



Minnesota Center for Environmental Advocacy

26 East Exchange Street • Suite 206 • Saint Paul, MN 55101-1667 • 651.223.5969

August 8, 2013

BY ELECTRONIC MAIL

Minnesota Pollution Control Agency
Attn: Karen Evens
525 Lake Avenue Suite 400
Duluth, MN 55802

**Re: Draft Poplar River Turbidity TMDL
Comments of Minnesota Center for Environmental Advocacy**

Thank you for the opportunity to submit these comments on the draft TMDL for the Poplar River. The Minnesota Center for Environmental Advocacy (MCEA) submits these comments on behalf of MCEA, Friends of the Mississippi River, the Minnesota Division of the Izaak Walton League, Minnesota Environmental Partnership, Minnesota Trout Unlimited, and Save Lake Superior Association.

MCEA is a Minnesota non-profit environmental organization whose mission is to use law, science and research to preserve and protect Minnesota's wildlife, natural resources and the health of its people. The undersigned groups are Minnesota non-profit environmental organizations that have statewide membership. Some of the group members live, work and recreate near the Poplar River, and are directly affected by the pollution there. The groups have been concerned about impairment of Minnesota's waters from point and nonpoint source discharges for a number of years, have made impaired waters a significant component of their work, and have participated in a number of related policy and legal matters.

The draft Poplar River TMDL cannot be approved in its current form because:

- the TMDL equation needs to be recalculated, based on new data indicating that the maximum daily load may be inaccurate;
- the wasteload allocation does not include ski slopes and their associated conveyances, which are point sources and contribute a significant amount of sediment to the Poplar River;
- the load allocation must be revised because the ski slopes are point sources and nonpoint contribution estimates are inconsistent; and
- there is insufficient assurance of nonpoint source reductions.

TMDL Models and Equation Must Be Updated

The Poplar River is listed as impaired for turbidity based on the 10 NTU criterion for Class 2A waters.¹ MPCA calculated a maximum daily load using a total suspended solids (TSS) surrogate

¹ Draft TMDL at 12.

of 12 mg/l.² The draft TMDL uses TSS monitoring data from 2001-2006 to calibrate FLUX and Watershed Erosion Potential Project (WEPP) models. It uses a flow duration curve to identify critical conditions and estimated contributions from categories of nonpoint sources.³ These monitoring data were also used to assign reductions and load allocations.

The draft TMDL relies on three studies of the Poplar River watershed to determine the existing sediment load and the required reductions. In 2008, RTI International conducted a study to evaluate sediment sources and develop an initial TMDL.⁴ The University of Minnesota subsequently conducted two studies, completed in 2010⁵ and 2013,⁶ which modeled sediment loading and source assessment. The University of Minnesota studies contain additional (and sometimes contradictory) information about the total sediment loading and the relative contributions from each category of sources. For example, the mean sediment load estimated in the University of Minnesota study was 15% lower than estimated in the RTI study.⁷ The draft TMDL does not appear to account for the University of Minnesota study results in assigning maximum daily loads. Nor does it account for changes in land use in the watershed that may affect flow and sediment loading.⁸

The RTI report estimated sediment contributions from each source category at low, median, and high flows.⁹ The subsequent University of Minnesota reports similarly calculated low, median, and high-flow sediment contributions. Only the contributions from ski runs, which dropped slightly in the University of Minnesota study, appear to have been updated in the draft TMDL; it is not clear why the draft TMDL only includes this updated estimate.¹⁰

Despite the TMDL claim that “The entire record of data was used at each site to estimate sediment loading,”¹¹ recent monitoring data have shown significant changes since the data relied upon to develop the draft TMDL. An MPCA analysis showed sediment loading in the Poplar River a dropped 35 percent during similar precipitation conditions since the 2001-2006 data used in the draft TMDL.¹² The Poplar River Management Board identified several actions that contributed to sediment reductions from ski slopes and stormwater runoff.¹³ The draft TMDL does not utilize the more recent monitoring data in the models used for the TMDL, does not

² *Id.* at 12, 23.

³ *Id.* at 30.

⁴ “Poplar River Turbidity Assessment,” RTI International et al., Mar. 24, 2008 (“RTI 2008”).

⁵ Brad Hansen, “Poplar River Sediment Source Assessment,” University of Minnesota, Mar. 30, 2010 (“Hansen 2010”).

⁶ John L. Nieber, “Lower Poplar River Watershed Sediment Source Assessment,” University of Minnesota, Feb. 2013 (“Nieber 2013”).

⁷ Nieber 2013 at 41.

⁸ See “Poplar River Water Quality Background,” Poplar River Management Board, Feb. 2013, available at http://www.poplarriverboard.com/pdf/Feb.13.Update.Poplar_River_Water_Quality_Background.pdf

⁹ RTI 2008 at 26; draft TMDL at 30.

¹⁰ Draft TMDL at 45.

¹¹ *Id.* at 25.

¹² See “2013 MPCA Data Analysis,” available at http://www.poplarriverboard.com/pdf/MPCA_Load_Data_Poplar_2009_11.pdf.

¹³ “Poplar River Water Quality Background,” Poplar River Management Board, Feb. 2013, available at http://www.poplarriverboard.com/pdf/Feb.13.Update.Poplar_River_Water_Quality_Background.pdf

calibrate the TMDL using current data, and does not evaluate whether the changes would affect the allocations assigned. Changes in the load affect the degree of impairment and the implementation actions required to reduce sediment loading watershed.

In addition to the differences between studies that were not clearly resolved in the TMDL, the monitoring data showing sediment reductions represents a significant change from the baseline conditions in the draft TMDL. The final TMDL should incorporate more recent monitoring data to ensure that the assigned loads reflect actual conditions on the ground. If the TMDL is not properly calibrated to the existing conditions and available monitoring data, the resulting load allocations will be inaccurate.

Inaccurate Load Assignment and Inadequate Pollution Source Assessment

The draft TMDL provides inaccurate and inadequate detail of the magnitude of pollutant sources in the watershed. Point sources are listed as nonpoint sources, pollution contributions during the critical conditions are not identified, and conflicting estimates of contributions within the load allocation are unresolved.

The Clean Water Act requires a TMDL to include a wasteload allocation and a load allocation for point and nonpoint sources, respectively.¹⁴ To determine the wasteload and load allocations, the TMDL must assess pollution sources and assign loads.¹⁵ Under EPA guidance, “The source assessment is needed to evaluate the type, magnitude, timing, and location of loading to an impaired waterbody.”¹⁶ As a part of the assessment, “each activity should be evaluated to determine its individual pollutant generating mechanisms, processes, and potential magnitude.”¹⁷ MPCA protocol provides similar guidance, stating that “the TMDL submittal should include an identification of the point and nonpoint sources of the pollutant of concern, including location of the source(s) and the quantity of the loading, e.g., lbs/per day.”¹⁸ Without an accurate source assessment, it is impossible for EPA to determine the accuracy of the wasteload and load allocations and it cannot approve the TMDL.¹⁹

Ski Slopes and Runoff Conveyances Must Be Placed in the Wasteload Allocation

Information provided in the draft TMDL and in its supporting documents shows that the ski slopes and their associated runoff conveyances are point sources discharging sediment that must be placed in the wasteload allocation.

It is unlawful under the federal Clean Water Act to discharge any pollutant into waters of the United States absent an NPDES permit.²⁰ “Discharge of a pollutant” means “any addition of any

¹⁴ 33 U.S.C. § 1313(d)(1)(C); 40 C.F.R. §§ 130.2, 130.7.

¹⁵ 40 C.F.R. §§ 130.2, 130.7.

¹⁶ *Protocol for Developing Sediment TMDLs*, U.S. EPA, Nov. 1999, at 5-1.

¹⁷ *Id.*

¹⁸ *MPCA Turbidity TMDL Protocol Guidance and Submittal Requirements*, MPCA, Mar. 2007, at 59.

¹⁹ *Guidelines for Reviewing TMDLs under Existing Regulations issued in 1992*, May 20, 2002, U.S. EPA, at 1.

²⁰ 33 U.S.C. § 1311(a).

pollutant to navigable waters from any point source...²¹ A “point source” is “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.”²²

Discharges from point sources must be placed in the wasteload allocation of a TMDL.²³ Process water containing pollutants discharged from pipes is, by definition, a point source and must be put in the wasteload allocation.²⁴ Even if a state has not permitted a point source discharge, “A pipe is a pipe, and . . . [is] thus incorporated into the wasteload allocation.”²⁵ On August 28, 2012, MCEA filed a 60-day notice of intent to sue Lutsen Mountains Corporation for discharging pollutants without obtaining an NPDES permit. The letter alleged that the ski slopes and associated conveyances transported and discharged sediment into the Poplar River. To date, MCEA has not filed suit against Lutsen Mountains Corporation and the facility does not have an NPDES permit.

The draft TMDL provides descriptions showing that the ski slope discharge and associated conveyances satisfy the point source definition. Stormwater and artificial snow meltwater, both carrying sediment, are directed through man-made conveyances and discharge to surface water through pipes. For example, the Brule tight-line is described as:²⁶

a pipe that is 36” in diameter that runs from just above the county road to an energy dissipating concrete vault near the bottom of the slope. . . .The tight-line collects surface water just above the county road and delivers it to this vault. After the water has gone through the vault, it is free to flow into the river through a single pipe.

In addition to this discharge, there is another point source nearby: “Parallel to the tightline is another pipe which collects water below the county road by implementing water bars every 100’.”²⁷ These water bars are man-made changes to the landscape to redirect water to a pipe that discharges directly to the river.²⁸

As explained in the 2010 University of Minnesota report, the Eagle Mountain storm water system is:²⁹

a series of rock lined ditches and drop inlets to pipes, which allow larger flows to be shunted from the ditches. The system discharges near the river into a short

²¹ 33 U.S.C. § 1362(12).

²² 33 U.S.C. § 1362(14).

²³ 40 C.F.R. § 130.2 (defining “TMDL” and “wasteload allocation”).

²⁴ *Id.*; *MCEA v. EPA*, 2005 WL 1490331, Civil No. 03-5450 (D. Minn. 2005).

²⁵ *MCEA v. EPA*, 2005 WL 1490331, Civil No. 03-5450 (D. Minn. 2005).

²⁶ Hansen 2010 at 25.

²⁷ *Id.* at 25.

²⁸ *Id.*

²⁹ *Id.* at 26.

ditch, protected by a rock weir. The water from the system then follows an old river channel, which directs it into the current river channel.

As with the tight-line system, stormwater and artificial snow meltwater picks up sediment and is channeled through man-made ditches and pipes, ultimately discharging to surface water.

Other examples of such channelized sediment sources described in the TMDL and supporting reports include:

- So-called “water bars,” or ditches built across ski hills to channel snowmelt;³⁰ Lower Meadow ski run, which has a 2-foot deep gully that has cut through the berms;³¹
- A ponded area that collects water from Mystery Mountain ski slopes and fills with runoff that discharges directly into Poplar River;³²
- A road on White Birch ski run that has caused a gully to form that runs directly to the river, and a second gully that goes directly downhill along the service road;³³
- Ullr Gully³⁴ and Ullr tight-line;³⁵ and
- Each individual ski hill, which is clear-cut and engineered to direct water down the hill at a faster speed, leading to greater capacity for and delivery of sediment.

The discharges from ski slopes collect water that Lutsen withdraws from surface water, sprays onto private lands, and then discharges into the Poplar River. The water carries sediment at rates that are higher than the natural background levels, in part because of the deforestation and grading performed to operate the ski slopes.

Lutsen’s runoff is not stormwater because it includes a substantial amount of additional water that picks up sediment as it runs down the hill and into Lutsen’s point source ditches and ravines. Stormwater is defined under the Clean Water Act as “stormwater runoff, snow melt runoff, and surface runoff and drainage.”³⁶ If Lutsen did not add artificial snow to its naturally occurring runoff, this definition might apply. The additional of artificial snow means Lutsen’s activity falls outside the definition of stormwater. This runoff is not precipitation; it is process water.

The artificial snow ultimately carries more sediment to surface water through conveyances, including ditches and pipes. The University of Minnesota found that increased snow on the ski runs led to increased sediment runoff.³⁷ Between 2001 and 2005, Lutsen Mountains Corporation drew an average of 76.2 million gallons of water a year for use in snow-making, which equates to approximately 12 inches of water applied to the ski runs.³⁸ More than 85 million gallons were

³⁰ *Id.*

³¹ *Id.* at 43; Nieber 2013 at 40.

³² Hansen 2010 at 43.

³³ *Id.* at 43-44; Nieber 2013 at 40.

³⁴ Nieber 2013 at 37-38 (noting that the drainage area to the ravine increased due to redirected water).

³⁵ Hansen 2010 at 25; *see* “Ullr Tightline Project at Lutsen,” Cook County, last visited July 30, 2013, available at <http://www.co.cook.mn.us/index.php/soil-and-water/1599-ullr-tightline-project-at-lutsen>.

³⁶ 40 C.F.R. § 122.26(b)(13).

³⁷ Nieber 2013 at 32.

³⁸ *Id.* at 31.

withdrawn in both 2008 and 2009, and further increases may be requested in the future.³⁹ Indeed, Lutsen Mountains Corporation is permitted to withdraw as much as 150 million gallons for artificial snow-making.⁴⁰ These significant withdrawals are sprayed onto the ski slopes, increasing subsequent water and sediment runoff. The draft TMDL does not resolve the detrimental impact of increased artificial snowmaking with the lower sediment levels found in recent monitoring data.

The combination of artificial snowmelt and graded, deforested ski runs is a significant source of the Poplar River's turbidity problems. The 2008 RTI report cites erosion gullies and erosion ravines resulting from ski run snowmelt, ski lifts, and access roads, as well as drainage pipes installed on the property, as sources of concentrated sediment runoff that contribute to the Poplar River's turbidity exceedances.⁴¹

The University of Minnesota's sediment source report calculated the sediment delivery rate for Lutsen Mountains Corporation ski runs at 4 tons per acre.⁴² This rate is significantly higher than the natural sediment delivery rate from stormwater; forested areas immediately adjacent to the ski runs with the same slope and soils produce a sediment delivery rate of 0.009 to 0.32 tons per acre.⁴³ Water infiltration rates were two times greater in forested areas compared to deforested ski runs, and approximately 40 times greater than graded ski runs.⁴⁴ Lutsen's ski runs and artificial snowmaking add significant sediment above natural background conditions.

MCEA requests that the MPCA assign the discharge from the ski hills to the wasteload allocation, identify specific reductions needed, and implement those reductions through an NPDES permit. MPCA must revise the wasteload allocation, load allocation, and implementation framework for the TMDL accordingly.

The TMDL Must Assess Contributions in Critical Conditions

The draft TMDL identified the months of April and May as the critical conditions for meeting the turbidity standard.⁴⁵ It also estimated the total reductions needed at high, moist, and mid-range flows. The draft TMDL did not, however, quantify the contributions from each source category at the critical flows during the critical season.⁴⁶ This step is necessary to determine what sediment sources need to be reduced to meet the 12 mg/l TSS target. Because the TMDL never identifies the relative source contributions across the load duration curve, the sediment source estimates are divorced from the maximum daily loads assigned.

³⁹ *Id.* at 32.

⁴⁰ Minnesota Water Appropriation Permit No. 1964-0846 (Issued Aug. 16, 2011).

⁴¹ "Poplar River Turbidity Assessment," p. 33 ("There are several places of concentrated runoff within the Lower Poplar River valley that emerged as a result of the recreational-based development...").

⁴² Hansen et al, "Poplar River Sediment Source Assessment," p. 22, March 30, 2010 (Univ. of Minnesota).

⁴³ Hansen 2010 at 22; Nieber 2013 at 29 (citing Patric, J.H., J.O. Evans, and J.D. Helvey, 1984. Summary of soil erosion data from forested lands in the United States, *J. Forestry*, 82: 101-104.).

⁴⁴ Hansen 2010 at 22.

⁴⁵ Draft TMDL at 33-34.

⁴⁶ *Id.*

The studies conducted in association with the TMDL consistently showed that the water discharged from ski runs is responsible for a significant portion of the sediment load in the Poplar River. The 2008 RTI report found that 33 percent of the river's total sediment load is attributable to ski runs and associated bare trails and roads, though these land uses represent only 14 percent of the watershed's total surface area.⁴⁷ On a yearly average, 65 percent of the upland sediment load originates from ski runs, which represents 660.5 tons of sediment delivery to the Lower Poplar River.⁴⁸ According to the same report, total suspended solids (TSS) are highest in the Lower Poplar River Watershed, where Lutsen Mountains Corporation operates its ski runs, during the month of April:

The month of April is typically characterized by high concentrations and loads of TSS and was shown in FLUX modeling to be the month of highest TSS loading. A portion of this load is likely delivered by melting snow; however, other factors, such as lack of ground cover and forest canopy, likely contribute to increased sediment detachment and transport to the Poplar River.⁴⁹

Because the contributions from ski slopes appear to be the largest contributor of sediment and peak during the critical conditions in April and May, they may need to be the focus of reductions during implementation. The final TMDL should include updated information about the sediment contributions from ski slopes and other sources during the critical conditions to assign proper wasteload and load allocations.

The TMDL Must Resolve Differences in Source Magnitudes

The draft TMDL utilizes multiple studies without describing the differences in their source estimates or resolving conflicting estimates. As a result, it is unclear how significant each source is and how much each source needs to be reduced.

In addition to differences in contribution estimates from ski slopes, the draft TMDL ignores different estimates from other source categories. The second largest source identified is a series of slumping river banks/bluffs, including the so-called "megaslump."⁵⁰ The exact contribution from these slumps is disputed, with the RTI study estimating that they contribute 726 tons of sediment per year⁵¹ and the University of Minnesota study estimating that they contribute only 472 tons per year.⁵² The biggest difference is in the "megaslump," with RTI estimating 504 tons per year⁵³ and the University estimating 188 tons per year.⁵⁴ The University of Minnesota appears to have used more detailed information in calculating the contributions from slumps,

⁴⁷ RTI 2008 at 9.

⁴⁸ *Id.* at 28.

⁴⁹ *Id.* at 20.

⁵⁰ Draft TMDL at 37.

⁵¹ RTI 2008 at 34.

⁵² Nieber 2013 at 30.

⁵³ RTI 2008 at 34.

⁵⁴ Nieber 2013 at 30.

mapping the locations of each slump reviewed.⁵⁵ The differences in estimates are shown below in Figure 1. The TMDL leaves this conflict unresolved.

Similarly, the TMDL does not address the differences in estimated sediment contribution from in-channel scouring. The RTI report estimated a median contribution of 53 tons of sediment per year, while the University of Minnesota report made no comparable estimate.⁵⁶ The TMDL appears to use the RTI estimate without explaining why the more detailed approach used by the University of Minnesota is not valid.

Similarly, the TMDL uses estimates from the 2008 RTI study to evaluate sediment contributions from forest land. Subsequent studies found that the estimated rate of erosion from forested lands was much lower. As with the slumps, the difference between the two studies is significant: the RTI study estimated forest contributions at 0.32 tons per acre, but the University of Minnesota study estimated 0.009 tons per acre.⁵⁷ By using such different coefficients, the forest contribution in the earlier study is significantly larger than the later estimate, 280 tons per year versus six tons per year.⁵⁸ Unhelpfully, the TMDL includes both of these estimates without evaluating which is accurate.⁵⁹

Accuracy in this source assessment is necessary to ensure that the wasteload and load allocation are assigned appropriately and that implementation is targeted effectively. Assigning too large a contribution to forests or slumps could lead to smaller estimations (and subsequent reductions) from ski slopes and their runoff conveyances. The final TMDL must include additional information about source types, sediment contributions during critical conditions, and overall sediment contributions to ensure an accurate assignment of the wasteload and load allocations.

By combining the updated monitoring data as well as the updated estimates in the University of Minnesota studies, the source assessment drastically changes, as shown in Figure 1.

⁵⁵ Hansen 2010 at 29; Nieber 2013 at 20.

⁵⁶ RTI 2008 at 37; Nieber 2013 at 30.

⁵⁷ Nieber 2013 at 29.

⁵⁸ Cf. Draft TMDL at 37 (Fig. 5.1, taken from RTI 2008 at 37), 41 (Table 5.1).

⁵⁹ Draft TMDL at 37, 41.

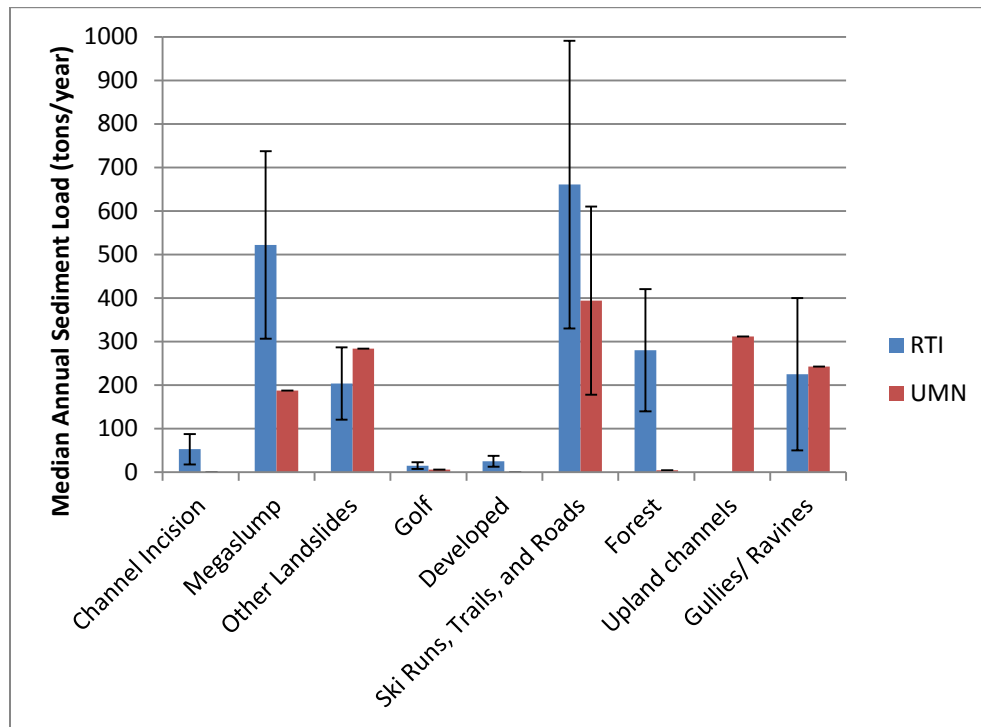


Figure 1. Estimates of sediment loading by source category. RTI estimates are in blue; University of Minnesota (UMN) estimates are in red. The minimum and maximum estimates are represented by the error bars for RTI estimates and for the UMN ski run, trail, and road estimate.

These changes, along with considering the ski runs a point source, will affect the mix between the wasteload and load allocation.

The final TMDL should resolve the conflicting estimates of contributions from ski slopes, slumps, and other sources. It must clarify which of the estimates for each category is accurate and the scientific basis for the selected rate. MPCA should amend the TMDL to address the pollutant sources categorically as recommended in its own guidance in place of a lump sum of watershed loading. The TMDL should, at a minimum, include the steps to target the specific sources during the implementation planning process and before expending public resources to address them.

Lack of Reasonable Assurance of Nonpoint Source Reductions

Reasonable assurance is a required element when wasteload allocations depend on successful implementation of nonpoint source load reductions.⁶⁰ MPCA recommends that “some additional provision in the TMDL, such as a schedule and description of the implementation mechanisms for nonpoint source control measures, is needed to provide reasonable assurance that the nonpoint source measures will achieve the expected load reductions.”⁶¹ EPA states that the

⁶⁰ *Guidance for Water Quality-Based Decisions: The TMDL Process*, U.S. EPA, 1991.

⁶¹ *Lake Nutrient TMDL Protocols and Submittal Requirements*, MPCA, March 2007, at 46.

measures should not only be specified, but “will be implemented and maintained.”⁶² Such delivery systems should have adequate funding.⁶³

The TMDL does not provide these assurances. It identifies existing permit authorities, though the contribution from permitted sources is small.⁶⁴ It goes on to state that the county water plan provides additional assurance, though it is unclear how a water plan that has been in place for almost two decades will lead to different outcomes from past experience.⁶⁵ It also cites the success of BMPs, noting that several have already been undertaken, but does not assess the degree to which past BMPs have reduced loading to achieve the water quality standard, nor does it assess whether additional BMPs will be successful. The recent BMPs were implemented by a coalition of local businesses (the Poplar River Management Board), and there is no assurance or funding for future implementation. The TMDL does not identify any regulatory or nonregulatory programs to ensure nonpoint source reductions, lacks a schedule for nonpoint source reductions, and lacks a reliable delivery system supported by adequate funding.

The TMDL include additional detail of necessary steps and assurances of reductions from nonpoint sources to ensure that the reductions necessary to meet water quality standards will be achieved, and further recommends that the TMDL take into account those practices already implemented.

Conclusion

The organizations listed below urge the MPCA to carefully review the issues above and make any necessary additions and changes to the draft TMDL before adopting and submitting it to the EPA for final approval. Please feel free to contact us should you have any questions with respect to these comments. Thank you for the opportunity to comment.

Sincerely,



Kathryn Hoffman
Staff Attorney
MCEA



Michael Schmidt
Water Quality Associate
MCEA

Trevor Russell, Watershed Program Director
Friends of the Mississippi River

⁶² *Protocol for Developing Nutrient TMDLs*, U.S. EPA, Nov. 1999, at 7-3.

⁶³ *Reasonable Assurance for Sources for Which an NPDES Permit is Not Required*, 65 Fed Reg. 43599-43600 (July 13, 2000).

⁶⁴ Draft TMDL at 45.

⁶⁵ *Id.*

Karen Evens
August 8, 2013
Page 11

Barry Drazkowski, President
Minnesota Division Izaak Walton League of America

Steve Morse, Executive Director
Minnesota Environmental Partnership

Jon Lenczewski, Executive Director
Minnesota Trout Unlimited

LeRoger Lind, President
Save Lake Superior Association

cc: Gaylen Reetz, MPCA
 Dave Werbach, US EPA Region V
 George Azevedo, US EPA Region V

1326 E. Skyline Blvd.
Duluth, MN 55805

July 8, 2013

Dear MPCA Board and Staff and U.S. EPA,

First, I would like to thank you for attempting to do something for the lower Poplar River. I have hiked along and in that river often over the years and it always breaks my heart to see the impact the ski hill has had on it. There have been times when I have watched huge amounts of muddy water coming directly down the ski slope and into the water. I'm happy to see some work being done throughout the area to reduce the sediment load.

The TMDL document is a disappointment, however. I was unable to decipher whether the available options are capable of reducing turbidity to the point where you could conclude that there is reasonable assurance that the target loads can be met over time. I was unable to correlate Table 5.3 (which refers to tons per acre per year based on vegetation type, amount of artificial snow, and slope length) with Table 4.1 (which refers to pounds per day). The TMDL should not be approved unless calculations show that the load can actually be reduced to the total maximum daily load amount under a scenario that the owners of the ski hill are amenable to. I would ask the Board and the EPA not to approve the TMDL without this critical piece of information. While I do have some sympathy for the owners of the ski hill, I think that if slopes need to be shortened and a forested buffer established along the river in order to meet the load targets, that is what should be done.

Thank you again for your work on behalf of the Poplar River.

Sincerely,
Jane Reyer



Minnesota Center for Environmental Advocacy

26 East Exchange Street • Suite 206 • Saint Paul, MN 55101-1667 • 651.223.5969

August 12, 2013

BY ELECTRONIC MAIL

Minnesota Pollution Control Agency
Attn: Karen Evens
525 Lake Avenue Suite 400
Duluth, MN 55802

**Re: Draft Poplar River Turbidity TMDL
Additional Groups Signed on to MCEA Comments**

On August 8, the Minnesota Center for Environmental Advocacy (MCEA) submitted comments regarding the draft Poplar River TMDL for turbidity on behalf of MCEA, Friends of the Mississippi River, the Minnesota Division of the Izaak Walton League, Minnesota Environmental Partnership, Minnesota Trout Unlimited, and Save Lake Superior Association.

Two additional organizations want the Minnesota Pollution Control Agency know that they also support the comments submitted on August 8. The undersigned organizations are Minnesota non-profit environmental organizations that have statewide membership. Some of the group members live, work and recreate near the Poplar River, and are directly affected by the pollution there. The groups have been concerned about impairment of Minnesota's waters from point and nonpoint source discharges for a number of years, have made impaired waters a significant component of their work, and have participated in a number of related policy and legal matters. wish to sign on in support of those comments:

Richard Staffon, President
Duluth Chapter of the Izaak Walton League

Brad Sagan
Northeastern Minnesotans for Wilderness

Thank you for the opportunity to comment.

Sincerely,

Kathryn Hoffman
Staff Attorney
MCEA

Michael Schmidt
Water Quality Associate
MCEA