ESTUARIES & COASTAL WETLANDS OF LAKE SUPERIOR

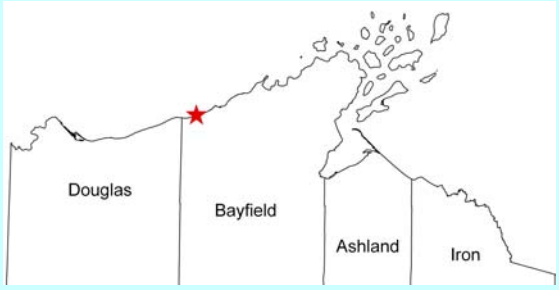
Iron River Mouth

Approximate Size: 30 acres*

Ownership: WDOT, Private

Year Last Surveyed by WDNR/NHI: 2012

GLCWC Classification: Barred Drowned River Mouth



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Site Description

Approximately 5 miles west of Port Wing, the widened span of Iron River where it enters Lake Superior has calm water with beds of submerged and emerged aquatic plants, as well as well-developed margins of Northern Sedge Meadow and Alder Thicket. A 40– to 50-yard-wide sand barrier only marginally impounds the river, with a narrow opening to the lake. A narrow beach continues in both directions along the lake, with a narrow dune community grading quickly to younger upland forest dominated by birch (*Betula*) and aspen (*Populus*). The riparian corridor just upstream from STH 13 is heavily developed with homes, power lines, and a large park; the remaining upland forests are young and fragmented.

The dune community is dominated by dune grass (*Ammophila breviligulata*), scouring rush (*Equisetum hyemale*), beach pea (*Lathyrus japonicus*), and brambles, with speckled alder (*Alnus incana*) and sandbar willow (*Salix exigua*) at the edges. The river margins harbor wetlands of emergent and submergent aquatics dominated by soft-stem bulrush (*Schoenoplectus tabernaemontani*) and the non-native invasive narrow-leaved cat-tail (*Typha angustifolia*), with beds of common water-milfoil (*Myriophyllum sibiricum*), coon's-tail (*Ceratophyllum demersum*), Richardson's pondweed (*Potamogeton richardsonii*), and Canadian waterweed (*Elodea canadensis*). These grade into Northern Sedge Meadow and Alder Thicket in many places, most prominently along the less-developed east bank. Dominant species here include tussock sedge (*Carex stricta*), Canada blue-joint (*Calamagrostis canadensis*), and field horsetail (*Equisetum arvense*), with tall meadow-rue (*Thalictrum dasycarpum*), cow parsnip (*Heracleum lanatum*), Canada goldenrod (*Solidago canadensis*), yellow touch-me-not (*Impatiens capensis*), and wild hops (*Humulus lupulus*) added to the mix where small alders create diffuse shade. A linear deposit of sediment extending from a bend in the river just below Highway 13 also supports emergent and submergent aquatics, including wool-grass (*Scirpus cyperinus*), common arrowhead (*Sagittaria latifolia*), rice-cut grass (*Leersia oryzoides*), soft-stem bulrush, and common bur-reed (*Sparganium eurycarpum*).

*Area includes creek mouth, lower creek up to 0.5 miles from mouth, associated wetlands, and immediately adjacent uplands.

Threats

The non-native invasive plants hemp-nettle (*Galeopsis tetrahit*) and queen-of-the-meadow (*Filipendula ulmaria*) are abundant in Alder Thicket areas. Crown vetch (*Coronilla varia*) and bird's-foot trefoil (*Lotus corniculatus*) are common on the sand barrier. The proximity of this site to Highway 13 may result in degradation of wetland and aquatic resources due to pollution (*e.g.*, runoff laden with sediment, road salt), increased water temperatures and thus lower dissolved oxygen levels (from heated water runoff in summer), and disruption of ecosystem and habitat continuity. Across the Lake Superior clay plain, water quality and wetland function are known to be adversely affected by open lands (*e.g.*, developed land, agriculture, young forest) and positively affected by older forests and conifers. Land use analysis of the watershed and associated water quality monitoring could facilitate better understanding of this site's aquatic and wetland resources.

Additional Comments

The lower Iron River is a Class II trout stream, supporting brook, brown and rainbow trout, burbot and lake sturgeon, and warm water species. About 1.5 miles upstream, Northern States Power operated the Orienta Dam and hydropower plant until 1985, when the dam washed out for the second time; the company is now working with the WDNR to abandon the operation. The present river channel does not follow its original path, thus the stream may erode a new channel through accumulated sediment (up to 4 feet deep) when the dam is removed.

Abbreviations and Helpful References

GLCWC - Great Lakes Coastal Wetland Classification.- http://glc.org/wetlands/pdf/wetlands-class_rev1.pdf

Lake Superior Binational Program - http://www.epa.gov/glnpo/lakesuperior/

WDNR Coastal Wetlands webpages - http://dnr.wi.gov, Keyword: "coastal wetlands"

WDNR/NHI - Wisconsin Department of Natural Resources, Natural Heritage Inventory Program. http://dnr.wi.gov , Keyword: "natural heritage"

"Managing Woodlands on Lake Superior's Red Clay Plain" - WDNR publication #PUB-FR-385 2007. http://dnr.wi.gov, Keyword: "bmp landowner guides"

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View of Iron River mouth and sand barrier from the west.

Suggested Citation

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