

Nemadji River Stewardship Committee Meeting 2/4/10 Summary

List of attendees:

Courtney Kowalczyk-Minnesota Waters
Tom Schaub-MPCA, Duluth
Marc Hershfield-MPCA, Duluth
Sam Martin-Pine County SWCD
Susan Oswood-Landowner
Jason Naber-Landowner
Greg Johnson-MPCA, St. Paul
Doug Hansen-MPCA, St. Paul
Mike Dahl-MN DNR Forestry & Landowner
Greg Bornu-Carlton Co. Land Department
Howard Maki-MN DOT-Duluth
Cordell Manz-WI DNR, Superior
Megan O'Shea-WI DNR, Superior
Cory Goldsworthy-Mn DNR Fisheries, Duluth
Heather Cunningham-Carlton Co. Planning and Zoning
Karl Koller-Mn DNR Ecological Resources, Grand Rapids
Brad Matlack-Carlton Co. Soil and Water Conservation District
Kirstin Swenson-Carlton Co. Soil and Water Conservation District

(Presenters in bold)

Kirstin Swenson- Deer Creek/Nemadji River TMDL Project Updates

See slide presentation with notes for updates on monitoring and public outreach.

Additional comments regarding TMDL project timeline:

- The project will be moving from Phase I into Phase II at the end of April 2010
- SWCD and MPCA are currently in the process of finalizing the workplan for Phase II
- Phase II will include continued monitoring at all sites, continued public outreach, and web tool expansion over the coming 3 years
- End result of Phase II will be development of the draft Deer Creek TMDL

Cory Goldsworthy-Nemadji River Fish Assessments and Temperature Monitoring

See power point presentation on main page.

- Fish assessments are being done on designated trout streams. This information will provide follow-up to past stocking as well as baseline information to aid in future stocking locations and trout stream designation decisions. In 2009,

assessments were done in N. Fork Nemadji River, Net River, Blackhoof River, and Deer Creek.

- A full survey was done on Spring Creek, which had a portion not designated as a trout stream. A full survey involves more intensive data collection including walking the entire stream and collecting stream metric data.
- Temperature data was also collected on all assessed streams as well as Rock Creek. Temperature data is collected in order to determine the water temperatures as they relate to stress levels for trout.
- N. Fork Nemadji River temperature results all stayed within range for growth of brook trout. Colder temperatures were in the lower portion of the river while warmer reaches were in the upper portion. Brown Trout and Rainbow Trout were found in the river as well as a young of the year Muskie. See table for full count of species.
- Net River had a low number of Steelhead, which may have been the result of a beaver dam blocking passage located at the mouth of the river. See table.
- Blackhoof River has had consistent numbers for trout and remains the best fishery in the Nemadji River system.
- A full survey completed on Spring Creek showed aquatic invertebrate species of a healthy stream. Stream temperatures were very good, well within the range of growth.
- DNR will be working with a landowner where cattle traffic following a fence line along the creek is causing erosion. The landowner is very interested in getting the cattle away from the stream. If the stream was designated for public access, there could be possibilities to fully fund restoration of the site.
- Deer Creek temperature data was within range of growth. No trout were found in Deer Creek. See table for species presence.

Megan O'Shae and Cordell Manz-Wisconsin-DNR, Nemadji River monitoring and impaired waters listing of lower Nemadji River

See power point presentation on main page.

- Sampling done at 8 sites including the main stem of the Nemadji River and 5 tributaries. Sampling included Turbidity, TSS, d.o., pH, transparency and nutrients. Sites were also monitored using fish and macro invertebrate IBIs and quantitative habitat monitoring.
- Habitat metrics included bank erosion estimates that are done using a visual observation of amount of bank eroded.
- Invertebrate IBI based on % of tolerant species relating to a measure of water quality and pollution.
- Fish and Invertebrate IBI's were good for all monitored sites
- Yet future monitoring will aid in further understanding of system.
- ½ of the site results exceeded the turbidity standard 25NTU. Using Wisconsin's use designation (warm water fishery) and MN associated numeric standard.

- Wisconsin does not have a numeric standard. The MN 25NTU standard was used as a surrogate guideline.
- Wisconsin has toxics standards which were also assessed. Data analysis shows a long list of toxics in a tributary to Crawford Creek which is a tributary to the Nemadji River .
- According to a toxic loading study done for Lake Superior, Nemadji River is a higher toxic contributor than the St. Louis River.
- Wisconsin proposed listing the Nemadji River on the 303(d) list of impaired waters for sediment this year. The public commentary period has recently closed and there were no comments.
- The listing will likely go through. Wisconsin does not intend to proceed with a TMDL and will instead move to implementation efforts.
- This will provide a good opportunity to partner with Carlton SWCD on implementation efforts.
- Fish tissue testing will aid in further investigation of toxics in the Nemadji River.
- Wisconsin is currently looking at targeting subwatersheds for implementation efforts according to percentage of open lands.

Tom Schaub-Isotope Study Analysis Update

See power point presentation on main page.

- Monitoring site locations for study have expanded to other subwatersheds which are also like contributors of sediment via groundwater. Site locations include: Mud Creek , Rock Creek, Deer Creek, and N. Fork Nemadji River.
- Well monitoring will take place in February.
- Field work will be completed by summer 2010
- Data results for general chemistry sampling will be available in STORET after analysis by MDH
- Isotope samples sent to a lab out of state for analysis

Doug Hansen-Deer Creek Groundwater Model

- Reviewing model and looking for improvements.
- New Deer Creek flow data could be added to model when it comes available.
- Isotope study data will also be useful information for model when it comes available.