ATTACHMENT A

Public Comments

From:	Molly Hoffman
To:	*Review, Environmental (DNR)
Subject:	FW: Poplar River District EAW
Date:	Friday, July 06, 2012 8:40:13 AM

From: Molly Hoffman [mailto:mkhoffman@boreal.org]
Sent: Thursday, July 05, 2012 10:05 AM
To: 'environmentalreview.dnr@state.mn.us'
Subject: Poplar River District EAW

Sirs:

Both the DNR and the owners of the Lutsen Mountain Ski Hill colluded for several years in illegal withdrawal of water from the Poplar River. It was a disgrace and tainted the DNR as well as the ski hill. The lack of accountability in this instance should preclude allowing a water district to be formed with its prime purpose being to supply water to the snow making operations.

We are aware of the importance of the ski hill operation to our local economy but also aware of the poor behavior of that corporation regarding natural resources. Fairness is an issue but most important is the issue of the precedent set by granting a water district arrangement to benefit a private for profit entity. It sets a precedent for private enterprise to be granted rights to water use through the public establishment of a water district.

Mary and Kenneth Hoffman
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Minnesota Pollution Control Agency

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June 28, 2012

Mr. Randall Doneen
EAW Project Manager
Environmental Policy and Review Unit
Division of Ecological and Water Resources
Department of Natural Resources
500 Lafayette Road North
St. Paul, MN 55155-4025

Re: Lake Superior – Poplar River Water District Environmental Assessment Worksheet

Dear Mr. Doneen:

Thank you for the opportunity to review and comment on the Environmental Assessment Worksheet (EAW) for the Lake Superior – Poplar River Water District project (Project) located in Cook County, Minnesota. The Project consists of the construction of a water pipeline and water appropriation from Lake Superior to provide raw water to residential, commercial, and government customers. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA staff has the following comments for your consideration.

Description (Item 6)

The EAW should clarify whether the other projects identified in the document are, or can be, considered connected actions to the proposed Project and whether their potential for environmental impacts should be included in the EAW in greater detail than that provided. For example, expansion of the public golf course facility and irrigation capabilities, as well as an increase of 31 acres of ski runs and 63 acres of additional snow making is identified in the document. The availability of water has been a limiting factor for development in the past, and the proposed Project will remove this limitation. The EAW should discuss the extent these other projects would be viable without adequate water for irrigation and snow making and if these other projects may be induced or become more feasible after the proposed infrastructure is completed. If so, the EAW should specifically address the actual and potential environmental impacts that will result from these proposed development activities, and provide adequate detail for others to evaluate the effects of these proposed activities.

The EAW should discuss how the proposed Project and the security of a reliable water source will affect development within the Lower Poplar River Alternative Urban Areawide Review (AUAR) area (i.e., secondary impacts to the proposed Project). The EAW should also discuss how the proposed activities conform to the AUAR and whether the proposed activities trigger an update of the AUAR, per Minn. R. 4410.3610, subps. 7.E and 7.F.

Permits and Approvals (Item 8)

- Please note that depending on the design of the water treatment facility, if the facility will have a discharge of wastewater (e.g., filter backwash) to a water of the state, a National Pollutant Discharge Elimination System/State Disposal System Permit may be required from MPCA to authorize the discharge.

- This section indicates that a Clean Water Act (CWA) Section 404 Permit from the U.S. Army Corps of Engineers (USACE) for project related wetland impacts may be necessary. Please be aware that if a USACE Section 404 Individual Permit is required for any project activity, then an MPCA CWA Section 401 Water Quality Certification or waiver must also be obtained as part of the permitting process. The Section 401 Water Quality Certification ensures that the activity will comply with the state water quality standards. Any conditions required within the MPCA 401 Certificate are then incorporated into the USACE 404 Permit. You can find additional information about the MPCA's 401 Certification process at www.pca.state.mn.us/water/401.html. For further information about the 401 Water Quality Certification process, please contact Jim Brist at 651-757-2245 or Judy Mader at 651-757-2544.

Land Use (Item 9)

As indicated in the EAW, Leak #16845 is located within the general Project area and was closed by the MPCA in April 2011. However, a second site in the general Project area, the Lutsen Mountains Maintenance POL, Petroleum Brownfield site #4128, was not identified. While the proposed water infrastructure does not appear to be within the immediate vicinity of these two sites, there remains the possibility that soil and/or groundwater contamination may be encountered during construction activities. The Project proposer and/or their contractor should be mindful of the potential for encountering contamination and have a contingency plan that can be put into action in the event that contamination is discovered. The State Duty Officer should be notified at (651) 649-5451 or (800) 422-0798 if contamination is encountered, per the requirements of Minn. Stat. § 115.061.

Fish, Wildlife and Ecologically Sensitive Resources (Item 11)

The EAW does not include discussion or evaluation of environmental impacts related to crossing the Poplar River or the two proposed crossing alternatives that have been identified for the pipeline (trench crossing and directional drilling). Instead, the EAW defers this analysis to the permitting stages of the project. MPCA staff believes that the EAW is the appropriate venue to evaluate the advantages and disadvantages of the two crossing methods, especially since both methods have the potential for environmental impacts.

Erosion and Sedimentation (Item 16)

This section of the EAW does not provide adequate detail on erosion and sediment control methods that will be employed during Project construction. Additional information is necessary for MCPA staff to effectively evaluate the Project for potential environmental impacts that may result from Project construction.

Water Quality: Surface Water Runoff (Item 17)

- The EAW process is an opportunity to think about potential secondary effects that an increased use of water for snowmaking may have on ski slope soil erosion with regard to cumulative effects and how those effects might be mitigated. Potential effects to all ski run acreages should be considered. The following is a short discussion of cumulative concerns specific to erosion on the slopes.

  Snowmaking, as described in the document, will place additional artificial snow on the runs. This snow has been described to melt more slowly relative to that of natural snow. The description suggests a large melting pool saturating the same area on a slope for a longer period of time. If that location of longer melt is a weaker area, for example, thin, fine soils close to bedrock, compacted

soils of older runs, compacted subsoils, or a higher perched water table in that particular area, the site is more sensitive and could respond with some type of erosive failure. The soils on the ski slopes are generally quite thin and, therefore, they are susceptible to perched water table conditions, and these conditions result in greater potential for surface runoff either from melting snow or from rainfall events. Higher potential runoff also leads to increased potential sheet, rill, and gully erosion. In addition, saturation of the soil profile above shallow bedrock on steep slopes will lead to increased potential for mass wasting.

Evidence presented in scientific literature indicates that areas with artificial snow have delayed dates for complete snow disappearance from ski slopes. It is suggested that the increased soil insulation from the larger snow depth will lead to less soil freezing and this can then increase infiltration of snowmelt water. The extra cushioning effect of the added snow helps to reduce the mechanic damage (from skiing and snow grooming machines) to vegetation observed in areas covered only by natural snow. The added moisture provided by artificial snow is also beneficial to the promotion of vegetative growth in water short areas (arid and semi-arid areas), but it is not clear that this benefit is realized in humid regions like northern Minnesota.

While there are demonstrated benefits to artificial snow, one potential negative effect would be the increased stored water in shallow soils, leading to increased potential for surface runoff in spring and early summer rainstorms, and possibly increased potential for mass wasting on steep slopes due to higher stored soil moisture in shallow soils. In addition, the delayed disappearance of snow delays the development of vegetation, thereby delaying the development of the protective plant cover that helps to reduce erosion potential from spring/summer rainfall events. There is also the effect of additives to the snowmaking water that promotes the formation of snow at higher temperatures; these additives, whether sterilized bacteria or chemical ions (salts) can have some beneficial and some detrimental effects. These effects involve impacts (beneficial or detrimental) to the soil, the vegetation, and the receiving water aquatic environment.

Thus the locations of artificial snow application, the conditions of the soil and perched water table beneath it, the routine assessment of the slope conditions and vegetated cover, installation and operation of special best management practices (BMPs) to manage for artificial snow runoff, as well as the other factors mentioned in the EAW are important in understanding how erosion may occur on the steep ski slopes. This combination of all factors and their interaction will be especially important to evaluate if, going forward in the management of the ski area, snowmaking will be a routine practice. A process to evaluate snowmaking impacts (erosion/soil loss/sediment delivery) should be implemented with appropriate responses to mitigate any negative impacts. This could be translated into a pro-active operation and maintenance plan geared toward prevention of any further erosion and potential surface sediment runoff. Plans of this type can be found online for other ski resort areas.

Moreover, of the few published studies evaluating the effects of artificial snow and erosion production from ski slopes, healthy vegetation is critical. An important BMP for sustainable development of skiing as a recreational activity will be the continued maintenance of diverse, healthy plant cover on ski slopes. The plants will not only provide surface protection against erosive flows of water, but will also help to maintain water balances in hillslope soils that do not promote either excessive surface runoff or slope instability. It is therefore important that non-intrusive

monitoring be conducted on the ski slopes to evaluate the best management practices for promoting and maintaining healthy vegetative communities, along with other appropriate BMPs and pro-active management.

The forthcoming modeling report from the University of Minnesota, related to the Poplar River Total Maximum Daily Load (TMDL), will provide insight into the snowmaking impacts and the need for consistent and appropriate mitigation. The report is scheduled for completion in July 2012.

- Total Suspended Solid (TSS) concentration data was compiled for two sampling sites on the Poplar River near its confluence with Lake Superior. The data suggest that the TSS concentrations in the Poplar River have decreased. which then suggests improving water quality. However, this conclusion is made solely on a visual observation of the concentration data (and charts). TSS load calculations have not been made, so load comparisons cannot be made yet. The reason for the apparent decreases in concentration cannot be identified without further analysis, but the data suggests that the BMPs installed in the watershed are having an effect. A key additional analysis of the data will involve a comparison of precipitation and stream flow for the years. Until then, a comparative load analysis has not been done to date on the data sets, so this review of TSS concentrations cannot be compared to the load calculations generated for the TMDL in the previous project work. The "final" conclusion of MPCA staff at this point is that a limited review of the data suggests that the lower TSS concentrations from 2001 to 2011 indicate an improvement in the water quality of the Poplar River. Please contact Greg Johnson at 651-757-2471 if you have questions regarding water quality monitoring of the Poplar River.

Water Quality: Wastewaters (Item 18)

The Project consultant has indicated to MPCA staff that the pipeline route will result in the removal of one groundwater monitoring well that is currently required by the MPCA State Disposal System Permit issued to Lutsen Resort Company. As the Project moves forward, future discussions with MPCA staff will be necessary to ensure the well is sealed in accordance with appropriate rules and codes, and that a replacement monitoring well is properly constructed, if deemed necessary. Please contact John Thomas at 218-302-6616 if you have questions regarding this issue.

Solid Wastes, Hazardous Wastes, Storage Tanks (Item 20)

- This section of the EAW should identify any chemicals necessary for the operation of the water treatment plant, as well as any wastes that would be generated as a result of facility operation.

- The operation of heavy equipment in and near lakes and streams obligates the Project proposers to develop a plan for managing fuels and lubricants, including a plan of action to implement in the event of spills. Project proposers and their contractors should be prepared to respond to spills and to recover and contain spilled material as quickly and thoroughly as possible. For petroleum spills that are five or more gallons, the Project proposers and/or their contractors are required to contact the State Duty Officer at 651-649-5451 or 800-422-0798. Information on reporting spills and leaks is available on the MCPA website at http://www.pca.state.mn.us/index.php/view-document.html?gid=2807 .

Cumulative Potential Effects (Item 29)

The document does not provide adequate analysis of the cumulative potential effects for those other projects that were mentioned in the EAW (see comments above under item 6). This should include the expansion and redevelopment of the golf course, expansion of the ski hill and snowmaking capabilities, as well as other proposed developments in the immediate Water District area (e.g., within and adjacent to AUAR boundaries) that have already been approved in some manner but have not yet achieved full build out. While general statements are made in the EAW, more specific detail on the potential effects of other future projects should be analyzed and documented as part of the EAW. In addition, the Water District comprises 3,500 acres of land area, while the AUAR area constitutes approximately 1,317 acres. The AUAR boundary has traditionally been considered to be the focus area for future development in the Lutsen ski hill area. Also, the availability of water has been a limiting factor for development in this area. With the establishment of the Water District and water source necessary for most development, the potential for future development will now be expanded, from 1,317 acres to 3,500 acres. Therefore, the EAW needs to assess the effects that this Project will have on future development that may now be allowed to occur on lands within the Water District but outside of the AUAR boundary.

We appreciate the opportunity to review this Project. Please provide your specific responses to our comments and notice of decision on the need for an Environmental Impact Statement. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this EAW, please contact me at 651-757-2508.

Sincerely,

Karen Kromar

Karen Kromar
Planner Principal
Environmental Review Unit
Resource Management and Assistance Division

KK:mbo

cc: Craig Affeldt, MPCA, St. Paul
Suzanne Hanson, MPCA, Duluth
Tom Estabrooks, MPCA, Duluth
Karen Evans, MPCA, Duluth
Greg Johnson, MPCA, St. Paul
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July 11, 2012

VIA U.S. AND ELECTRONIC MAIL

Randall Doneen
Environmental Review Planning Director
Department of Natural Resources
500 Lafayette Road, Box 25
St. Paul, 55155-4025

Re: Lutsen Draft Environmental Assessment Worksheet

Dear Mr. Doneen,

I write to provide the comments of Minnesota Center for Environmental Advocacy ("MCEA"), the Duluth-McCabe Chapter of the Izaak Walton League, Minnesota Trout Unlimited, Northeastern Minnesotans for Wilderness, and Save Lake Superior Association on the Draft Environmental Assessment Worksheet ("EAW") for the Lake Superior – Poplar River Water District Project ("Poplar River Project").

MCEA is a Minnesota-based non-profit environmental organization, the legal and scientific voice protecting and preserving Minnesota's wildlife, natural resources and the health of its people. Minnesota Trout Unlimited is a nonprofit organization made up of several thousand members in seven chapters across the State of Minnesota. We work to conserve, protect, restore and sustain Minnesota's trout and salmon fisheries and their watersheds. Our vision is that by the next generation robust populations of native and wild trout and salmon will thrive in Minnesota's coldwater lakes and streams, so that our children can enjoy healthy fisheries in their home waters. Our members regularly fish the Poplar River. Northeastern Minnesotans for Wilderness ("NMW") is a non-profit corporation based in Ely, Minnesota. NMW was formed to protect and preserve wilderness areas and wild places and to foster education about the value of wilderness and wild places. NMW has over 400 members and supporters, most of whom live in the area covered by the Superior National Forest. The Save Lake Superior Association ("SLSA"), begun in 1969, is the oldest citizen group working exclusively to preserve and protect Lake Superior. SLSA serves to protect the integrity of natural land features of the North Shore. SLSA also educates the public about pollution and other threats to Lake Superior. IWLA is a national nonprofit conservation organization committed to protection of fish and wildlife, critical habitat, air and water resources.

Each of these organizations is interested in and concerned with the potential environmental impacts associated with the increased sediment loading into the Poplar River from increased snowmaking capacity at the Lutsen Mountains Resort. We appreciate the opportunity to comment on the Draft EAW.

I. FACTUAL BACKGROUND

A. History of Lutsen Mountains' Water Withdrawals for Snowmaking.

Lutsen Mountains Corporation's predecessor obtained a permit to withdraw water from the Poplar River in 1964. That permit was modified in 1986 to allow additional withdrawals of up to 12.6 million gallons per year. However, in 2001 and thereafter, Lutsen Mountains Corporation ("LMC" or "LM") consistently withdrew more water than allowed under the appropriation permit. In 2001 surface water withdrawals directly from this designated trout stream jumped to 60 million gallons. Exh. 1. Since this time, LMC' annual withdrawal has grown to more than 100 million gallons per year—nearly 10 times the permitted amount. *Id.*

After a decade of violating its appropriations permit, LMC went to the Minnesota Legislature in 2011 seeking a special exemption from state law, which prohibits appropriations from trout streams. In response, the Legislature enacted special legislation directing the DNR to issue a withdrawal permit.

The Minnesota Legislature, acting pursuant to Minn. Stat. § 103G.265, approved a withdrawal of up to 150 million gallons per year from the Poplar River for snowmaking and mandated that the permit be issued "without any additional administrative process." 2011 Minn. L. Ch. 107 § 101. The Legislature mandated that the withdrawal be suspended when the flow of the Poplar River falls below 15 cfs:

> The permit authorized under this section shall be suspended if the flow of the Poplar River falls below 15 cubic feet per second for more than five consecutive days. The permit authorized under this section shall be reinstated when the flow of the Poplar River resumes to 15 cubic feet per second or greater.

As directed, the DNR issued the permit with the condition that "appropriation shall cease at any time the flow in the Poplar River falls below 15 cfs for five consecutive days…" Exh. 3. (Permit No. 64-0846, ¶ 8). LMC's Co-President signed a contingency statement on behalf of LMC stating in part: "I agree to suspend my appropriation and withstand the results of no appropriation from the [Poplar River] should I be directed to do so by the Department of Natural Resources." *Id.* Nevertheless, in late Fall 2012, LMC sought an exemption from the 15 cfs limitation from the DNR. That exemption was granted in a temporary permit issued in November 2011. The temporary permit allows LMC to withdraw water from the Poplar River down to 5 cfs, the operational limitations of its pump intakes, not the 15 cfs required by the Minnesota Legislature.

The Minnesota Legislature placed another limit on LMC's withdrawals from Poplar River. LMC is required to cease withdrawals from the Poplar River within 5 years. Consequently, LMC is seeking another water source for its snowmaking. In 2012, LMC returned to the Legislature and obtained a provision in the bonding bill that allocated $6 million in public funds to establish a rural water district whose primary purpose is to provide water fto LMCfor snowmaking (76

percent as proposed), with limited use by a public golf course (17 percent) and other individual private residents (6.8%).

B. Description of Proposed Project.

As described in the EAW, the project consists of an intake from Lake Superior, a pump house to draw water into the pipeline, a pipeline running approximately 12,500 feet north from pump house, and a water treatment plant at the end of the pipeline.

LMC is also proposing to expand snowmaking infrastructure to 32 acres of existing trails, and construct 32 new acres of ski runs and trails with snowmaking infrastructure. Total snowmaking capacity at completion of this project will cover 343 acres, a 20.4% increase from the current 285 acres. Since these proposed expansions coincide with this water supply project these two expansions are clearly associated actions. The project will increased snowmaking capacity and enables the expansions.

LMC's existing permit allows the withdrawal of up to 150 million gallons of water per year. The proposed appropriation from Lake Superior will be 225 million gallons for snowmaking, representing a fifty percent increase in water use for snowmaking.[1]

C. Sediment and The Poplar River.

Under the Section 303(d) of the Clean Water Act, states are required to identify waters that fail to meet water quality standards. The Poplar River is a designated trout stream under Minnesota Statute 97C.001 and Administrative Rule 6264.0050, as well as a Class 2A Aquatic Life and Recreation water body under Administrative Rule 7050.0222. It was first listed on the Clean Water Act Section 303(d) Impaired Waters List in May 2004 by the Minnesota Pollution Control Agency for exceedances of the Minnesota mercury and turbidity water quality standards. The lower stretch of the Poplar River was listed again in 2006 for turbidity, the same year the Minnesota Pollution Control Agency initiated a Total Maximum Daily Load (TMDL) study. To date, the lower stretch of the Poplar River, designated AUID 04010101-613, remains on the 303(d) Impaired Waters list for mercury and turbidity water quality standards.[2]

Although not mentioned in the Draft EAW, it is important to note that reaches of stream monitored in the Upper Poplar River watershed are not impaired for turbidity. A 2006 study that was the basis for listing the lower reach of the Poplar River as impaired also investigated the water quality of the upper watershed area[3]. This investigation found a six-fold increase in total sediment loading in the lower reach compared to the upper portion of the watershed even though the upper sampling site captures over 90 percent of the watershed area.

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[1] Draft EAW, p. 8.
[2] *See* 2010 Approved List of Impaired Waters needing TMDLs, http://www.pca.state.mn.us/index.php/view-document.html?gid=17240 (last visited 5/15/2012).
[3] An Assessment of Representative Lake Superior Basin Tributaries. 2002 Minnnesota Pollution Control Agency. http://www.lakesuperiorstreams.org/general/ls-tributarystreamassessment-2002.pdf

This investigation and subsequent investigations specific to the lower watershed area provide clear evidence that activities in the lower watershed are the primary drivers for the observed dramatic increases in sediment loading. The photos below show a visual comparison of turbidity levels in the lower Poplar River during a storm in 2002. The top photo was taken near the upper gauge; the lower photo was taken near the lower gauge.[4]

[4] Photos courtesy of University of Minnesota St. Anthony Falls LAobratory Stormwater Research Update, August 2011, available at http://stormwater.safl.umn.edu/updates-august-2011 (last visited 7/11/2012).

Several studies in the lower Poplar River have been completed since listing on the 303d list. These studies identify a number of direct and indirect effects that a variety of land use and ski hill related activities have on increasing sediment loading in the lower watershed. The 2008 TMDL report found that ski runs consistently contribute a disproportionately large amount of total sediment loads[5] and that ski runs are responsible for 65 percent of average sediment delivery from upland erosion processes.[6] They concluded that 33 percent of the river's total sediment load is attributable to Lutsen's ski runs and associated bare trails and roads, even though those uses account for only 14 percent of the watershed's total surface area.[7] In a modeled scenario of future development ("build out") within the lower watershed they predicted an almost 20% increase in average annual sediment delivery.[8]

A recent University of Minnesota report, available only in draft at this stage, calculated the sediment delivery rate for LMC at 4 tons per acre, contrasted with a sediment delivery rate of only 0.32 tons per acre for surrounding forested areas.[9] According to the University of Minnesota Report, ski slopes produce more sediment per unit area than forested slopes for several reasons, including:

[5] RTI International, "Poplar River Turbidity Assessment," March 24, 2008, p. 29 (figure 10).
[6] *Id.* (figure 11).
[7] RTI International, "Poplar River Turbidity Total Maximum Daily Load Evaluation of Existing Data" 46-47, August 16, 2007. Attached as Exhibit 1.
[8] RTI International, "Poplar River Turbidity Assessment," March 24, 2008, p. 30 (figure 12).
[9] Hansen et al, "Poplar River Sediment Source Assessment," p. 22, March 30, 2010 (Univ. of Minnesota). Draft.

- Forested areas intercept and dissipate raindrop energy better than grass;
- Tree roots, organic material and fallen debris in forested areas, reduce runoff energy and promote infiltration;
- Grading of ski slopes exposes less permeable subsurface materials and increase compaction and
- Ski slopes receive an increase volume of water from snowmaking compared to forested areas.[10]

While these direct effects on sediment loading are well documented, it is also important to consider the indirect effects that hydrologic changes associated with the ski slopes and snow making have had on sediment loading particularly in areas near the Poplar River. As described in the EAW, the new pipeline will enable increased water use and the expansion of snowmaking activities. From 2001 – 2005, an average of 76.2 million gallons of water were use each year for snowmaking which equates to more than 11.7 inches of additional runoff for the lower watershed compared to without snowmaking. If the Poplar River exhibit similar characteristics as other North Shore streams[11] a total annual runoff (water yield) of 4 to 5 inches would be expected from the watershed which means that snowmaking activities currently result in nearly a tripling of runoff volume in the lower watershed the project could enable a doubling of this runoff.

This increased water yield for the lower watershed will not only directly increase sediment loading from the ski slopes and upland areas, it will also increase near channel erosion and sediment loading. A 2008 report on the Poplar River channel concluded that bed channel incision and stream lateral migration were not a significant source of fine sediment. Instead, they concluded that landslides near the active channel, incision along valley slopes, and localized erosion within the river valley related to land-use alterations were the primary long-term sources of sediment. These types of erosive features are most likely the result of increasing the frequency and magnitude of peak flows due to increased runoff from the lower watershed.

The TMDL report presents substantial evidence that highest sediment loads in the lower watershed are highly associated with high flow events in spring, particularly 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.[12]

[10] *Id.*
[11] Annual Stream Runoff and Climate in Minnesota River Basins. Todd Vandegrift and Heinz Stefan. U of Minnesota St. Anthony Falls Laboratory Project Report 543. 2010.
[12] *Id*. at 20.

The observed increased sediment loading in the lower Poplar River has had significant effects on the aquatic habitat provided in this designated trout stream[13][14]. The substrate in the lower reaches of the Poplar River has historically been dominated by gravel and boulder which provide interstitial spaces for a diverse and abundant aquatic invertebrate community. The documented hydrologic changes in the lower watershed and increased sediment loading are expected to create degraded aquatic habitat conditions and increased substrate embeddedness. This is likely to degrade the aquatic habitat in the lower reaches and reduce the quality of the aquatic invertebrate and fish communities. A study of the Poplar River invertebrate communities published in 2008[15] published results consistent with these expectations:

> A number of indicators point to the lower mainstem of the Poplar being a physically harsh environment due to flow velocity (particularly during spates), lack of refugia such as pools and under-bank areas, and the potential for high flow events to carry large sediment loads. These indicators include 1) the relatively high current velocity even during summer low flow, 2) the large average substrate size (boulders, then cobble) and lack of fine substrates and large wood, 3) the relatively low abundance of invertebrates at some sites, and the overall low relative abundance of delicate and sensitive taxa (e.g., mayflies, stoneflies, and caddisflies) even though a variety of these taxa were collected, 4) the predominance of Chironomidae, which are physically hardier and can fill many of the feeding niches of other invertebrates, 5) the relatively high abundance of clingers and low abundance of burrowers and filterers, 6) the low abundance of swimming invertebrates relative to clingers and climbers, and 7) the high overall tolerance values for Poplar sites.

The study concluded:

> This physical harshness likely results from the steeper gradient, higher flow during spates, lack of refugia for biota during spates, and the probability that high flows contain a relatively large amount of suspended sediment particles that can dislodge or damage invertebrates that cannot find refuge.

The harsh environment described in this report also has implications for the fish communities in the lower Poplar River. Coldwater streams like the Poplar River provide habitat conditions suitable to sustain trout and salmon populations (primarily low water temperatures, high dissolved oxygen, and high water quality). In DNR surveys prior to 2002, young brook trout and rainbow trout have consistently been captured in the lower reaches of the Poplar above and below the barrier falls[16]. DNR fish assessments in 2006 and 2007 provide evidence for reduce

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[13] Sediment in streams. Sources, biological effects, and control. Tom Waters. American Fisheries Society Monograph. 1995.

[14] See overview of effects at http://www.lakesuperiorstreams.org/understanding/param_turbidity.html#impacts

[15] Poplar River Macroinvertebrate and Habitat Survey. Valerie Brady and Dan Breneman. Natural Resources Research Institute Technical Report NRRI/TR-2008/27. 2008

[16] Minnesota Dept. of Natural Resources. Section of Fisheries. Stream Population Assessment, Poplar River. Grand Marais Fisheries Office. (1983, 1990, 1991, 1992, 1995, 1998, 2002). *See also* Minnesota Dept. of Natural Resources. Section of Fisheries. Stream Survey, Poplar River. Grand Marais Fisheries Office. (1989).

abundance of fish in these reaches. Catches of brook trout and rainbow trout remain below the normal range for streams in the region. In its lowest reaches, below the barrier falls, sampled fish prior to 2002 included brook trout, pink salmon, rainbow trout, walleye, northern pike, and sunfish. The state record Chinook salmon (33lb. 4 oz.) was caught by an angler in the lower reach of the Poplar River below the barrier falls in 1989. In 2006, no trout were captured and in 2007, the catch was below the normal range.

In sum, all available evidence shows that activities related to the ski hill operations have had significant environmental effects on the water quality and aquatic habitat found within the lower Poplar River.

D. Lutsen Mountains' Efforts To Control The Sediment.

The TMDL report includes the following five general recommendations to reduce sediment loading in the lower Poplar River:

- Ski runs appear to contribute significant amounts of sediment. Activities related to increasing vegetative cover and controlling erosion should be continued.
- The policy of evaluating dirt trails and roads within the property of Lutsen Mountain Resorts should be continued and actions designed to reduce erosion from these sources should be taken.
- The ravines and gullies identified in this report should be further investigated. If runoff from developed lands is contributing to these, erosion in the ravines should be mitigated by slowing and/or removing the flowing water and restoring the gully so further erosion does not occur.
- The megaslump should be stabilized to limit further erosion.
- Runoff from impervious areas, dirt roads, parking lots, and bare areas should be controlled and treated if found to have high turbidity levels, or contributes to the formation of ravines or gullies.

LMC, in cooperation with Cook County and the State of Minnesota has taken several steps to meet these recommendations to mitigate the significant changes in the hydrologic regime and sediment loading caused by activities in the lower watershed related to ski hill operations. Most of this work has been initiated through the Poplar River Management Board, a group of landowners and public agencies formed to address the sediment problem in the river. To date, projects include: elimination of some service roads and trails; implementation of a project to stabilize the so-called "megaslump," the largest landslide along the river located conveniently adjacent to the discharge point of the wastewater treatment ponds; and implementation of three stormwater management systems. Stabilization of the "megaslump" project was funded through $400,000 of state and federal funds.[17] The most recent stormwater management system is publicly funded through the Great Lakes Commission Great Lakes Basin Program for Soil Erosion and Sediment Control.[18]

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[17] *See* www.poplarriverboard.com, last visited July 5, 2012.
[18] http://www.bwsr.state.mn.us/aboutbwsr/snapshots/10-2010.pdf (last visited July 5, 2010).

It remains to be seen whether these limited actions proposed and completed to date on a small portion of the lower watershed will reduce sediment loading, restore channel stability, and meet water quality standards.

II. LEGAL BACKGROUND

The EAW for the Poplar River Project is mandatory under Minnesota Rule 4410.4300, subpart 24.A. An EAW is a "brief document which is designed to set out the basic facts necessary to determine whether an environmental impact statement is required" for the project.[19] An EIS is required where any major governmental action creates the "potential for significant environmental effects."[20] The regulatory government unit's ("RGU's") analysis must take into account both the EAW and any comments received from the public.[21]

According to the Environmental Quality Board rules, the RGU must consider four criteria when determining whether a proposed project has the potential for significant environmental effects.[22] First, the RGU must consider the "type, extent, and reversibility of environmental effects." Second, it must consider the cumulative potential effects. In considering cumulative potential effects, the RGU must consider "whether the cumulative potential effect is significant; whether the contribution from the project is significant when viewed in connection with other contributions to the cumulative potential effect; the degree to which the project complies with approved mitigation measures specifically designed to address the cumulative potential effect; and the efforts of the proposer to minimize the contributions from the project."

Third, the RGU must consider "the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority." When considering ongoing regulatory authority, the RGU may rely "only on mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the project…."[23] The RGU may not rely on future monitoring or permit conditions to address issues should they arise. Rather, the "very purpose of an EIS…is to determine the potential for significant environmental effects *before* they occur."[24] Fourth, the RGU must consider "the extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other EISs."[25]

Additionally, any "[c]onnected actions and phased actions shall be considered a single project for purposes of the determination of need for an EIS."[26]

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[19] Minn. Stat. § 116D.04, subd. 1a.
[20] *Id.*, subd. 2a; Minn. R. 4410.1700, subp. 1.
[21] Minn. Stat. § 116D.04, subd. 2a(b).
[22] Minn. R. 4410.1700, subp. 7.
[23] Minn. R. 4410.1700, subp. 7.
[24] *Trout Unlimited, Inc. v. Minnesota Dept. of Agriculture*, 528 N.W.2d 903, 909 (Minn. Ct. App. 1995).
[25] Minn. R. 4410.1700, subp. 7.
[26] Minn. R. 4410.1700, subp. 9.

III. THE LAKE SUPERIOR – POPLAR RIVER WATER DISTRICT PROJECT SHOULD BE SUBJECT TO AN ENVIRONMENTAL IMPACT STATEMENT DUE TO THE SIGNIFICANT ENVIRONMENTAL EFFECT OF INCREASED SEDIMENT ON THE POPLAR RIVER.

A. Expanding Snowmaking Capacity And Activities Related to Ski Hill Operations Will Increase Sediment Loading In The Poplar River. Sediment In The River Is A Significant Environmental Effect.

The lower Poplar River is a "beautiful and unique setting that stands out even against the beauty of the Minnesota North Shore."[27] It remains "one of Minnesota's most popular destinations with its unique blend of recreation and natural beauty."[28] However, based on recent studies, land use activities within the lower watershed of the river have taken its toll on the quality of the water and stream habitat. The Poplar River has been listed as impaired for turbidity since 2004.

The studies prepared for the TMDL show that activities in the lower watershed associated with operations of LMC are the largest single source of this sediment. LMC's activities contribute to the sediment problem in the Poplar River in several ways. First, the hills are clear-cut. Forested areas contribute far less sediment than non-forested. Second, LMC grades the ski hills, compacting the soil and making it less permeable. Third, they make artificial snow, resulting in more run-off from the ski hills. The run-off picks up sediment and carries it into the river as it travels downhill. LMC now proposes to expand at least two, if not three of these activities. Moreover, the Draft EAW itself concedes that "These proposed expansions have the potential to increase sediment in stormwater runoff."[29]

The current turbidity impairment in the Poplar River is a significant environmental effect that has garnered the attention of landowners, recreationalists and public agencies. Among other activities focused on this problem:

- Local landowners and agencies formed the Poplar River Management Board to address the water quality problems in the Poplar River in 2005.
- The Poplar River Management Board has applied for and received two grants totaling over $1 million from state and federal agencies to fund work to clean up sediment and channel stability problems on the river.
- The MPCA has classified the lower stretch of the Poplar River as impaired for turbidity, meaning that it fails to meet state water quality standards under the Clean Water Act.
- The MPCA is working to complete a TMDL study to classify the sources of sediment polluting the river, as it is required to do under Section 303(d) of the Clean Water Act. This process has resulted in at least two separate studies; the first by consulting firm RTI International, commissioned by the EPA, and the second by the University of Minnesota, commissioned by the MPCA.

[27] *Id.*, p. 8.
[28] *Id.*
[29] Draft EAW, p. 10.

The volume of time and resources alone that are used to address the sediment problem in the Poplar River are indicative of the significant environmental impact recognized by all parties. Given the conclusions of the studies of the sediment problem, it should be self-evident that increased snowmaking has the potential to contribute to thissignificant environmental effect of excessive sedimentation of the river.

In fact, regarding sediment, there is compelling evidence that current activities associated with the ski hill operation and snow making have already had a significant impact on sediment loads and habitat of the Poplar River. The proposed increase in water withdrawals and 20 percent expansion of ski slopes with snowmaking are also likely to have significant effects, as described in Section I.C., above. The project will result in expansion of the ski kill and expansion of snowmaking activities. In addition, since former limitations on the amount of water that can be applied to the ski slopes will no longer exist, it is to be expected that more water will be applied. These activities have proven to have significant environmental effect already and the build-out scenario presented in the 2008 report clearly shows an expected increase in sediment loading will occur if development occurs as described in the Alternative Urban Areawide Review[30] (AUAR). Stormwater management of the large increase in runoff volume may work to reduce the effects; however, stormwater controls are voluntary practices and neither the history of the sediment problem in the Poplar River nor the Draft EAW indicate that the project proponent is proactive in any way in managing runoff from operations of the ski hill.

The EAW also fails to take into consideration the potential impacts to the aquatic community in the Poplar River which the pipeline trench itself may have. The pipeline trench has the potential to interrupt the flow of groundwater seepage to the river. This groundwater seepage could be critical to trout survival at certain times of the year (e.g., during periods of low summer flows when cold water flows could provide localized refugia for trout), providing important water volume, thermal benefits (both cooling effects in summer and warming effects in winter), or both. The pipeline has the potential to cut off ground, and even surface water, flows for long stretches of river. While the flow above the crossing may eventually re-enter the river there, aquatic life in the 4,000' reach above this may be substantially impacted. The entire reach downstream from this crossing stands to have all the groundwater flows from the west side of the valley diverted directly to Lake Superior via this trench. Even modest flows at critical times can be essential to maintain trout populations here.

The DNR should find that this project has a "potential for significant environmental effects" and complete an Environmental Impact Statement evaluating the effects of this project on the already-impaired Poplar River.

[30] LowerPoplar River: Alternative Urban Areawide Review. Tim Nelson, Cook County Planning. http://www.co.cook.mn.us/images/stories/pzoning/AUAR%209%20Mar%202006.pdf (last visited 7/11/2012).

B. The Draft EAW Fails To Determine Whether There Is A Potential For Significant Environmental Effects. It Should Calculate Increased Sediment Load From The Proposed Action.

The Draft EAW estimates that with the golf course expansion and irrigation, construction of additional ski runs and increased snowmaking, it will add 11.2 million cubic feet (MCF) of water to the river, an increase it calculates at less than one percent. There are several problems with this calculation.

1. The Draft EAW calculates an increase in total water runoff, not an increase in sediment.

The Draft EAW states that "[a]n approximation of the increased runoff can be obtained estimating baseline runoff from the 348 acre ski area." But total sediment loading or erosion, not total water runoff, is the relevant question when it comes to significant environmental impact on the Poplar River. The TMDL studies show that ski areas contribute far more sediment, proportionally, to the river than forested areas. So, while the artificial snow may add a small percentage of total water to the watershed, it will likely add a large percentage of total sediment.

Within the lower stretch of the river, ski slopes contribute 4 tons/acres of sediment, while forested areas produce 0.32 tons/acre, or approximately ten times less than the ski slopes. LMC is planning three types of expansions that should be evaluated separately:

- Expansion of snowmaking capacity to existing, ungraded ski slopes. Ungraded ski slopes do, on average, have better infiltration rates than graded ski areas, and the Draft EAW states that the existing ski area to which snowmaking will be expanded is ungraded.[31] But the infiltration rate for ungraded ski areas is still lower than forested areas, and the addition of snowmaking will likely increase sediment loading from this area that currently does not have snowmaking.[32]
- Construction of new ski slopes, and addition of snowmaking to these new slopes. The Draft EAW does not address whether the proposed new ski trails, will be graded or ungraded.
- Greater snowmaking capacity for all existing ski areas, graded and ungraded.

Thus, a calculation of the increased sediment impact from snowmaking involves far more than simply calculating a percentage of increase in water contributed to the watershed. The Draft EAW fails to do any of these calculations, and the TMDL reports will not do so, either.[33] It falls to the DNR and LMC to make those calculations in association with this EAW, or an EIS.

[31] *Id.* at 23 (Figure 5).
[32] *Id.*
[33] *Id.* at 61 ("The U of M did not investigate the effect of snowmaking on sediment delivered to the river.").

2. The Draft EAW calculates the additional water runoff as a percentage of the entire watershed, but only the lower stretch of the river is classified as impaired.

The upper portion of the Poplar River watershed constitutes ninety percent of the total watershed area. This area is densely forested with a shallow grade and the Poplar River in this portion of the watershed is not impaired.[34] Closer to Lake Superior, the river is classified as impaired for turbidity. All studies have concluded that activities associated with the ski hill operations are the primary source of turbidity in the lower reaches. Increasing the ski hill area within the lower watershed and increasing the amount of area of the lower watershed where snowmaking will occur by 20 percent are the relevant factors to consider. Given this context, it is inappropriate to dilute the potential impacts of changes proposed by this project by evaluating them in the context of the entire watershed area.

3. The Snowmaking Estimates Are Too Conservative.

The Draft EAW estimates that in 15 years, snowmaking will have increased from 98 million gallons per season to 146 million gallons per season. Yet LMC has asked for an appropriation of 225 million gallons with the construction of this project. The EAW fails to explain why it is measuring environmental impact assuming that LMC will use less water for snowmaking than it has requested. Since LMChas asked for 225 million gallons, the EAW should evaluate the environmental impact from that potential appropriation.

B. The Connected Actions of Expanding the Ski Area And Other Potential Development Will Increase Sediment In the Poplar River.

The Draft EAW should clarify whether the expansion of the ski slopes and golf course are connected actions. If they are connected actions, they should be evaluated as part of this EAW. It appears that the proposed expansions are connected actions as the pipeline will allow far greater water withdrawals than LMC has available from the Poplar River, enabling greater snowmaking capacity on the new ski hills and irrigation on the expanded golf course.

Since both the the ski hill expansion and golf course expansion appear to be dependent upon the more reliable, increased water supply they are connected actions and should be analyzed in this EAW.[35] Two projects are "connected actions" if:

> (A) one project would directly induce the other;
> (B) one project is a prerequisite for the other and the prerequisite project is not justified by itself; or
> (C) neither project is justified by itself.[36]

Additional development in the area should also be considered a "cumulative potential effect."[37] A "cumulative potential effect" is defined as "the effect on the environment that results from the

[34] *Id.*, p. 11.
[35] Minn. R. 4410.1700, subp. 9.
[36] Minn. R. 4410.0200, subp. 9c.

incremental effects of a project in addition to other projects in the environmentally relevant area that might reasonably be expected to affect the same environmental resources, including future projects actually planned or for which a basis of expectation has been laid, regardless of what person undertakes the other projects or what jurisdictions have authority over the projects."[38]

The Draft EAW identifies several purposes for the project. These are: (1) to allow LMC to withdraw its water for snowmaking from Lake Superior rather than the Poplar River; (2) to accommodate an expansion of irrigation the golf course, as the current pipeline does not have the capacity to provide water for additional irrigation; (3) to provide potable water because locals wells are declining in production, especially for larger resorts; and (4) to give local fire departments better access to water for re-filling tankers during a fire.

The Draft EAW identifies future stages of development, including increasing capacity of the water treatment plant, and new spur lines on the pipeline to accommodate future users. It also mentions expanded irrigation capacity on the golf course, expanded snowmaking on existing 32 acres of trails, and 32 new acres of trails with new snowmaking capacity.

The golf course irrigation expansion is a connected action, as the existing pipeline cannot support it, and the new pipeline is required. The new pipeline is a "prerequisite" for this irrigation expansion.[39]

Expanded snowmaking capacity on existing trails and new ski trails with snowmaking are also "connected actions" within the meaning of the statute. LMC can only withdraw water from the Poplar River for four more years; then it must find another source. If it does not find another source, it cannot make snow. Expanding snowmaking onto existing and new runs is nonsensical if there is no water with which to make the snow; the expansion would not be "justified" without the pipeline.[40] In addition, LMC has contended that it is not an economically viable without snow-making[41]; presumably that means that building ski runs without artificial snowmaking is pointless because the use of those runs would be too limited.

The impact of the expansions planned in connection with the pipeline is not fully considered in the current Draft EAW. While the contribution of sediment from adding 31 acres of ski runs is considered in the context of the main spring snow melt, its impact during the summer and fall is overlooked, and downplayed by obscuring it within the large spring flows. These newly created slopes cause increased erosion and sedimentation (as compared to forested land) until snow

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[37] Minn. R. 4410.1700, subp. 7.
[38] Minn. R. 4410.0200, subp. 11a.
[39] Minn. R. 4410.0200, subp. 9c(B).
[40] Minn. R. 4410.0200, subp. 9c(C).
[41] *See, e.g.*, Letter from Commissioner Landwehr to Lutsen Mountains Corporation, dated November 10, 2011 ("LMC has indicated that it will go bankrupt if it is not able to make snow in the early winter…if snowmaking is cut off after December, as was suggested by some providing public comment, Lutsen may not be able to recover from what is anticipated to be a slow start to the skiing season."). Available at http://files.dnr.state.mn.us/waters/watermgmt_section/pwpermits/lutsen_final_signed_permit.pdf (last visited 7/10/2012).

cover is established for the season. Summer or fall rains can flush sediment into the river which can smother trout, steelhead and salmon eggs depending upon the precise time of year. This impact can be especially acute if followed by a long period of low flows.

Lutsen should also be required to identify any future plans for development beyond the 63-acre expansion identified in the EAW. There is good reason to think that LMC intends a future expansion of its ski hills that is not explored in this EAW. The Draft EAW states that in 15 years, LMC will use 146 million gallons of water per season. But it has requested an appropriation permit from DNR for 225 million gallons. One can only assume that by asking for so much more water than it needs, LMC is planning additional expansions of its resort and ski hills.

The Draft EAW indicates that the current aquifer is declining and larger resorts will be the first to use water from the pipeline. It does not explore, however, whether any of the "larger resorts" are limited in growth by the declining aquifer, and would now be able to expand because of the increased potable water resources. If the increased potable water resources from the pipeline "directly induce[s]" development of the resorts, that development is a "connected action" and must be analyzed as part of this EAW. It is not relevant whether LMC is responsible for that development or one of the other property owners; it must be "included regardless of what person undertakes the other projects or what jurisdictions have authority over the projects."[42]

Since both the ski hill expansion and golf course expansion are connected actions, they should be analyzed in this EAW.[43] To be clear, the position of MCEA and the undersigned organizations is that the expanded snowmaking capacity alone has the potential for significant environmental effects and justifies an EIS. Artificial snowmaking was identified in the University of Minnesota report as one of four ways in which LMC contributes to the sediment problem. However, adding artificial snow to existing runs, building new runs with artificial snow, expanding the golf course and adding irrigation, as well as any additional development enabled by the new water source should, by law, be further analyzed.

IV. IN THE ALTERNATIVE, LUTSEN MOUNTAINS MAY OBTAIN AN NPDES PERMIT FOR ITS DISCHARGE OF SEDIMENT. THIS MAY BE AN ADEQUATE MITIGATION MEASURE TO AVOID AN EIS.

A. Lutsen Is A Point Source Of Sediment From Its "Tightline" Systems, Rills, Gullies, Ravines, Ditches And Other Conveyances On Its Property. A NPDES Permit Would Require It To Limit Its Sediment Discharge Into The Poplar River.

When determining whether a project needs and EIS, the RGU must consider "the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority."[44] When considering ongoing regulatory authority, the RGU may rely "only on mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified

[42] Minn. R. 4410.0200, subp. 11a.
[43] Minn. R. 4410.1700, subp. 9.
[44] Minn. R. 4410.1700, subp. 7.

environmental impacts of the project…."[45] Although LMC is participating in the TMDL process, this is not a regulatory process and will not bring Lutsen Mountains under the authority of any regulatory agency. Since 2008, no TMDL implementation plan has been completed and review of current implementation plans in the Knife River and elsewhere in Minnesota provide no assurance that anything but voluntary Best Management Practices (BMP) will be recommended. However, LMC is subject to the Clean Water Act, and should be brought under the regulatory authority of the MPCA by applying for an NPDES permit for its discharge of sediment, a pollutant. An NPDES Permit will require specific mitigation measures that can reasonably be expected to mitigate the sediment problem by requiring LMC to decrease its sediment discharge to comply with water quality standards.

LMC is discharging pollutants from a point source and is therefore subject to NPDES. The water it appropriates from the Poplar River is later discharged, laden with sediment, back into the Poplar River from man-made surface and subsurface conveyances. These include its ski hills, which create run-off channels, as well as pipes and containers installed specifically to control and direct runoff. Snowmaking guns, the creation of ski slopes leading to discrete runoff channels, and the installation of conduit to channel snowmelt are all point sources as defined in the Clean Water Act. 33 U.S.C. § 1362 (point source means "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, . . . from which pollutants are or may be discharged.")

Likewise, there is no question that pollutants are discharged from these point sources, as the ski hills are the largest single source of sediment. Obviously, the addition of artificially made snow, as well as the proposed expansion of ski hills, contributes to increased runoff and increased pollutant delivery to the Poplar River.

The Clean Water Act prohibits point source discharges absent a NPDES permit. 33 U.S.C. §§ 1311(a), 1342. If LMC obtains a NPDES permit, it will be required to control its sediment discharge to meet water quality standards. If it fails to do so according to the terms of the permit, the MPCA or other entities can take appropriate enforcement actions. A NPDES permit would be an effective mitigation measure to ensure that LMC's snowmaking and any proposed expansion of its ski hills and resort facilities would not cause additional environmental harm to the Poplar River.

B. The Mitigation Measures Identified In The EAW Are Inadequate.

The Draft EAW identifies several mitigation measures but fails to demonstrate that any will be effective in mitigating the effects of the project.

First, the Draft EAW misleadingly suggests that artificial snow reduces the potential for erosion. None of the TMDL related studies have ever suggested that snowmaking will have any beneficial effect. To the contrary, they have made it clear that the sheer volume of water deposited on the ski hills in the lower watershed contributes significantly to sediment loading. It is inappropriate to suggest this in an EAW based on a speculative theory presented by the project

[45] *Id.*

proposer. The turbidity impairment occurred during a period of extensive and increasing snowmaking activities. No beneficial effects have been identified or studied to the degree to make any determination. The effect of artificial snowmaking should be studied before any conclusions can be drawn.

Second, LMC has implemented several projects to control the sediment, but the effectiveness of these projects, if any, remains to be seen. The Draft EAW states that "[c]ontinued water quality monitoring by the MPCA has shown a trend toward reduced sediment load within the Poplar River, indicating that these efforts have been successful." However, the MPCA cautions against making any conclusions based on existing data because it has not been analyzed. "Eyeballing" the data is not a solid basis for making conclusions about a trend, especially after a dry winter. Moreover, the University of Minnesota study concludes the opposite, stating that although these projects "should help to control the erosion within the Poplar River watershed, they do not appear to be solving the problem."[46] Given the magnitude of the megaslump and the fact that this area has been stabilized it would not be surprising to see improved water quality; however, this is not the same as meeting water quality standards.

The Draft EAW also identifies additional projects to be completed in 2012 and 2013. Again, the effectiveness of these voluntary projects is unknown. The Draft EAW makes no attempt to analyze the potential for success of these projects. Additionally, it appears that, at best, these projects are attempting to address LMC's current sediment loading, not its future expansion. The Draft EAW does not address whether these projects are designed to mitigate the additional sediment load caused by LMC's proposed expansion of snowmaking and ski hills. The planning of LMC's future projects to address the sediment problem goes back to at least 2010, pre-dating the appropriation from the Legislative to fund this project.[47]

Indeed, the Draft EAW seems to state that increased sediment loading from the proposed expansion will *offset* gains made by the current attempts to control sediment: "Any potential increase in sediment load to the Poplar River will be compensated by previous, ongoing and future storm water management projects as part of the Total Maximum Daily Load (TMDL) process that is underway as a result of the turbidity impairment." In addition to the fact that this statement is entirely unsupported by any calculations, if the current measures will reduce sediment, and this new expansion increases it again, any gains from the TMDL process will be lost.

This is no small matter. The Minnesota Board of Water & Soil Resources reported that the projects to reduce sediment at the Poplar River "have the potential to reduce enough sediment loading to make the Poplar River the first water body in Minnesota to be removed from the 303(d) list."[48] While this statement seems quite optimistic, if it is true, it would be an extraordinary accomplishment. The increased sediment loading from this proposed expansion of snowmaking and ski hills threatens the potential for achievement of that goal.

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[46] Poplar River Sediment Source Assessment Report, p. 26.
[47] *See*, BWSR Snapshots, October 2010, available at http://www.bwsr.state.mn.us/aboutbwsr/snapshots/10-2010.pdf (last visited July 6, 2012).
[48] *Id.*

Third, the regulatory mechanisms the Draft EAW identifies to address sediment will not be effective because they only regulate the construction phase. The Draft EAW states that "Increases in sediment runoff due to construction activities, snowmaking, irrigation, and planned expansions will be minimized as part of Stormwater Pollution Prevention Plans (SWPPP) required by these activities."[49] That is simply untrue. LMC is only proposing to obtain a construction stormwater permit. An SWPPP "is a plan that describes the strategies and steps that will be taken to prevent nonpoint source pollution discharging from a construction site."[50] The SWPPP will not address snowmaking, and it will only address runoff from irrigation or planned expansions directly from the construction site for the short duration of the construction phase. Likewise, the Cook County stormwater management requirements, referenced on p. 11 of the Draft EAW, primarily calls for the implementation of a SWPPP and use of a construction stormwater permit.[51] The Draft EAW does not identify any additional requirements that would mitigate erosion or sediment problems after construction or on existing ski hills.

SUMMARY

The following proposed actions have the potential for significant environmental effects on the Poplar River: (1) increased snowmaking; (2) expanding snowmaking to new ski areas; (3) construction of new ski areas; and (4) other proposed development, including expanding and irrigating the golf course, and additional development that the increase in water appropriations will allow. At a minimum, this EAW should be redone to adequately analyze the increased sediment load from the proposed project, its connected actions and cumulative effects. However, a new EAW with accurate calculations will almost certainly find that the project has the potential for significant environmental effects. By Minnesota law, a project that has a potential for significant environmental effects should be subject to an EIS.

However, if the project proposer can identify mitigation measures that are "specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the project,"[52] an EIS may be avoided. LMC may avoid an EIS by applying for a NPDES permit for its sediment discharge. A NPDES permit would require LMC to control its sediment discharge to comply with existing water quality standards.

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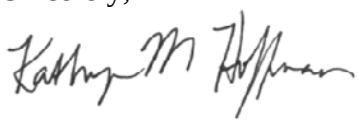
[49] Draft EAW, p. 12.
[50] [50] SWPPP, published by Minnesota Pollution Control Agency, available at http://www.pca.state.mn.us/index.php/view-document.html?gid=7423 (last visited 7/11/2012).
[51] *See* Cook County Ordinance No. 51, 5.2(A) ("The stormwater management plan shall contain the information required for compliance with the most recent requirements of the Storm Water Pollution Prevention Plan (SWPPP)…")
[52] Minn. R. 4410.1700, subp. 7.

Sincerely,



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Izaak Walton League, Duluth-McCabe Chapter

Northeastern Minnesotans for Wilderness

Save Lake Superior Association

Trout Unlimited-Minnesota

cc: Karen Evens, MPCA

From:	AuldBear@aol.com
To:	*Review, Environmental (DNR)
Subject:	Poplar River Water District EAW
Date:	Wednesday, June 13, 2012 10:13:37 AM

Golf courses and ski hills using water to sustain them or improve profit. Both activities are "artificial" - they could just as easily use rain water or natural snow. They want to enhance their water use only for greater profit.

The North Shore and inland areas are best left "natural" - not mechanically watered. Leave golf and skiing as natural acts, not unnartural ones. No water from the Lake, nor from the Poplar River. Let it come from the sky.

Dyke Williams
3725 Parkway
Deephaven, MN 55391
auldbear@aol.com

From: John Green
To: *Review, Environmental (DNR)
Subject: Poplar River Water District EAW
Date: Tuesday, June 19, 2012 11:54:49 AM

Comments on Lake Superior – Poplar River Water District Project EAW

Sec. 18, Water quality: Wastewater
a) Sources, composition, and quantities. "The proposed water district will not result in any change to the existing domestic and commercial wastewater generation or treatment." However, referring to Sec. 13, p. 8, the plan is to increase the water appropriation for potable drinking water from 5-6 MGY to 20 MGY. All of this water will become wastewater and be released to the environment.
b) Describe waste treatment methods . . . This section must be addressed. For instance, the current practice certainly involves on-site sewage systems, as well as the sewage lagoons so obvious in the air photos. The "suitability of site conditions" must be discussed.
c) Similar comment as for above. What is the capacity of the current lagoon system, and how will the increased water use be accommodated?

Sec. 19 a. Depth to ground water. These answers are wholly inadequate. Source of the information not given. Hard to believe the depth to water table can be "as much as 300 feet" in this District"; no reference.
Depth to bedrock. "Further North the bedrock gets deeper" is too vague to be useful. It sounds as if it must be at or very close to the surface is the pipeline crossing of the Poplar River might have to involve blasting or drilling of bedrock.

Sec. 25, Nearby resources. Archaeological, historical, or architectural resources. Basis for answer of "No"? What archaeological survey was carried out?
Designated parks: does not mention the nearby Lutsen Scientific and Natural Area.

Sec. 28, Impact on infrastructure. See Sec. 18 b, c: need for enlarging water treatment capacity since District is planning for increased domestic/commercial water use?

John C. Green, Ph.D.
1754 Old North Sore Road
Duluth, MN 55804

Minnesota
Historical Society

STATE HISTORIC PRESERVATION OFFICE

July 10, 2012

Randall Doneen
MN DNR Environmental Policy and Review
500 Lafayette Road, Box 25
St. Paul, MN 55155

RE: EAW – Lake Superior – Poplar River Water District
Lutsen Twp., Cook County
SHPO Number: 2012-2155

Dear Mr. Doneen:

Thank you for the opportunity to comment on the Environmental Assessment Worksheet prepared for the above project. It is being reviewed according to the responsibilities given the Minnesota Historical Society by the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act.

We do not believe that any above-ground cultural resources will be affected by this project. However, due to the nature and location of the proposed project, we recommend that an archaeological survey be completed. The survey must meet the requirements of the Secretary of the Interior's Standards for Identification and Evaluation, and should include an evaluation of National Register eligibility for any properties that are identified. For your information, we have enclosed a list of consultants who have expressed an interest in undertaking such surveys.

We will reconsider the need for survey if the project area can be documented as previously surveyed or disturbed. Any previous survey work must meet contemporary standards. **Note:** plowed areas and right-of-way are not automatically considered disturbed. Archaeological sites can remain intact beneath the plow zone and in undisturbed portions of the right-of-way.

Please note that this comment letter does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36CFR800, procedures of the Advisory Council on Historic Preservation for the protection of historic properties. If this project is considered for federal funding, or requires a federal license or permit, it should be submitted to our office by the responsible federal agency.

If you have any questions regarding our review of this project, please contact Kelly Gragg-Johnson at (651) 259-3455.

Sincerely,

Mary Ann Heidemann
Manager, Government Programs and Compliance

Enclosure: List of Consultants

July 3, 2012

Dear Sir:

I am voicing my disapproval of this water pipeline coming out of Lake Superior. I was on C. County's Planning & Zoning Committee for 5 yrs. and I seen so much taxpayers money go into that Ski Hi/area caused because of over-development. This will open the door for more development & more environment destruction which Taxpayers will have to pay to fix up again. They should have to pay this 3.6 million back to the state. The majority of the people that work up there are on poverty wages & the only ones that benefit from all this are the owners. The river will never be the same again & the main reason they wanted this pipeline is for snow-making & they should be held to that. There should be stipulations put on how much water they can use & where to use it. - Not for watering lawns - Hot Tubs - Golf Courses & other things that are not necessary. Stipulations put in place they can't come back begging for gov. for maintaining the waterline in the future & restrictions put on any more development. This pipeline will open the door for other corporations to draw water out of L. Superior. I feel this project is just a waste of Taxpayers money again. I was born & raised in this county & could write 10 pages of things about why I am against side of this. My Phone no. is 218-387-1727 if you want to find out more.

Thanks for reading this.

Lloyd Speck

Mr. Lloyd Speck
2441 W Highway 61
Grand Marais, MN 55604

7-10-12

RE: Lake Superior—Poplar River Water District EAW Worksheet

Mr. Doneen;

The W.J. McCabe Chapter of the Izaak Walton League of America is located in Duluth. Our Chapter has been active since the 1920's. We are keenly interested in ,water, watersheds, fisheries and related riparian zone matters.

We've recently met (2011 & 2012) with Mr. Skinner of Lutsen Mountain regards the permit they hold to pull snow make-up water from Poplar River. We've indicated our opposition to the in-river withdrawal, and, our support for what is now known as The Poplar River Watershed District. We communicated our support to the Minnesota Legislature in 2012.

In our conversations with Mr. Skinner, and Ms. Judy Erickson (retained by Lutsen Mountain as Legislative representative and community inter-face)we, and, Trout Unlimited made it clear that while we support L. Superior withdrawal, we had, and, have concerns about such water access in terms of adding additional energy for development in an important natural area already significantly stressed by heavy lower watershed development.

We note the MPCA concerns and questions, (letter to Randall Doneen 6-28-12). We share those concerns.

We do appreciate the work done by Lutsen Mountain and others voluntarily, and, under the TMDL process. We do appreciate the "unofficial", but, perceived impression by several commentators, that some improvement "may" be appearing as a result.

We do agree with MPCA concerns regards "other projects". (6-28-12) They need to be connected for better understanding cumulative impacts, and, appropriate mitigation.

Given the magnitude of the known impacts from the ski hill, slump area, waste disposal, etc., the McCabe Chapter IWLA, opposes approval of any expansion at this time of the golf course, or Lutsen Mountain. It will take some years of continued progress in order to make informed judgments on the advisability of any ski hill, golf course expansion.

On behalf of McCabe IKES;

Brent Gurtek,
Chapter President
1873 Korkki Road
Duluth MN 55804
218-525-7573

David Lenz
For Brent Gurtek
+ as approved by Brent

Randall, 7-10-12
, you are apparently on vacation — I had no email address for you. The above short comment letter has been approved by our BOD including President Brent Gurtek — Dave Lenz