

Regional Stormwater Protection Team Presents “Creek News”

Weekly updates of regional surface water information



The Lower Nemadji River, WI – That’s a lot of Sediment!

The lower Nemadji River flows through a narrow, steep-sided valley



The riparian area of the lower Nemadji is largely intact, but the river is still impacted by stormwater

when it enters the heavily industrialized and urbanized portion of the City of Superior. From there it empties into Allouez Bay and the Duluth-Superior Harbor near the Burlington Northern Ore Docks. Even within the City of Superior, parts of the steep red clay bluffs that confine the valley are generally undeveloped, creating a buffer between the river system and surrounding urban areas.

Wetlands at the mouth of the Nemadji cover about 90 acres and support the spawning beds of muskellunge and several other warm water fish species. This area contains valuable coastal wetlands, and fish and wildlife spawning and nursery grounds. For this reason, the Lake Superior Binational Program has identified it as important habitat to the Lake Superior ecosystem. No stream carries as much sediment to Lake Superior as the Nemadji. About 33% of its basin is covered in red clay, up to 200 feet thick, that was deposited during a geologic period when glacial lakes covered the region. Although some red clay erosion is natural, human activities on the land during the past century have accelerated its rate, causing the river to cut deep valleys into the surrounding bluffs.



The Nemadji empties into Superior Bay near the Burlington Northern ore docks; clouds of sediment flow into Lake Superior through the Superior Entry.

The Duluth-Superior Harbor must be dredged to maintain channels deep enough for ship traffic. About 33,000 tons of the more than 100,000 tons of deposited Nemadji sediment must be dredged annually by the U.S. Army Corps of Engineers at a cost of about \$260,000. This is 17 dump truck loads of silt and clay being unloaded into Lake Superior daily. Sedimentation can choke spawning beds and carry contaminants and nutrients that can degrade aquatic habitat and modify food webs. Find out more about the Nemadji at www.lakesuperiorstreams.org/southshore/nemadji.html and www.ci.superior.wi.us/index.asp?NID=365

Creek news is a weekly press release of happenings along our streams, lakes and rivers. For more information contact the Regional Stormwater Protection Team c/o Marnie Lonsdale, City of Duluth (218) 730-4063