

ESTUARIES & COASTAL WETLANDS OF LAKE SUPERIOR

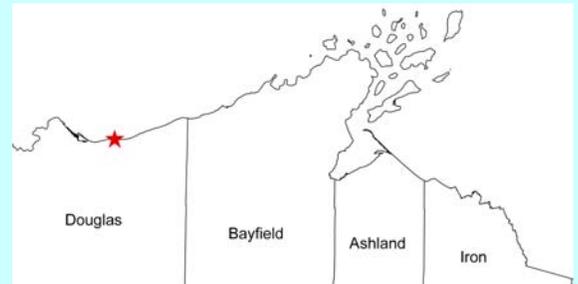
Amnicon River Estuary

Approximate Size: 80 acres*

Ownership: Private, Douglas County

Year Last Surveyed by WDNR/NHI: 2012

GLCWC Classification: Open Drowned River Mouth



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Site Description

The Amnicon River is a warm-water drainage stream approximately 8 miles east of Superior in north central Douglas County. A private camp occupies the river's west bank along its first mile, while private homes and recreational lands occupy the east bank, along with a public boat landing. The river is distinctive in its extensive riparian wetlands along the first 3.5 miles. Second-growth Boreal Forest occupies adjacent uplands, and is more young and fragmented on the east bank, and older and more intact on the west.

A large, unvegetated sand barrier (500 yards long, averaging 40 yards wide) channels the river to Lake Superior at its mouth. A 7-acre wetland lies west of the first river bend, with mostly Shore Fen and Emergent Marsh species, with a small inlet providing submergent aquatic habitat and a narrow band of Alder Thicket along the shoreline. Dominant species here include broad-leaved cat-tail (*Typha latifolia*), marsh cinquefoil (*Comarum palustre*), lake sedge (*Carex lacustris*), sweet flag (*Acorus calamus*), and common arrowhead (*Sagittaria latifolia*). An extensive Emergent Marsh at the next river bend upstream has deeper channels dominated by wild rice (*Zizania palustris*), grading into a variable wetland of Northern Sedge Meadow and Emergent Marsh, with calciphiles such as wiregrass sedge (*Carex lasiocarpa*), sweet gale (*Myrica gale*), and bogbean (*Menyanthes trifoliata*) in scattered patches.

Boreal Forest lies along the west bank, and attains 50% canopy cover mostly from 12- to 18-inch-diameter balsam poplar (*Populus balsamifera*) and trembling aspen (*P. tremuloides*), with lesser amounts of paper birch (*Betula papyrifera*), white spruce (*Picea glauca*), and northern white cedar (*Thuja occidentalis*, up to 24"). Large white pines (*Pinus strobus*) are present but rare. The understory is occupied by thimbleberry (*Rubus parviflorus*), speckled alder (*Alnus incana*), balsam fir, and balsam poplar saplings. The ground layer is moderately diverse, typified by lady fern (*Athyrium filix-femina*), common oak fern (*Gymnocarpium dryopteris*), skunk cabbage (*Symplocarpus foetidus*), and wood horsetail (*Equisetum sylvaticum*). The large trees (especially conifers), complex multi-layered canopy, and relatively diverse ground layer identify this as a good-quality Boreal Forest.

*Area includes river mouth, approx 0.9 mile of upstream riparian wetlands & immediately adjacent uplands.

Threats

Non-native invasives noted include purple loosestrife (*Lythrum salicaria*), Canada thistle (*Cirsium arvense*), and garden valerian (*Valeriana officinalis*). 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 Amnicon River supports spawning brown and rainbow trout, burbot, salmon, muskellunge and walleye and a diverse forage fish community. The Lake Superior Binational Program identified the Amnicon River estuary as important habitat for coastal wetlands and fish spawning and nursery grounds. During survey work conducted as part of the 1996 coastal wetlands evaluation, while no rare species of macroinvertebrate were found in the river, the overall taxa richness was high (Epstein 1997, see WDNR Coastal Wetlands webpages below).

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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A broad, largely unvegetated sand formation creates a barrier between the river and Lake Superior (left). Wild rice is an indicator of good water quality (right).

Suggested Citation

A. Staffen, K. Doyle, and R. O'Connor. 2012. Site Description for Amnicon River Mouth. Wisconsin Department of Natural Resources. Madison, WI. <http://dnr.wi.gov>, Keyword: "coastal wetland amnicon river"



This project was funded by the Wisconsin Coastal Management Program and the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management under the Coastal Zone Management Act.