

15. Black-Presque Isle and Ontonagon

HEALTHY WATERS REPORT CARD

OFFSHORE	NA	ISLANDS	NA
NEARSHORE	C	COASTAL WETLANDS	B
EMBAYMENTS & INSHORE	C	COASTAL TERRESTRIAL	A-
TRIBUTARIES & WATERSHEDS	B	OVERALL B	

Report card denotes general condition/health of each biodiversity target in the region based on condition/stress indices. See introduction to the regional summaries.



A Very Good	<i>Ecologically desirable status; requires little intervention for maintenance</i>
B Good	<i>Within acceptable range of variation; may require some intervention for maintenance.</i>
C Fair	<i>Outside of the range of acceptable variation and requires management. If unchecked, the biodiversity target may be vulnerable to serious degradation.</i>
D Poor	<i>Allowing the biodiversity target to remain in this condition for an extended period will make restoration or preventing extirpation practically impossible.</i>
Unknown	<i>Insufficient information.</i>



Maple Creek. Photo credit: William Taft/ Michigan Department of Environmental Quality.

Summary/ Description

The Black-Presque Isle and Ontonagon regional unit is located along the southern shore of Lake Superior, (HUC 04020101 and HUC 04020102) and extends from just west of the mouth of the Montreal River in the west, to the community of Ontonagon in the east. The regional unit is 6,150.48 km² in size, including the associated nearshore waters. The Porcupine Mountains, Porcupine Mountains State Park and the Ottawa National Forest are all located in the Black-Presque-Isle/ Ontonagon region. The majority of the land-base of this regional unit is in Michigan, however the southernmost portion of the land-base of the regional unit extends into Wisconsin. The Black-Presque Isle and Ontonagon regional unit is part of the territory ceded in the Treaty of 1842. The signatory tribes retain rights to hunt, fish, and gather within the regional unit (A. McCammon Soltis, pers. comm., January 5 2015). It is part of Subregion 0402 – Southern Lake Superior-Lake Superior. The Black-Presque Isle and Ontonagon regional unit combines two tertiary (HUC 8) watersheds, Black-Presque Isle and Ontonagon, and contains 8 quaternary (HUC 10) watersheds. The watersheds of this unit are dominated by forests. The coast is characterized by sand beaches, rocky shore and extensive coastal wetland in the east.

TABLE 15.1: Black-Presque Isle and Ontonagon BY THE NUMBERS

Land and Water Cover	Region (km²)	Region %	Lake Superior Total (km²)	Notes
Agriculture	37.03	0.54	1,441.07	
Developed	7.77	0.11	389.55	
Forest	5,730.13	82.97	107,747.13	
Associated Nearshore Waters	671.67	9.72	17,868.03	
Other	333.33	4.83	8,227.57	
Water (inland)	126.72	1.83	9,473.05	
Total Area	6,906.66	100	145,146.40	
Coastal Features	Region	Region %	% of Lake Superior Total for Coastal Feature	
Coastline (km)	96.27	NA	1.65	Based on SOLEC shoreline
Sand Beaches (km)	24.26	25.20	3.77*	*% of Lake Superior Total Sand Beaches
Coastal Wetlands (km ²)	51.99	25.37*	4.71**	*% of Regional Coastal Area ** % of Lake Superior Total Coastal Wetlands
Natural Cover in Coastal Zone	202.22	98.70*	3.27**	*% of Regional Coastal Area ** % of Lake Superior Total Natural Cover in Coastal Area
Number of Islands	0	NA	0	
Condition	Region	Region %	% of Lake Superior Total	
Population Density (persons/km ²)	2.26	NA		
Road Density (km/km ²)	0.48	NA		
Number of Dams and Barriers	2,639	NA	11.2	
Artificial Shoreline (km)	1.09	1.13	0.48	
Land Ownership & Protection	Region (km²)	Region %	Regional Area (km²)	
Private	3,069.23	49.23	6,234.99	Regional area based on landmass
Public/Crown	2,922.05	46.87	6,234.99	
Tribes/ First Nations	0.69	0.01	6,234.99	
Parks & Protected Areas (total)	243.02	3.90	6,234.99	
Parks & Protected Areas (coast)	69.81	34.07*	204.89**	*% of Regional Coastal Area **Regional Coastal Area (km ²)

Important Biodiversity Features

Nearshore and Inshore Waters

- The Black-Presque-Isle/Ontonagon region contains several sites noted to be Important Habitat for Lake Trout. This region also contains two Important Habitat Areas and one Important Habitat Site (Lake Superior Binational Program Habitat Committee 2006) (Figure 15.1, Table 15.3, Figure 15.3).

Coastal Zone and Islands

- This region contains extensive sand beaches, including large protected coastal areas in the Porcupine Mountains State Park.

Tributaries and Watersheds

- Historically 21 tributaries in Lake Superior had Lake Sturgeon spawning runs. The Ontonagon River is one of these historical spawning tributaries, and is located in the Black-Presque Isle and Ontonagon regional unit. The Ontonagon River population status is reintroduced and the population trajectory is unknown (Golder Associates Ltd. 2011).
- A Lake Sturgeon Rehabilitation Plan for Lake Superior (Auer 2003) identifies the Ontonagon River as one of the seventeen tributaries to Lake Superior in which there should be a focus on Lake Sturgeon rehabilitation. Habitat restoration is a priority in the Ontonagon River, due to the loss of all wetland habitats (Auer 2003).
- 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 (Interagency Wild & Scenic Rivers Council 2012)

Figure 15.1: Black-Presque Isle and Ontonagon - Coastal and Watershed Features

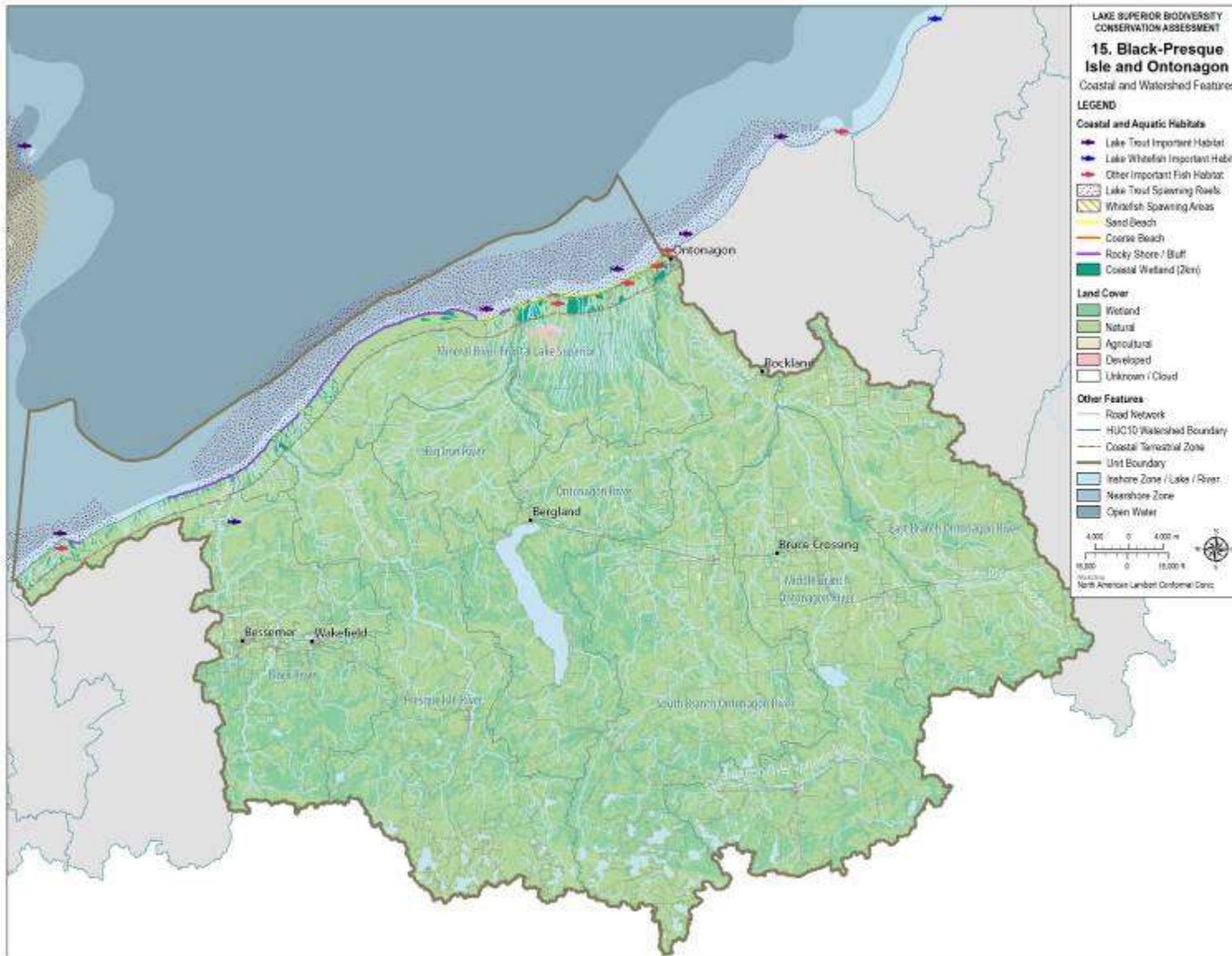


TABLE 15.2: Black-Presque Isle and Ontonagon CONDITION AND TRENDS

Target (Data Source)	Condition	Trends
Offshore ¹	NA	
Nearshore ¹	C (0.48)	
Embayments and Inshore ^{1,2}	C (0.54)	
Coastal Wetlands ^{2,3}	B (0.627)	
Islands ⁴	NA	No islands have been documented
Coastal Terrestrial ³	A- (0.800)	
Tributaries and Watersheds ²	B (0.60)	

A: Very Good	<i>Ecologically desirable status; requires little intervention for maintenance</i>
B: Good	<i>Within acceptable range of variation; may require some intervention for maintenance.</i>
C: Fair	<i>Outside of the range of acceptable variation and requires management. If unchecked, the biodiversity target may be vulnerable to serious degradation.</i>
D: Poor	<i>Allowing the biodiversity target to remain in this condition for an extended period will make restoration or preventing extirpation practically impossible.</i>
Unknown	<i>Insufficient information.</i>

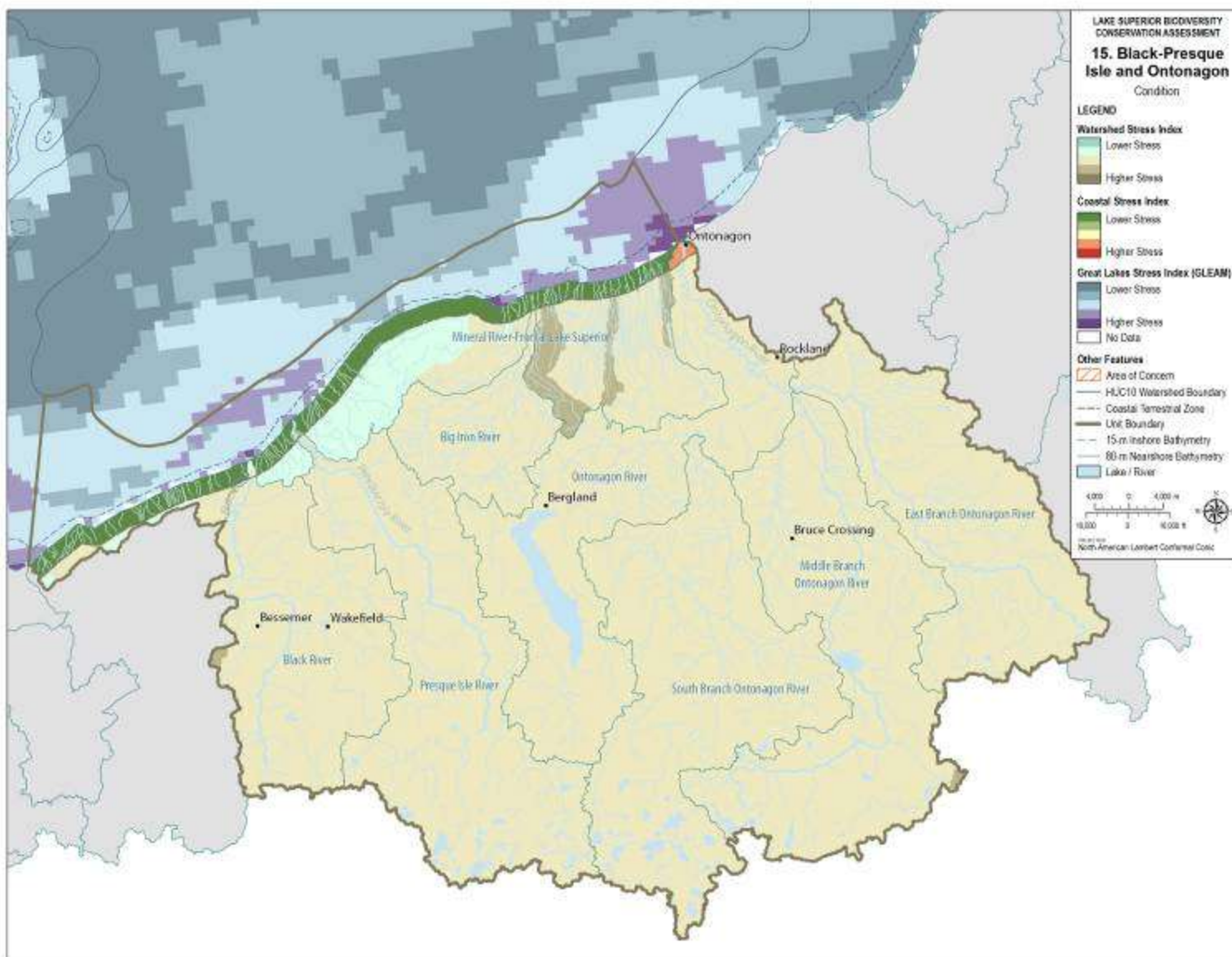
1: Great Lakes Cumulative Stress (GLEAM 2012, Allan et al. 2013)

2: Watershed Stress Index (GLEI 2013)

3: Coastal Condition Index (developed for this report)

4 : Island Condition Score (Henson et al. 2010)

Figure 15.2: Black-Presque Isle and Ontonagon - Condition



Important Issues & Threats

- A number of waterbodies within the Black-Presque Isle and Ontonagon regional unit are listed as impaired. Reasons for impairment include mercury and PCBs in the water column, copper, E. coli and mercury and PCBs in fish tissues. Affected uses include aquatic consumption (U.S. EPA 2013I, 2013am).
- Forest fragmentation through real estate development is an emerging concern in the Upper Peninsula Lake Superior watersheds. Large tracts of forest lands owned by corporate land holders are being sold to companies which run real estate investment trusts; smaller parcels are then developed (W. Taft, pers. comm., February 25, 2013).
- The Copperwood Project of Orvana Resources US Corp. (a subsidiary of Orvana Minerals Corp.) is a mineral lease covering 712 hectares in the Black-Presque Isle and Ontonagon regional unit. Proven and probable reserves of both copper and silver have been identified. A mining permit was received from the Michigan Department of Environmental Quality in April 2012, and additional permits related to wetlands, discharges and air-quality are under review by the Michigan DEQ. Production at the mine is expected to start in 2014 (Orvana Minerals Corp. 2013). The Copperwood Measured and Indicated Mineral Resource Area is located in close proximity to the Lake Superior shoreline.

Conservation In Action

Parks & Protected Areas

- Ottawa National Forest
- Agate Falls Scenic Site
- Bond Falls Scenic Site
- Lake Gogebic State Park
- Porcupine Mountains Wilderness State Park
- State Forest – Baraga Management Unit
- Twin Lakes State Park

Existing Programs & Projects

- Under the Michigan Water Quality Standards (WQS), portions of the Ontonagon River (Ontonagon County) are designated as Outstanding State Resource Waters (OSRW). Also under the Michigan WQS, all surface waters of the Lake Superior basin that are not identified as OSRWs are designated as Lake Superior basin - Outstanding International Resource Waters (LSB-OIRW). Under the above designations, additional anti-degradation controls are applied for new or increased pollutant loadings (Michigan DEQ 2013a).
- A 14.0 mile segment of the Black River, from the Ottawa National Forest boundary to Lake Superior, is designated as Scenic through the National Wild and Scenic Rivers System (Interagency Wild & Scenic Rivers Council 2012, USDA Forest Service 2007a).
- 72 miles of the Presque Isle River and its tributaries are designated as Recreational or Scenic through the National Wild and Scenic Rivers System. A total of 24.0 miles are designated as Scenic and 48.0 miles are designated as Recreational (Interagency Wild & Scenic Rivers Council 2012, USDA Forest Service 2007a).
- 170 miles of the Ontonagon River and its tributaries are designated as Recreational, Wild or Scenic through the National Wild and Scenic Rivers System. A total of 43.0 miles are designated as Wild, 35.0 miles are designated as Scenic, and 92.0 miles are designated as Recreational (Interagency Wild & Scenic Rivers Council 2012, USDA Forest Service 2007a).

- The Winegar Moraine and Iron Co. Northern Goshawk State Important Bird Area (IBA) is located in the Black-Presque Isle and Ontonagon regional unit (National Audubon Society 2013, 2012).
- The Western Peninsula Invasives Coalition is the Cooperative Weed Management Area serving all of Gogebic, Iron, and Ontonagon Counties, including the areas covered by the Ottawa National Forest. The mission of the Western Peninsula Invasives Coalition is the prevention, containment and management of non-native invasive species (M. Preisser, pers. comm., May 31 2013).
- 25 Citizen-based Groups are noted to do work in the Black-Presque Isle and Ontonagon regional unit (U.S. EPA 2013l, 2013m).

TABLE 15.3: Black-Presque Isle and Ontonagon IMPORTANT HABITAT SITES AND AREAS

<i>Code</i>	<i>Site/ Area</i>	<i>Important Habitat Site/Area Name</i>	<i>Key Features</i>
MI-005	Site	Long Lake	Rare plant and animal habitats, proposed wilderness
MI-042	Area	Porcupine Mountains	Mesic Northern Forest, rare plant and animal habitat
MI-044	Area	Sylvania Wilderness Area	Large area of undisturbed presettlement vegetation, old growth forest, pristine lakes, diverse habitat types, rare plant and animal habitat.

Figure 15.3: Black-Presque Isle and Ontonagon - Important Habitat Sites and Areas

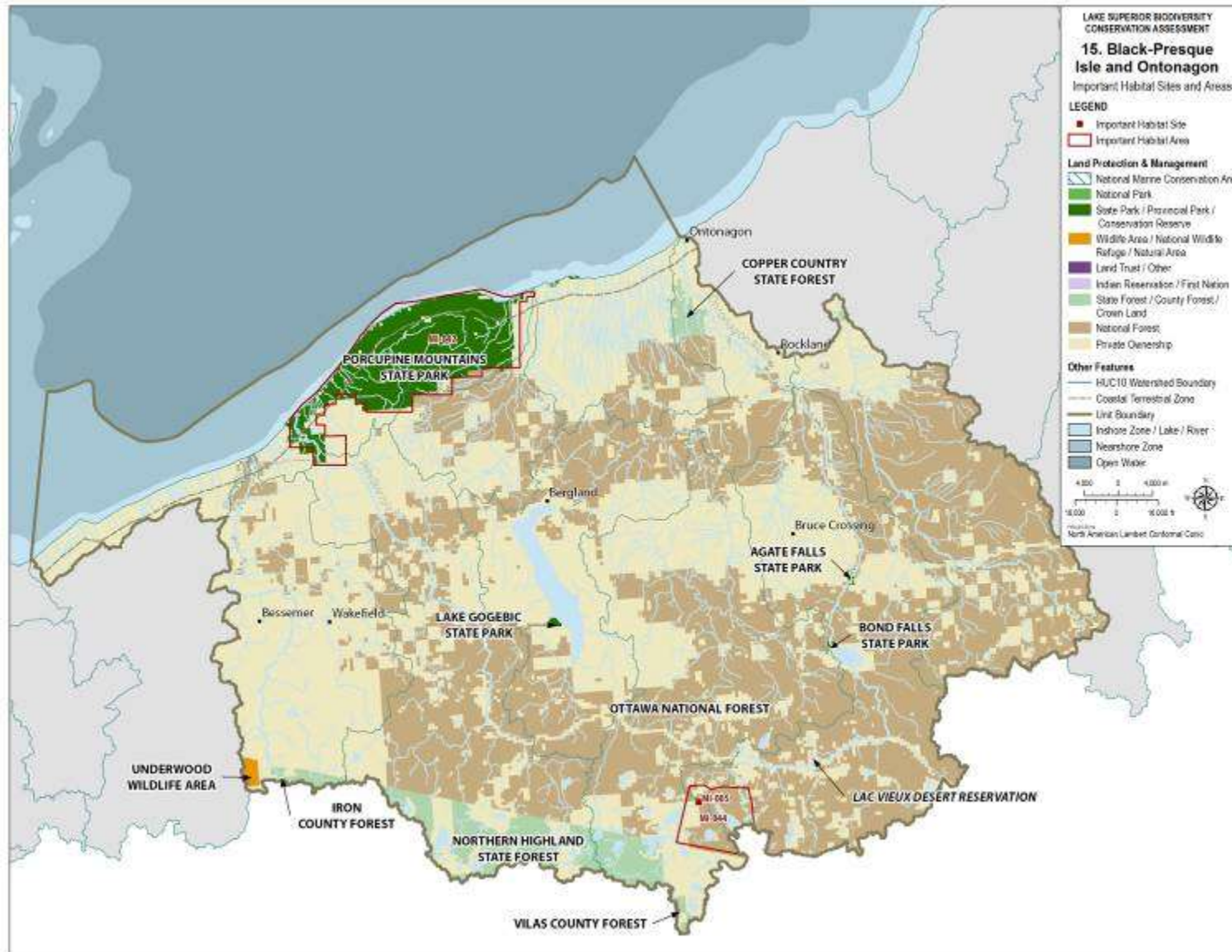


TABLE 15.4: Black-Presque Isle and Ontonagon LIST OF SPECIES AND COMMUNITIES OF CONSERVATION CONCERN

At least 109 species and communities of conservation concern have been documented in the regional unit. 91 of these have viability rankings which indicate the species or community is currently present, or was at the date of last sampling. The viability rankings of these species varies from A to E (A – Excellent predicted viability, B – Good predicted viability, C – Fair predicted viability, D – Probably not viable, E – Verified extant). 13 species and communities were once known to occur here, but have current conservation ranks of F (Failed to find) or H (Historical). A further 5 species and communities of conservation concern are known to occur in this regional unit, but are currently not ranked for viability.¹⁹

<i>Present Records (Viability Rankings of A to E)</i>	
Scientific Name	Common Name
<i>Accipiter gentilis</i>	Northern goshawk
<i>Agabus wasastjerna</i>	A Predaceous Diving Beetle
<i>Astragalus canadensis</i>	Canadian milk vetch
<i>Astragalus neglectus</i>	Cooper's milk vetch
Black spruce swamp	Black Spruce Swamp
Bog	
Boreal rich fen	Boreal Rich Fen
<i>Botrychium mormo</i>	Goblin moonwort
<i>Calamagrostis lacustris</i>	Northern reedgrass
<i>Callitriche hermaphrodita</i>	Autumnal water-starwort
<i>Carex assiniboinensis</i>	Assiniboia sedge
Clay Bluffs	
<i>Clematis occidentalis</i>	Purple clematis
<i>Clinostomus elongatus</i>	Redside dace
<i>Collinsia parviflora</i>	Small blue-eyed Mary
<i>Coregonus artedi</i>	Lake herring or Cisco
<i>Coregonus kiyi</i>	Kiyi
<i>Coregonus zenithicus</i>	Shortjaw cisco
<i>Cottus ricei</i>	Spoonhead sculpin
<i>Crataegus douglasii</i>	Douglas's hawthorn
<i>Cryptogramma stelleri</i>	Slender cliff brake
<i>Cygnus buccinator</i>	Trumpeter Swan
<i>Cypripedium arietinum</i>	Ram's head lady's-slipper
<i>Dentaria maxima</i>	Large toothwort
Dry-mesic Northern Forest	
<i>Dryopteris filix-mas</i>	Male fern

¹⁹ 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.

Lake Superior Biodiversity Conservation Assessment - Volume 2: Regional Unit Summaries

Dryopteris fragrans	Fragrant cliff woodfern
Emergent Marsh	
Emydoidea blandingii	Blanding's turtle
Falco peregrinus	Peregrine falcon
Galearis spectabilis	Showy orchis
Gavia immer	Common loon
Glyptemys insculpta	Wood turtle
Gomphus lineatifrons	Splendid clubtail
Gomphus quadricolor	Rapids clubtail
Granite Cliff	
Gratiola aurea	Hedge-hyssop
Haliaeetus leucocephalus	Bald eagle
Hardwood-Conifer Swamp	
Helianthus mollis	Downy sunflower
Helophorus latipenis	A Water Scavenger Beetle
Huperzia selago	Fir clubmoss
Lake--deep, soft, seepage	Lake--Deep, Soft, Seepage
Lake--shallow, soft, seepage	Lake--Shallow, Soft, Seepage
Lake--spring	Lake--Spring
Melica smithii	Smith's Melic Grass
Mesic Northern Forest	
Mimulus guttatus	Western monkey flower
Moehringia macrophylla	Big-leaf sandwort
Muskeg	Scrub Bog, Upper Midwest Type
Myriophyllum farwellii	Farwell's water milfoil
Northern Bald	Rich Glade, Upper Midwest Type
Northern dry-mesic forest	Northern Dry-mesic Forest
Northern mesic forest	Northern Mesic Forest
Northern Shrub Thicket	Wet Scrubland, Upper Midwest Type
Northern Wet Meadow	Wet Meadow, Upper Midwest Type
Northern wet-mesic forest	Northern Wet-mesic Forest
Open bog	Open Bog
Ophiogomphus anomalus	Extra-striped snaketail
Panax quinquefolius	Ginseng
Pandion haliaetus	Osprey
Perimyotis subflavus	Eastern pipistrelle
Petasites sagittatus	Sweet coltsfoot
Poor Conifer Swamp	
Poor fen	Poor Fen
Potamogeton vaseyi	Vasey's pondweed
Prosartes hookeri	Fairy bells
Pterospora andromedea	Pine-drops
Ranunculus rhomboideus	Prairie buttercup
Rich Conifer Swamp	
Sand and Gravel Beach	
Sandstone Bedrock Lakeshore	
Sandstone Cliff	
Sandstone Cobble Shore	
Scirpus torreyi	Torrey's bulrush
Silene nivea	Evening campion
Spring pond	Spring Pond
Stream--slow, soft, warm	Stream--Slow, Soft, Warm
Sturnella neglecta	Western meadowlark
Submergent Marsh	
Tympanuchus phasianellus	Sharp-tailed grouse
Vaccinium cespitosum	Dwarf bilberry

Lake Superior Biodiversity Conservation Assessment - Volume 2: Regional Unit Summaries

Vertigo bollesiana	Delicate vertigo
Vertigo cristata	Crested vertigo
Vertigo paradoxa	Mystery vertigo
Viola novae-angliae	New England violet
Volcanic Bedrock Glade	
Volcanic Bedrock Lakeshore	
Volcanic Cliff	
Volcanic Cobble Shore	
Zizia aptera	Prairie golden alexanders
Historical or Failed to Find Records	
Scientific Name	Common Name
Adlumia fungosa	Climbing fumitory
Boloria freija	Freija fritillary
Buteo lineatus	Red-shouldered hawk
Calypso bulbosa	Calypso or fairy-slipper
Great Blue Heron Rookery	Great Blue Heron Rookery
Littorella uniflora	American shore-grass
Lysimachia hybrida	Swamp candles
Notropis dorsalis	Bigmouth shiner
Nuphar pumila	Small yellow pond lily
Planogyra asteriscus	Eastern flat-whorl
Ranunculus cymbalaria	Seaside crowfoot
Ribes oxycanthoides	Northern gooseberry
Terrapene carolina carolina	Eastern box turtle
Unranked Records	
Scientific Name	Common Name
Anzia colpodes	Lichen
Ephemeral pond	Ephemeral Pond
Menegazzia terebrata	Lichen
Northern Hardwood Swamp	Flatwoods, Upper Midwest Type
Northern wet forest	Northern Wet Forest