

## Black-Presque Isle and Ontonagon Regional Plan

This is one of twenty Regional Plans prepared to further guide and 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](http://www.natureconservancy.ca/superiorbca)).

Regional Plans are intended to be adaptive documents which support and respond to local conservation efforts that are contributing to lakewide biodiversity goals. To contribute an update to this Regional Plan, please contact [superiorplans@glnpo.net](mailto:superiorplans@glnpo.net).

## 15. Black-Presque Isle and Ontonagon

The Black-Presque Isle and Ontonagon regional unit is located along the southern shore of Lake Superior and extends from the Montreal River in the west to the community of Ontonagon in the east. More than 92% of the Black-Presque Isle and Ontonagon regional unit landmass is forested, and very little of the regional unit is in agriculture or developed (both account for less than 1%). Coastal wetlands account for over 25% of the coastal zone in the regional unit. Sand beaches are found along 25% of the coastline. Portions of the Ontonagon River are designated as Outstanding State Resource Waters, and 170 miles of the river and tributaries are designated as recreational, wild, or scenic through the National Wild and Scenic Rivers System. Seventy-two miles of the Presque Isle River and its tributaries, as well as the Black River, are designated as recreational or scenic through the National Wild and Scenic Rivers System.



The Porcupine Mountains, Porcupine Mountains State Park, and Ottawa National Forest are all located in the region. The Trap Hills extend from Victoria and Rockland in the east to the Porcupine Mountains in the west. The Trap Hills region is a biologically diverse area of high rock outcrops, sweeping vistas, old-growth forests, wetlands, rivers, archaeological sites, and hiking trails, including the North Country National Scenic Trail. At least 109 species and communities of conservation concern have been documented in this regional unit, including Lake Sturgeon, Cisco, and Kiyi.<sup>1,2</sup> Flows of the Ontonagon River and tributaries are influenced by the Bond Falls

<sup>1</sup>For 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 shall 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 NHI 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.

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

Hydroelectric Project. The area around Long Lake includes rare plant and animal habitat. Undisturbed pre-settlement vegetation, old growth forest, pristine lakes, and diverse rare plant and animal habitat are found throughout the Sylvania Wilderness Area.

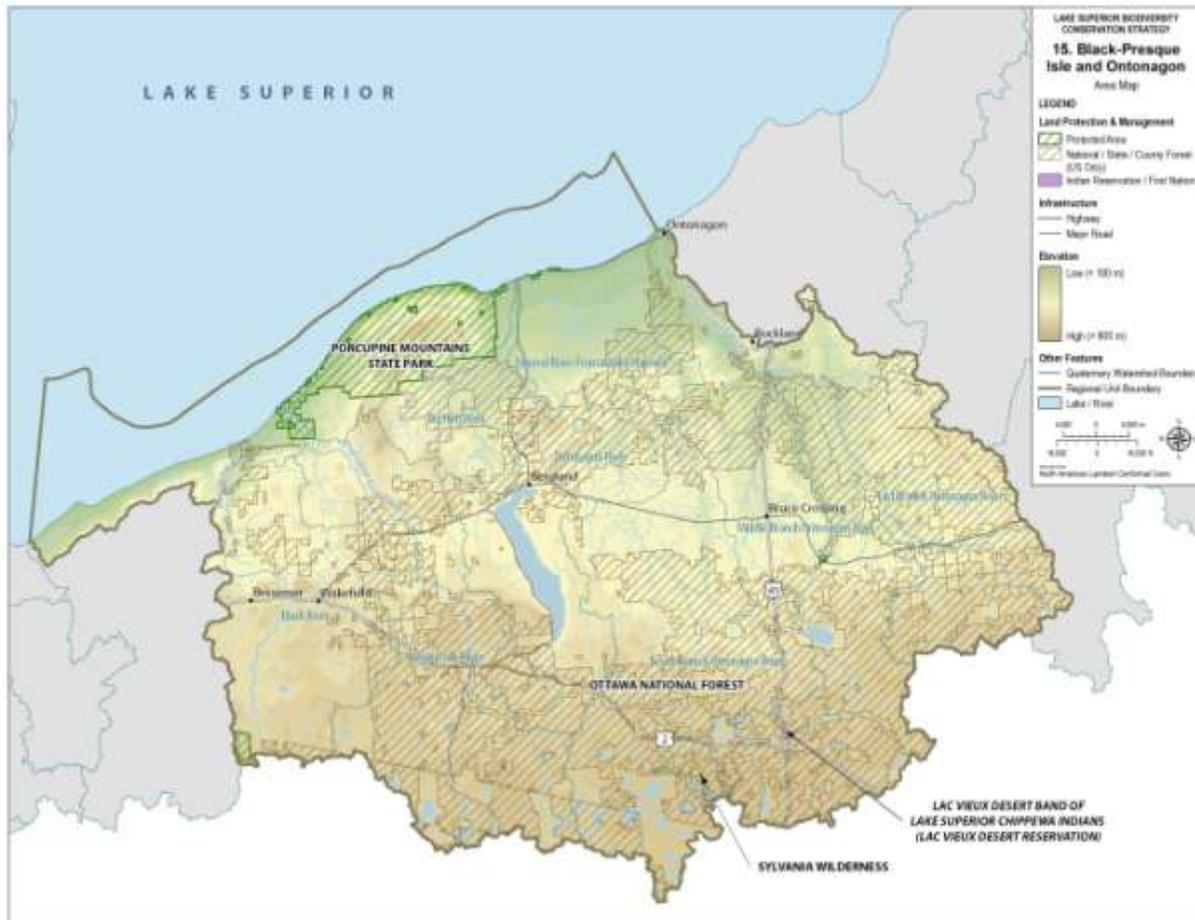
Report Card <sup>3</sup>		Overall Grade: B
Conservation Target	Grade	Conservation Target Notes
Nearshore	C	Important habitat areas for Lake Trout. Region is adversely affected by elevated nutrient inputs, warming water temperatures, and sediment inputs.
Embayments & Inshore	C	Some bays and nearshore areas are adversely affected by nutrient and sediment inputs.
Islands	N/A	There are no islands in this region.
Coastal Wetlands	B	Wetlands at the mouth of the Ontonagon River have been filled because of development. Some tributaries are affected by legacy mining.
Coastal Terrestrial	A-	Large protected coastal areas in the Porcupine Mountains State Park, and over 98% of the zone is in natural cover.
Tributaries & Watersheds	B	Segments of the Black River, Presque Isle River, and Ontonagon River have all been designated as portions of the National Wild and Scenic Rivers System. There are important habitat sites for Brook Trout in this region. Dams and road/stream crossings adversely affect aquatic habitat connectivity. Spruce decline and Emerald Ash Borer threaten riparian habitat.

## Overview of Conservation Opportunities

Threats in this region include impaired waterbodies and fish consumption advisories, forest fragmentation, aquatic fragmentation, invasive species, and mining. Many portions of this region have had areas designated for the high quality of the waterbody, which need to be protected (e.g., Presque Isle River is a National Wild and Scenic River). A large portion of the region is in State and Federal ownership, providing public opportunity to influence land management activities. Many road/stream crossing improvement projects and dam removal projects have been identified. Riparian forest management/restoration activities could help protect cold water tributary habitat. Several groups are actively managing invasive species and preventing their spread.

<sup>3</sup>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.

## Area Map



## 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. 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
<b>Lakewide Strategy 1: Restore and protect a system of representative, high quality habitats.</b>			
<p><i>Common Actions For All Regional Plans</i></p> <p>Maintain or enhance areas where large blocks of land with natural cover exist or could be expanded.</p> <p>Preserve sites that have high species diversity and/or critical habitat for fish or wildlife.</p>		Multiple	1.1
Protect the habitats of biological significance with special consideration to environmentally-sensitive sites in the nearshore areas of the Black-Presque Isle and Ontonagon region.	Protect, manage, or restore sensitive habitat for Cisco from Union Bay to the Ontonagon River.	Nearshore	1.1
	Protect, manage, or restore sensitive habitat for Brook Trout off Omans Creek.		
	Protect, manage, or restore sensitive habitat for Lake Trout near Little Girls Point, from the Black River to Union Bay and west Ontonagon Reef.		
	Protect the integrity of the Lake Superior coast from the Montreal River to the Ontonagon River.	Coastal Terrestrial	1.1
Protect the habitats of biological significance with special consideration of important fish spawning sites in the tributaries.	Identify and protect important fish spawning habitats, such as locations near Rainbow Falls, Presque Isle Falls and Victoria Falls.	Tributaries & Watersheds	1.1
Restore habitats of biological significance for Lake Sturgeon.	Restore coastal wetlands, where feasible, near the mouth of the Ontonagon River.	Coastal Wetlands	1.1
Protect the sensitive habitats of the Trap Hills.	Inventory, monitor, and protect rare plants and Falcons and their habitat.	Tributaries & Watersheds	1.6

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
Protect the sensitive habitats of the Winger Moraine.	Protect and restore lakeshore and riparian habitats.	Tributaries & Watersheds	1.1
Protect the sensitive habitats of the Slate River Sloughs.	Aggressively manage the Purple Loosestrife at the south end of Lake Gogebic to protect the wetlands of the Slate River Slough.	Multiple	1.6
Protect the habitats of biological significance with special consideration given to tributaries supporting Redside Dace, Creek Heelsplitter, and Brook Trout.	Protect and restore habitats by planting/favoring long-lived conifer and adding large woody material to streams.	Tributaries & Watersheds	1.1
Protect the habitats of biological significance with special consideration given to Jack Pine habitats.	Support and manage the Baraga Plains habitat for the Kirtland’s Warbler, Northern Barrens Tiger Beetle, Chryxus Arctic Butterfly, Spruce Grouse, and Black-Backed Woodpecker. Use fire as a disturbance agent.	Multiple	1.2
Protect water quality in the tributaries of the Black-Presque Isle and Ontonagon Rivers.	Decommission unnecessary roads.	Tributaries & Watersheds	1.4
	Monitor water quality in tributaries and wetlands that may be affected by mining activities.		
	Inventory and repair eroding roads, trails, landings, and recreation sites near waterbodies.		
Restore diversity and structure in northern hardwood ecosystems.	Manage northern hardwood ecosystems to promote mid-tolerant tree species (Red Oak, Yellow Birch, Ash, and White Pine) and restore long-lived conifers.	Tributaries & Watersheds	1.1
	Maintain and promote large standing and down dead trees for cavity nesters and other wildlife and fish species.		1.3
Achieve and maintain young forest habitats.	Regenerate Aspen, Paper Birch, and Jack Pine where these stands are at risk of transitioning to later successional forest types.	Tributaries & Watersheds	1.3
Promote structural and species diversity in Red Pine plantations.	Create canopy gaps where there are seed sources for natural regeneration; continue thinning to facilitate natural successional pathways.	Tributaries & Watersheds	1.1

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
Increase people's awareness of, and challenges to, conserving critical aspects of Lake Superior's biodiversity, including cold water tributaries, barrens, and old growth habitats.	Support the outreach and education efforts of Camp Superior, Camp Nesbit, the Ottawa Visitor Center, and the Porcupine Mountain Visitor Center.	Tributaries & Watersheds	1.8
Restore wetland habitats that have been hydrologically altered by roads, railroads or trails.	Inventory, assess, and remove/restore roads, trails, or railroads from wetlands where the hydrology and wetland function have been impaired.	Tributaries & Watersheds	1.3
Promote habitat important to American Woodcock.	Maintain areas of small openings on moist soils adjacent to young forest habitat.	Tributaries & Watersheds	1.1
Manage openings to provide habitats of biological significance (e.g., Dwarf Bilberry and Northern Blue Butterfly) and promote existing pollinator habitat as well as restore/enhance areas for pollinators.	Inventory, assess, and restore natural openings to native plant species.	Tributaries & Watersheds	1.10
Protect and preserve critical dune habitat from erosion from Silver City to Ontonagon.	Inventory, assess, and develop management plans to address threats.	Coastal Terrestrial	1.1
<b>Lakewide Strategy 2: Manage plants and animals in a manner that ensures diverse, healthy, and self-sustaining populations.</b>			
<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
Restore the inshore fish community.	Conduct an assessment of the inshore fish community.	Embayments & Inshore	2.4
Promote Wild Rice beds in suitable habitats, emphasizing large patches.	Expand Wild Rice beds.	Tributaries & Watersheds	2.2
	Identify new potential habitat for establishing Wild Rice beds, including but not limited to Erickson, Mink, and Brush Lakes.		

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
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 the Black- Presque Isle, and Ontonagon region.	Nearshore	2.4
	Conduct annual survey(s) to determine Lake Trout population status and trends.		2.7
Restore and protect self-sustaining Lake Whitefish populations in as many of the original, native habitats as is practical, with emphasis in priority areas.	Conduct annual survey(s) to determine Lake Whitefish population status and trends.	Nearshore	2.7
Restore and protect self-sustaining Lake Sturgeon populations in each tributary where they historically used to spawn (i.e., minimum 1500 adults).	Support continuation of the stream-side sturgeon rearing facility on the West Branch of the Ontonagon River.	Tributaries & Watersheds	2.4
	Identify and take the actions necessary to rehabilitate Lake Sturgeon.		
Restore and protect self-sustaining Brook Trout populations within tributaries of the Black, Presque Isle and Ontonagon Rivers.	Determine the highest quality cold water habitats and prioritize projects to protect and connect habitats.	Tributaries & Watersheds	2.4
Protect sensitive reptiles and amphibians, particularly Mink Frogs, Smooth Green Snakes, Wood Turtles, Eastern Newts, and Ring-Necked Snakes.	Document the presence of sensitive herptofauna and prioritize protection for specific habitat types.	Tributaries & Watersheds	2.7
	Maintain large upland openings where sensitive snake populations exist.		
	Determine where turtles are most vulnerable at road-stream crossings and install protective devices.		
Protect self-sustaining Moose populations in the region.	Manage habitat to provide food sources and adequate cover for Moose in the face of a changing climate.	Tributaries & Watersheds	2.4
	Manage Deer densities at a level compatible with viable Moose populations.		
Increase people's awareness of, and challenges to, conserving Lake Superior's biodiversity, including the State Threatened Common Loon.	Develop signs to post at boat landings and education materials to inform water craft users of best practices to minimize disturbance.	Tributaries & Watersheds	2.4
	Support the local volunteer network of Loon Rangers and encourage new recruits.		

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
	Support and promote the elimination of the use of lead in tackle and ammunition.		
Protect and restore self-sustaining Walleye populations and critical habitat.	Continue biennial stocking of Walleye fingerlings per the Ontonagon River prescription (11/3/2010).	Tributaries & Watersheds	2.4
<b>Lakewide Strategy 3: Reduce the impact of existing aquatic invasive species and prevent the introduction of new ones.</b>			
<i>Common Actions For All Regional Plans</i> Control high priority infestations of aquatic invasive species, including continued control of Sea Lamprey.		Multiple	3.2
Prevent the spread of high priority aquatic invasive species in the region.	Support the region’s aquatic invasive species prevention groups, ISCCW, Gogebic Conservation District, Cisco Lake Association, and Lake Gogebic Improvement Association.	Tributaries & Watersheds	3.11
	Prevent the spread of aquatic invasive species from ballast water via outreach and education.	Nearshore	3.3
	Install boat wash stations at Lake Superior landings (Black River Harbor, Union Bay, Silver City, and Ontonagon) and other “super-spreader” lakes (Lake Gogebic).	Tributaries & Watersheds	3.3
	Support the use of boat wash stations at high use landings and events (e.g., fishing tournaments) at other inland lakes.		3.3
	Inventory non-invaded lakes and initiate rapid response protocols when aquatic invasive species are detected.		3.1
	Control high priority infestations (e.g., Eurasian Watermilfoil and Rusty Crayfish) in the Cisco Chain of Lakes-Bass, Crooked, Duck, Langford, and Pomeroy Lakes.		3.1

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
Lakewide Strategy 4: <b>Adapt to climate change.</b>			
<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
Conduct climate change vulnerability assessments for fisheries, herptofauna, priority habitats and species, and nearshore water quality.	Utilize existing forest ecosystem climate change vulnerability report recommendations in project planning.	Tributaries & Watersheds	4.1
Identify and evaluate probable climate change impacts on cold-water dependent aquatic species, especially Brook Trout and Mudpuppies.	Conduct intensive monitoring of high quality cold-water streams for climate change modeling and detection.	Tributaries & Watersheds	4.10
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
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	4.13
	Identify and monitor at priority watersheds to measure nutrient and sediment loading.		
Implement adaptive plant and forestry management practices that respond to climate change to minimize possible disturbances that impact Lake Superior.	Address spruce decline and enhance riparian forest diversity and resiliency.	Tributaries & Watersheds	4.3

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
<p>Lakewide Strategy 5: <b>Reduce the negative impacts of dams and barriers by increasing connectivity and natural hydrology between the lake and tributaries.</b></p>			
<p><i>Common Actions For All Regional 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).</p>		Tributaries & Watersheds	5.2
<p>Inventory, assess, and prioritize barrier removal projects to restore aquatic habitat connectivity and provide for self-sustaining native populations of aquatic organisms in the region.</p>	Map unmapped roads in the Black-Presque Isle and Ontonagon watersheds.	Tributaries & Watersheds	5.1
	Develop a map of subwatersheds to display watershed ratings of infrastructure vulnerability.		
	Inventory road/stream crossings in watersheds with a high and very high infrastructure vulnerability rating.		
	Estimate risk of failure for infrastructure in present and future climates.		
	Prioritize infrastructure replacement projects and replace those with the best cost/benefit ratio.		
<p>Lakewide Strategy 6: <b>Address other existing and emerging threat that may impact important habitat or native plant and animal communities.</b></p>			
<p>Promote best management practices and consideration of important habitat areas and species in the region during environmental assessment and regulatory processes for mining and related activities.</p>	Incorporate consideration of Lake Superior Biodiversity Conservations Strategy goals into mining related reviews within the region.	Tributaries & Watersheds	6.1
	Monitor important habitat and species within mining affected areas and acknowledge best management practices.		
<p>Prevent the spread of high priority terrestrial invasive species in the region.</p>	Support the region’s Cooperative Weed Management Area, Western Peninsula Invasives Coalition.	Tributaries & Watersheds	6.8

Regional Objective	Next Step	Conservation Target	Primary Lakewide Strategy
	Control high priority infestations (e.g., Garlic Mustard, Japanese Barberry, Bell's/Morrow's/Tartarian Honeysuckle, Purple Loosestrife, Common/Glossy buckthorn, and 12 new invaders).		
Manage forest structure and composition to provide for healthy, resilient forests.	Practice sustainable forestry using best management practices to protect soil and water resources.	Tributaries & Watersheds	6.6
	Monitor implementation and effectiveness of best management practices across land ownerships throughout the region.		
	Maintain tree vigor and diversity of species, age class, and patch size to promote resilient forests in the face of new threats (e.g., Emerald Ash Borer, Hemlock Woolly Adelgid, Oak Wilt).		

## 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](http://www.natureconservancy.ca/superiorbca) .

The public and stakeholders who are connected to these areas provided input to the Next Steps in each Regional Plan. 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 [superiorplans@glncpo.net](mailto:superiorplans@glncpo.net).

### Existing Plans

There is a strong ongoing history of action to restore and protect Lake Superior’s extraordinary biodiversity. Actions are already occurring at all scales, from national programs to individual efforts. Some important habitats currently have a conservation designation with a corresponding management strategy. Active supervision of these areas is essential to sustaining biodiversity. Other existing plans relevant to conserving habitats and species in this region should continue to be implemented, including but not limited to:

- A Basin-wide Fish Habitat Strategic Plan for the Great Lakes

- Forest Ecosystem Vulnerability Assessment and Synthesis for Northern Wisconsin and Western Upper Michigan
- Great Lakes Fishery Commission – Fish-community objectives for Lake Superior
- Great Lakes Fishery Commission – A Brook Trout rehabilitation plan for Lake Superior
- Great Lakes Fishery Commission – A Lake Sturgeon rehabilitation plan for Lake Superior
- Great Lakes Fishery Commission – A Lake Trout restoration plan for Lake Superior
- Great Lakes Fishery Commission – A Rehabilitation Plan for Walleye Populations and Habitats in Lake Superior
- Kirtland’s Warbler Recovery Plan
- Lake Superior Aquatic Invasive Species Complete Prevention Plan
- Lake Superior Climate Adaptation, Mitigation, and Implementation Plan
- Michigan Aquatic Invasive Species State Management Plan
- Michigan Climate Action Plan
- Michigan DNR Fisheries Division Strategic Plan
- Michigan DNR Invasive Species Strategy
- Michigan Forest Action Plan and State Forest Management Plans
- Michigan Great Lakes Plan
- Michigan Wildlife Action Plan
- National Fish, Wildlife, and Plants Climate Adaptation Strategy
- Ottawa National Forest Land and Resource Management Plan