Maintain self-sustaining populations of Lake Whitefish within the range of abundance	Conduct surveys to determine Lake Whitefish population status and trends.	Nearshore	2.4

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
observed during 1990-99 (Horns et al. 2003).	Protect nearshore areas used by adult Lake Whitefish for foraging and spawning.		2.3
	Protect embayments and the nearshore areas which provide habitat for developing larvae and juveniles.	Multiple	
	Restore where feasible documented river-spawning populations (Lawrie and Rahrer 1972).	Tributaries & Watersheds	
Lakewide Strategy 3: Reduce the impact of existing aquatic invasive species and prevent the introduction of new ones.			
<i>Common Actions For All Regional Plans</i> Control high priority infestations of aquatic species, including continued control of Sea Lamprey.		Multiple	3.2
Prevent the introduction and spread of aquatic invasive species: priority control projects.	Remove the invasive strain of phragmites from the wastewater treatment facilities at Red Cliff, Washburn and Bayfield to prevent spread into Kakagon/Bad River sloughs; conduct additional surveys to identify and treat satellite populations around those facilities.	Tributaries & Watersheds	3.2
	Control invasive cattails in Wild Rice beds and other important wetland habitats on the Bad River Reservation.		
	Control Purple Loosestrife in the Kakagon/Bad River Sloughs and Bad River watershed.		
	Control Eurasian Water Milfoil in the Pike Lake Chain.		
Prevent the introduction and spread of aquatic invasive species: priority early detection projects.	Develop and implement an early detection and rapid response program for invasive plant species in embayments and coastal areas.	Multiple	3.1
	Continue fisheries and benthos early detection monitoring in Chequamegon Bay.		
	Continue early detection monitoring programs in inland lakes.	Tributaries & Watersheds	3.12
	Continue and expand the citizen-based Riverine Early Detectors program in lotic habitats.		
Prevent the introduction and spread of aquatic invasive species: priority prevention/education projects.	Continue conducting ballast water inspections on at least 25% of all vessels, with emphasis on conducting inspections on vessels previously not inspected.	Multiple	3.8

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
	Develop a financially feasible and effective ballast water treatment system that utilizes multi-treatment approach to prevent and reduce transport of viable organisms in ballast water and ballast sediments.		
	Support partnerships between public and academic organizations to research ballast treatment systems.		
	Install a boat wash station at the Cary Mine convenience Store near the Gile Flowage.	Tributaries & Watersheds	3.9
	Inform the public about aquatic invasive species at boat landings and marinas.	Multiple	3.11
	Implement new cost share programs or continue voluntary programs to monitor for and aggressively eliminate invasive species, especially in beach, dune, barrens, and coastal fen communities.	Multiple	3.2
	Educate local tourist operators and commercial fishermen on how to prevent the introduction and spread of aquatic invasive species.		3.11
	Repair and maintain a boat wash station at Second Landing of Reykdahl Road near the city of Ashland.	Coastal	3.9
	Explore potential to install boat wash stations at tribal landings on the Bad River Reservation.		3.9
Lakewide Strategy 4: Adapt to climate change.			
<i>Common Actions For All Regional Plans</i> Incorporate climate change model projections and adaptive management measures into natural resource management plans.		Multiple	4.1
Develop a cold water resource protection plan that will identify and evaluate probable climate change impacts.	Utilize FishVis stream temperature models (Stewart et al. 2015) to prioritize watersheds with projected persistent cold water habitats.	Tributaries & Watersheds	4.11
	Identify and map groundwater recharge areas.		
	Identify and map groundwater discharge areas.		

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
	Identify groundwater/surface water interactions.		
	Identify the amount of groundwater withdrawal that will result in a reduction of groundwater contributions to streams.		
Gain a greater understanding of habitat and species climate change vulnerabilities and management options in the inshore and nearshore.	Develop fine scale modeling of current and wave action that allow us to predict and better understand potential effects of climate change on water quality.	Multiple	4.12
	Identify areas of the nearshore and coastal zone that are vulnerable to eutrophication.		4.13
	Utilize existing forest ecosystem climate change vulnerability report recommendations in project planning.	Tributaries & Watersheds	4.1
Gain a greater understanding of herptile habitat, species vulnerabilities and management options due to climate change.	Conduct a vulnerability assessment for the Mink Frog; Wood Frog; Pickerel Frog; Spotted, Red-backed and Blue-spotted Salamanders; Mudpuppies and Northern Ring-necked Snake.	Tributaries & Watersheds	4.13
	Identify and determine management options for projected range expansions/retractions of herptile species.		
Decrease the number and volume of combined sewer overflows and wastewater treatment facility overflows.	Evaluate the storm water capacity of wastewater treatment facilities with respect to potential increases in flood events associated with climate change.	Coastal Terrestrial	4.1
Mitigate the contribution of greenhouse gases to the environment.	Work with industry to evaluate and identify ways to reduce carbon footprint in everyday operations.	Tributaries & Watersheds	4.7
Implement adaptation actions to account for changes in variability and/or frequency in air and water temperatures, water levels, storm events, droughts, etc.	Replace inadequate road and stream crossings in vulnerable watersheds; ensure they can sustain at least a 100-year flow event.	Tributaries & Watersheds	4.2
	Identify and manage for travel corridors to allow for species shifts, with emphasis on connecting large blocks of natural habitat.	Multiple	
Implement adaptive plant and forestry management practices that respond to climate change to minimize possible disturbances that impact Lake Superior.	Enhance riparian forest diversity and resiliency, with emphasis on encouraging native spruce.	Tributaries & Watersheds	4.3

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
Develop and implement a long term climate change monitoring strategy.	Identify and monitor at priority stream gauge stations to track how discharge and temperature could be changing with respect to climate change.	Multiple	4.11
	Identify and monitor at priority watersheds to measure nutrient and sediment loading.		
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 Regional 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 & Watersheds	5.2 5.3
Maximize the extent of connected aquatic habitats and stream reaches to provide for self-sustaining native populations of aquatic organisms in the region.	Implement ongoing barrier removal program in the Bad River watershed to restore access to priority stream reaches, without expanding the range of exotic species.	Tributaries & Watersheds	5.2
	Inventory, assess and prioritize barrier-removal projects in the Montreal watershed, without expanding the range of exotic species.		5.2
	Estimate risk of failure for infrastructure in present and future climates and identify vulnerable subwatersheds.		5.1
	Restore passage to tributary streams with priority on projects that maximize the benefit/cost ratio.		5.2
	Conduct outreach to individuals, townships, counties and other partners to encourage investment in fish friendly culvert design.		5.1
Lakewide Strategy 6: Address other existing and emerging threats that may impact important habitat or native plant and animal communities.			
Conduct sustainable forestry practices throughout the regional unit.	Consider the variability and dynamic ecology of the landscape and forest types to restore more historically natural forest types.	Multiple	6.6
	Increase representation of conifers in riparian areas.	Multiple	6.6

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
	Promote a variety of age classes, species diversity, and habitat elements such as downed woody debris and snags.	Tributaries & Watersheds	6.1
Increase representation of coastal boreal forest, in particular cedar, hemlock, white and yellow birch, red and white pine.	Retain existing boreal species.	Tributaries & Watersheds	6.6
	Utilize sound forest management practices when managing non-boreal species.		
	Plant boreal species.		6.1
Evaluate land use development proposals with regard to water quality, important habitat and species needs.	Review land use development proposals for consistency with local and regional plans.	Tributaries & Watersheds	6.1
Prevent the spread of high priority terrestrial invasive species in the region: control projects.	Control glossy buckthorn in the upper White River, Sections 19 and 20, T46N R7W, Bayfield County.	Tributaries & Watersheds	6.8
	Control/eradicate garlic mustard in the Bad River floodplain at Copper Falls State Park and inventory or predict habitat likely to support Garlic Mustard upstream and downstream for control/eradication.		
	Control Glossy Buckthorn and invasive Honeysuckle along the Marengo River.		
Prevent the introduction and spread of terrestrial invasive species: priority prevention/education projects.	Develop native plant ordinances that could be utilized by local municipalities throughout the basin. The ordinance could require native plantings on city-sponsored landscaping projects.	Tributaries & Watersheds	6.8
	Develop incentives, draft landscaping plans and draft ordinances that encourage native plant landscaping on commercial and industrial projects.		

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 Michele Wheeler at michele.wheeler@wisconsin.gov.

Existing Plans

Other existing plans relevant to conserving habitats and species in this region include but are not limited to:

- Bad River Watershed Association Culvert Program Strategic Plan
- Bad River Watershed Association Marengo River Watershed Action Plan
- Bad River Tribe's Nonpoint Source Management Plan
- Bird Conservation Plan for the Boreal Hardwood Transition (Bird Conservation regional 12 – US Portion)
- Chequamegon Bay Area Partnership Strategic Plan
- Great Lakes Fishery Commission - A Lake Sturgeon rehabilitation plan for Lake Superior
- Great Lakes Fishery Commission - A Brook Trout rehabilitation plan for Lake Superior
- Great Lakes Fishery Commission - A Lake Trout restoration plan for Lake Superior
- Joint Venture Bird Plans
- Michigan Wildlife Action Plan
- Michigan Climate Action Plan
- Michigan Great Lakes Plan
- Michigan Forest Action Plan and State Forest Management Plans
- Michigan Aquatic Invasive Species State Management Plan
- Michigan DNR Fisheries Strategic Plan
- Michigan DNR Invasive Species Strategy
- Piping Plover Management Plan
- Wisconsin DNR Copper Falls State Park Master Plan
- Wisconsin DNR Lake Superior Action Plan
- Wisconsin DNR Lake Superior Estuary and Coastal Wetland Biotic Inventory Plan
- Wisconsin DNR Statewide Strategic Plan for Invasive Species
- Wisconsin DNR White River Property Group (Ashland and Bayfield Counties) Master Plan
- Wisconsin DNR Wildlife Action Plan
- Wisconsin Initiative on Climate Change Impacts
- Wisconsin Lake Superior Basin Brook Trout Plan

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