

Poplar River Turbidity TMDL Public Meeting – June 7, 2007

(Notes compiled by MN Sea Grant staff)

Welcome:

Don Sivertson

Content: SWCD is LGU and results will come through SWCD. Comments will go to SWCD via Dave Stark.

Local Role in TMDL:

Dave Stark

Content: Comments should be directed to Dave. May not be able to answer all questions, but will do his best to find the answers. Working with EPA, MPCA, stakeholders, and with subcontracts to NRRI for biological monitoring and Sea Grant for facilitation and outreach.

State Role in TMDL:

Karen Evens, MPCA

Content: Project management. Administer to SWCD. Will approve TMDL. Technical assistance. This process looks at whole watershed. Goal is sustainable management of the watershed. Part of that is looking at finding total pollutant loads, identifying sources, and figuring out what can be done to reduce pollution from these sources. BMPs NEED community commitment and support to implement!

Introduction to North Shore Streams:

Cindy Hagley, MN Sea Grant, provided a description of issues and conditions for North Shore streams.

Poplar River TMDL PowerPoint Presentation:

Troy Naperala of the RTI contracting Team presented information on their role in the project and initial results of their work to date.

Questions and answers from the meeting:

Q: How did you judge when to sample the Poplar River?

A: Event-based sampling and ongoing water quality monitoring. Sampling is on-going.

Q: How will you separate natural sources and sources caused by development?

A: Stream surveys and channel assessments; modeling; looking at different land uses. Won't be able to get at an exact number. There is uncertainty in the process.

Q: What are the different sources of erosion?

A: Erosion from land, streambank erosion, and upland erosion.

Q: What is a sonde?

A: A sonde is a water quality monitoring probe that remains in the stream and collects continuous data automatically. The data we received from the sonde last summer showed the same trends as the grab samples, but the numbers ran higher.

Q: How many samples do you collect?

A: About 25 per year during open water season. Some during low flow periods, most during high flows. Now we get sonde data every 30 minutes, just at the downstream location. The sonde was just placed last summer. There have been some start up problems with it.

Q: Why does 2002 data have 50% of samples exceeding 10 NTUs but a lower than average load?

A: Load does not equal concentration. 2002 was a low flow year. There was a high concentration, but the low volumes mean that overall the load was lower.

Q: On WEPP model, wasn't there a large amount of sediment that was unaccounted for?

A: Model says approximately 180 tons from land but approximately 700 tons (possibly) from in-stream sources.

Q: Will we take into account the BMPs that are currently applied in the watershed?

A: To a certain extent, yes, it will take those into account.

Q: Will the channel assessment be done on the main channel only or will it include the tributaries?

A: Will include tributaries, road ditches, upstream, intermittent in lower watershed.

Q: Are you open to suggestions on methods?

A: Yes, but need that feedback very soon.

Q: Has this been done on other North Shore rivers?

A: Lester, Talmadge, French, Knife, Beaver, and Poplar on list for turbidity. Only Knife is undergoing TMDL now (for sediment).

Q: What makes you decide to monitor a particular stream?

A: Chosen on prioritization through Lake Superior Basin Plan. Picked representative rivers. Looked at development pressures, as well as pristine streams. We will be choosing new streams that we don't currently have data on. In the 1970s, IJC monitored most North Shore streams.

Q: Will you be doing a chemical analysis of sediment to track the source?

A: No, not now.

Q: Why not have intermediate sample sites between the up and downstream sites?

A: We didn't feel we could add this additional component, given limited resources. May be able to do this later on as an evaluation. It would take a lot of effort, time, and money to do it well enough. Not as simple as it seems. We could survey the slump very carefully and measure change in slump instead of measuring sediment in water.

Q: Will the TMDL exclude natural sources?

A: No. They will be included in the load allocation (LA). Some erosion is natural, of course. Goal is not zero sediment. There is no requirement to split LA into natural vs human (USEPA regulations), but the goal is to split that out to help manage the watershed.

Q: Is the 10 NTU criterion appropriate?

A: EPA struggles with this. Criterion was developed before the science was well-developed. Criteria are not set based on "natural conditions," but on conditions deemed necessary to support designated uses (i.e., aquatic life). A site specific criterion is not being considered at this time. Additional monitoring and biological sampling will help determine applicability of the 10 NTU criterion. Clean Water Act says states are required to set standards to support aquatic life.

Q: If "natural sources" exceed 10 NTU, do we still have to reach this criterion?

A: We still need to attempt to control the sources.

Q: If natural sources are greater than 10 NTU, why should we control these sources?

A: Channel assessment will help determine which are natural and which are unnatural. To meet criterion and protect aquatic life, we need to meet the goals.

Q: Two objectives: (1) Determine numbers and share with citizens; and (2) Information needs to be credible to landowners to promote lasting behavior change. How will we make sure it is credible to landowners?

A: Public process, such as tonight; SWCD involvement.

Q: The PRMB goal is for the Poplar River to be unimpaired.

If we do everything we can, will the river be considered unimpaired even if we don't achieve 10 NTUs?

A: None recorded.