DEPARTMENT OF NATURAL RESOURCES

RECORD OF DECISION

In the Matter of the Determination of the Need for an Environmental Impact Statement for the Lake Superior – Poplar River Water District FINDINGS OF FACT, CONCLUSIONS, AND ORDER

FINDINGS OF FACT

- 1. The Lutsen Mountains Corporation proposes creation of the Poplar River Water District and construction of a water pipeline and water appropriation from Lake Superior to provide potable and raw water to residential, commercial and government customers within the district.
- 2. A water appropriation application was submitted by the Poplar River Water District on January 17, 2012 requesting 450 million/gallons/year (MGY), from Lake Superior for snow making, irrigation and potable domestic uses. The data submittal for the EAW revised this request to 225 MGY for snowmaking and firefighting, 50 MGY for irrigation, and 20 MGY for drinking water.
- 3. The proposed project requires preparation of a State Environmental Assessment Worksheet (EAW) according to the rules of the Minnesota Environmental Quality Board (EQB) and the Minnesota Environmental Review Program for projects that propose a new appropriation of ground or surface water averaging 30,000,000 gallons per month.
- 4. The MDNR prepared an EAW for the Project, pursuant to Minnesota Rules, part 4410.4300, subpart 24.
- 5. The EAW is incorporated by reference into this Record of Decision on the Determination of Need for an Environmental Impact Statement (EIS).
- 6. The EAW was filed with the EQB and a notice of its availability was published in the EQB *Monitor* on June 11, 2012. A copy of the EAW was sent to all persons on the EQB Distribution List, to those persons known by MDNR to be interested in the proposed project, and to those persons requesting a copy. A press release announcing the availability of the EAW was sent to newspapers, and radio and television stations, statewide. Copies of the EAW were also available for public review and inspection at the MDNR Northeast Regional Office, the MDNR library, the Grand Marais Public Library,

and the Duluth Public Library. The EAW was also made available to the public via posting on the MDNR's website.

- 7. The 30-day EAW public review and comment period began June 11, 2012 and ended July 11, 2012, in compliance with the EAW public review and comment period pursuant to Minnesota Rules, part 4410.1600. The opportunity was provided to submit written comments on the EAW to the MDNR by U.S. Mail, by facsimile, or electronically.
- 8. During the 30-day EAW public review and comment period, the MDNR received eight comments from the following individuals:

Mary and Kenneth Hoffman

Karen Kromar, Minnesota Pollution Control Agency

Kathryn Hoffman, Minnesota Center for Environmental Advocacy

Izaak Walton League, Duluth-McCabe Chapter

Northeastern Minnesotans for Wilderness

Save Lake Superior Association Trout Unlimited-Minnesota

Dyke Williams
John C. Green
Mary Ann Heidemann, State Historic Preservation Office
Lloyd Speck
Brent Gurtek, Izaak Walton League, Duluth-McCabe Chapter

The comments are included in the Record of Decision as Attachment A. Each comment submitted is summarized with MDNR's response following each comment.

9. Comments submitted by Mary and Kenneth Hoffman:

COMMENT: Past illegal water use by the Lutsen Mountain Ski Area should preclude allowing a water appropriation for the water district for snow making.

RESPONSE: The DNR has been working with Lutsen Mountain to address the over-appropriation of water use and the water district is the proposed method of securing a water source that is suitable for the proposed use with effective controls and oversight. It should also be noted that the DNR did issue an appropriation permit on August 16, 2011 for 150 MGY from the Poplar River with a condition that requires Lutsen Mountain to secure a different water source by October 5, 2016, because they will not be able to appropriate water under the existing permit after this date. The proposed water appropriation from Lake Superior by the water district for snowmaking is being pursued by Lutsen Mountain as the alternative water source required by this permit condition.

COMMENT: Concern about the precedent of establishing a public water district to benefit a private for-profit entity.

RESPONSE: This comment does not address accuracy and completeness of information, potential impacts that warrant further investigation, nor the need for an EIS.

10. Comments submitted by Karen Kromar of the Minnesota Pollution Control Agency:

COMMENT: The ski run expansion and golf course alterations should be considered connected actions and environmental effects from these activities should be evaluated.

RESPONSE: The EAW did identify the Superior National at Lutsen (SNL) golf course alteration and expansion of snow making facility and ski runs at Lutsen Mountain (LM) as future stages of the project under Item 6d. There are three distinct projects that need to be evaluated to determine if they are connected actions:

- 1. Expansion of snow making to existing ski areas
- 2. Construction of additional ski runs that includes additional snow making
- 3. Golf course alterations

Connected actions are defined by Minnesota Rules, part 4410.0200, subpart 9c as a project that would directly induce the other, one project is a prerequisite of the other or if neither project is justified by itself. Based on this definition, the expansion of snow making to existing ski runs could be considered a connected action because the new appropriation from Lake Superior for the water district is a prerequisite to the increased snow making. There is, however, some difficulty in applying the connected action to the snow making on existing runs because the DNR has issued a permit for 150 MGY from the Poplar River for Lutsen Mountain to make snow. The amount of this authorization is such that Lutsen Mountain could expand snow making to these existing runs, at least during the duration of that permit. Regardless of whether or not the expanded snow making on existing runs is considered a connected action, the EAW and this Record of Decision address environmental effects from the increased snow making on existing runs. It should also be noted that, as a result of public comments, Lutsen Mountain has looked more closely at potential increased snow making on existing runs and has determined that the 32 acres of increased snow making on existing ski runs was a far greater estimate than would actually be considered. Lutsen Mountain has provided a revised estimate of approximately 4.4 acres and defined the specific area for increased snow making on existing runs (See Finding of Fact No. 17).

Construction of additional ski runs is not a connected action because these additions have been planned since before the water district was envisioned and the presence of the water district will not induce nor is it needed for this development. The golf course alteration is also not a connected action, nor is the increase in irrigation, as these alterations have been planned since before the water district proposal and the alterations are not dependent on the water district. The golf course has an existing water appropriation from Lake Superior and could request additional water under that permit for the proposed increase in irrigation.

Even though the new ski runs and golf course alterations are not connected actions, the actions are reasonably foreseeable and a basis of expectation has been laid, and as such, the environmental effects would need to be evaluated as cumulative effects. The EAW did describe the various potential cumulative environmental effects from these activities; however, there is some difficulty in doing this as the details of these future actions have not yet been fully developed.

The golf course alteration does propose an increase in the actual playable area of the golf course along with an increase in irrigated area. The increase in playable area is associated with extended fairways within the existing golf course property, with the exception of approximately 4 acres of area for two fairway extensions that are proposed for extension into the ski area. The EAW and the Record of Decision did address cumulative environmental effects of the proposed revision to the degree possible given the current information available. The Cook County Planning & Zoning department is currently evaluating the proposed golf course alterations to determine if the completed Lower Poplar River Alternative Urban Areawide Review (AUAR) sufficiently addressed the proposed golf course expansion or if the AUAR needs to be updated. In either case the proposed expansion will need to comply with the approved mitigation plan within the current or updated AUAR to mitigate environmental effects.

The expanded ski runs are 25 acres of new ski runs on the North face of Moose Mountain, 2 acres of new trail between Caribou and White Wolf, and 0.3 acre for a kids' adventure area on Ullr Mountain. The additional snow making capacity is associated with existing ski runs on top of Mystery Mountain that are currently dependent on only natural snow. Although the EAW identified this potential increase as 32 acres, further refinement by the project proposer, identified in Finding of Fact No. 17, has reduced this amount to 4.4 acres.

Potential cumulative environmental effects associated with these actions include increases in sedimentation and erosion due to land use changes and construction activities. Potential increases in sedimentation and erosion from construction activities are temporary and will be subject to ongoing public regulatory authority under the MPCA General Construction Stormwater Permit and under the Cook County Stormwater Ordinance. Potential increases in sedimentation and erosion from land use changes are subject to ongoing public regulatory authority under the Cook County Stormwater Ordinance.

COMMENT: There is a need to discuss the impact of future development within the district due to availability of water.

RESPONSE: There is a potential for additional development because more water would be available through the district. However there are no current proposals or other actions for which a basis of expectation has been laid that can be subject to environmental assessment.

Cook County completed an AUAR for the Lower Poplar River that is within the proposed water district boundary. Any proposed developments with the Lower Poplar River AUAR will need to comply with the final mitigation plan developed as part of the AUAR. In order for the AUAR to remain in effect Cook County will need to look at development trends and other factors at least at a 5 year interval to determine if the AUAR and mitigation plan need to be revised to address the current situation.

COMMENT: Water treatment facility may need a National Pollutant Discharge Elimination System (NPDES) permit.

RESPONSE: This potential requirement will be added as a needed permit.

COMMENT: A 401 Water Quality Certification may be needed from MPCA depending on the action that requires Section 404 permit from the U.S. Army Corps of Engineers.

RESPONSE: This potential requirement will be added as a needed permit.

COMMENT: The EAW did not identify the previously contaminated site, Lutsen Mountains Maintenance POL, Petroleum Brownfield site #4128. Although the proposed construction activities do not appear to be proposed in the area of this site the project proposer and contractors should be made aware of the potential to encounter contamination.

RESPONSE: The project proposer will be notified of this potential.

COMMENT: The EAW did not evaluate environmental impacts to fish, wildlife and ecologically sensitive resources for the proposed pipeline crossing of the Poplar River.

RESPONSE: The EAW did include this information in response to Item 11A, which identified that fish and aquatic organisms will be disrupted during construction of the trench at the trench location and downstream. This disruption is proposed to be minimized by timing the construction in low-flow and nonspawning periods. An additional mitigation measure that will be considered is the use of directional drilling. Additional evaluation of the pipeline crossing of Poplar River has indicated a trench crossing as the preferable construction method. This method includes diverting flow to one side of the channel for construction of half the crossing, then diverting the river to the completed half of the crossing to allow for construction of the second half of the crossing. There is a boulder island in the area of the proposed crossing that will assist in diversion of the river. Environmental effects from the crossing are subject to mitigation by ongoing public regulatory authority under the DNR Work in Public Waters Permit and the U.S. Army Corps of Engineer's Section 10/404 permit and potentially MPCA's 401 Water Quality Certification.

Item 11B of the EAW also identified the known population of Black hawthorn, a state-listed threatened species in the area of the crossing. A botanical survey of the area will be

needed and if the plants cannot be avoided a threatened and endangered species taking permit will be needed.

COMMENT: The EAW does not provide adequate detail on erosion and sediment control methods that will be employed during project construction to allow MPCA staff to evaluate the project for environmental effects.

RESPONSE: Environmental effects are typical of what would be expected from a linear construction project that will disrupt approximately 3 acres and includes three areas of steeper slopes, wetlands, and a river crossing that will require additional measures to prevent erosion. Phasing of pipeline construction and rapid stabilization of disturbed areas are proposed to help prevent erosion during and after pipeline construction. Additional measures to prevent erosion as part of pipeline construction include rapid stabilization blankets for steep slopes, bioroll stream bank protection, silt curtains, wetland restoration as well as installation of both typical and heavy duty silt fences. There are no known issues that would prevent the use of typical best management practices from meeting the standards required as part of the construction stormwater general permit. As part of the Stormwater Pollution Prevention Plan the MPCA can require permit conditions to mitigate the potential for increased sedimentation from construction activities.

11. Comments submitted by Kathryn Hoffman of the Minnesota Center for Environmental Advocacy:

COMMENTS: Requiring the Lutsen Mountain ski area to obtain a NPDES permit for stormwater discharges would be suitable ongoing public regulatory authority to mitigate and control potential increases in sedimentation from increased snow making.

RESPONSE: The MPCA was consulted to see if requiring an NPDES for stormwater discharges from the ski area was required. Based on the information provided to the MPCA, and consistent with the agency's past practice, MPCA is not requiring an individual NPDES permit for this project.

COMMENTS: The current turbidity impairment of the Poplar River is a significant environmental effect. The proposed increase in snowmaking capacity will contribute to the turbidity and result in potentially significant cumulative effect.

RESPONSE: After considering public comments on the EAW, Lutsen Mountain looked more closely at the proposed expansions of snow making to better define the areas of proposed expansion and refine the amount of water requested for snow making. These changes have resulted in a revised project description that is fully described in Findings of Fact No. 17. The key revisions or clarifications related to this environmental effect include:

 Reducing the requested appropriation for snowmaking from 225 MGY to 150 MGY.

- Reducing the proposed increase in snow making on existing runs from 32 acres to 4.4 acres on the upper portion of Mystery Mountain.
- Clarification that the potential 25 acres of new ski runs on the North face of Moose Mountain and the 2 acres of new trail between Caribou and White Wolf are located outside of the Lower Poplar Watershed and the 0.3 acre new learning area is within the Poplar River Watershed.

The only proposed increase in snowmaking within the Poplar River watershed is 4.4 acres of snowmaking on an existing run and a 0.3 acre expansion of the learning area. An additional 27 acre expansion of trails, ski runs and snowmaking is planned for areas outside the Poplar River watershed.

Lutsen Mountain does not intend to make additional snow on the existing ski runs as part of the water appropriation from Lake Superior. The proposed Lake Superior water appropriation, as is relates to snow making, is a different water source than the existing Poplar River water source. The Poplar River water appropriation will be terminated if the Lake Superior water source is authorized. The cost of snowmaking at Lutsen Mountain needs to be balanced with having desirable snow conditions to attract skiers and snowboarders. Natural snow accumulations are variable and Lutsen Mountain uses snowmaking to add to the natural snow to get to a level of snow coverage that is desirable for customers. The more natural snow that is available reduces the amount of snowmaking that is required. Lutsen Mountain is currently authorized to appropriate 150 MGY from the Poplar River for snowmaking. Water use data for Lutsen Mountain snowmaking from 2001 to present has varied between 60 MGY (2001) and 107 MGY (2010). The proposed 150 MGY appropriation from Lake Superior will not change the amount or variability that is appropriated on a yearly basis. The 150 MGY requested is intended for increased snowmaking on existing ski runs and for snow making on planned new ski runs as well as to account for variability in natural snow conditions.

The increased sediment load to the Poplar River would result from 4.4 acres of increased snow making on existing runs and creation of and snow making on the 0.3 acre expansion to the learning area. The 4.4 acres of increased snow making on existing runs is for an area on Mystery Mountain that currently does not have snow making infrastructure and relies completely on natural snow. The existing ski run that is proposed for additional snow making is in an area of the ski hill that is at relatively low risk for increased sediment from runoff because it is high in the watershed, away from streams or the river, and is also in an area of relatively shallow slopes. Lutsen has provided the preliminary plan for developing the additional snow making on Mystery Mountain to Cook County Planning and Zoning. Cook County Planning and Zoning has determined that these activities would require Lutsen Mountain to apply for and receive a permit as a large site stormwater project.

The existing water appropriation of 150 MGY from the Poplar River has contributed to the impairment of the Lower Poplar River for Total Suspended Solids (TSS). The proposed water appropriation from Lake Superior, for the same level of snowmaking that is now permitted, will not result in any increased sediment to the Lower Poplar River.

The MPCA has been implementing a Total Maximum Daily Load (TMDL) process to identify sediment sources and needed sediment load reductions so that the Lower Poplar River can meet water quality standards for TSS. As part of the TMDL process MPCA contracted with a consulting firm called RTI to evaluate and model sediment sources within the Lower Poplar Watershed. RTI prepared the Poplar River Turbidity Assessment (March 2008) that identifies a median sediment load from ski runs, trails and roads of 661 tons/year (4.0 tons/year/acre) which is 33% of the sediment load to the Lower Poplar River. RTI's report did not evaluate sediment load related to snowmaking at Lutsen Mountain. As a refinement to this evaluation the MPCA contracted with Dr. Nieber of the University of Minnesota to make a more refined assessment of sediment sources in the Lower Poplar River. Although Dr. Nieber's report is not finalized, his evaluation of sediment sources from the ski area has not shown significantly different results for the sediment load from the ski area. This evaluation showed that at typical snow making quantities of approximately 12 inches of water equivalent, the erosion rate increased from 4.11 tons/year/acre to 5.25 tons/year/acre.

After input from MPCA and the Poplar River Management Board, it was evident that the modeling was based on some parameters not generally representing the ski slopes. Tall grasses are present on ski slopes and water bars have been installed on some runs, whereas modeling used in the EAW was based on short grass as the cover type and the presence of water bars on the ski runs was not incorporated into the model. Dr. Nieber has conducted additional evaluation and modeling at the request of the MDNR, to help understand the effect of snow making on sediment load under various levels of water appropriation up to 225 MGY. For this evaluation Dr. Nieber looked at a single slope within the ski area and added precipitation as an input into the model during times when the temperature was below freezing so that the model would calculate the additional precipitation as snow. This evaluation was only done for a single slope so other slopes within the ski area could have different erosion rates. Dr. Nieber further refined the evaluation of snowmaking on the single slope and tested the sensitively of the model to various model inputs. Dr. Nieber provided a memorandum to the MDNR that describes the results of this refined evaluation at various levels of water appropriation for snowmaking. This memorandum is included in this Record of Decision as Attachment B. This analysis shows that vegetative cover for a slope and slope length are important factors for the model's estimation of sediment delivery. With no additional water added from snowmaking the sediment delivery rates ranged from 0.3 tons/year/acre to 4.7 tons/year/acre. With the addition of 10.8 inches of water equivalents from snowmaking the sediment delivery rates ranges from 0.8 tons/year/acre to 7.2 tons/year/acre. If this water equivalent was applied to the entire 240 acres of ski hill it equates to an approximate water appropriation of 70 MGY. 20.9 inches of water equivalents from snowmaking, which would equate to an approximate water appropriation of 136 MGY, results in sediment delivery rates ranges from 0.5 tons/year/acre to 23.6 tons/year/acre. 31.5 inches of water equivalents from snowmaking, which equates to an approximate water appropriation of 205 MGY, results in sediment delivery rates ranges from 0.6 tons/year/acre to 100.1 tons/year/acre. While these modeling results have large ranges and the actual contribution of increased sediment from snowmaking is still in question, this information supports the hypothesis that increased snowmaking levels on the existing runs has the potential for causing increased sediment in the Lower Poplar River. Furthermore, this information supports the assessment that a proposed water appropriation above the currently authorized 150 MGY has the potential for increasing the sediment delivery to the Lower Poplar River and other streams in the area.

The proposed change in water source from the Poplar River to Lake Superior and the reduction of the proposed appropriation from 225 MGY to 150 MGY, which represents a change in the proposal represented in the EAW, result in no change to the potential for increased sedimentation because the volume of permitted appropriation is the same as existed prior to the EAW, but existing sediment from this source is an important environmental effect that is currently being evaluated as part of the TMDL process. If the entire existing water appropriation of 150 MGY were to be used for snow making on the entire ski area including proposed additional ski runs (approximately 240 acres), the maximum water equivalent that could be added from snow making is 23 inches of water equivalents. The forthcoming Lower Poplar River TMDL will provide additional insight into the impacts from snowmaking. The TMDL implementation plan will define mitigation measures and best management practices as well as monitoring requirements to measure the success of sediment reduction efforts. In order for the water appropriation to be consistent with the implementation plan, Lutsen Mountain will need to be consistently working to meet sediment reduction goals outlined in the TMDL.

The only proposed increase in sediment delivery beyond what is currently authorized is the 4.4 acres of increased snowmaking on existing runs and the 27.3 acres of new trails and runs and associated snowmaking. Only 0.3 acres of the proposed new runs and the 4.4 acres of new snowmaking could contribute to sediment delivery to the Poplar River. All of these proposed expansions are subject to ongoing public regulatory authority under the Cook County Stormwater Management Ordinance (Ordinance No. 51). Specific mitigation measures that can reasonably be expected to mitigate the potential increase in sediment and the associated estimate of sediment reductions are as follows:

- Installation of water bars on ski runs, which will reduce the length of slope on any specific run
- Permanent sedimentation basins
- Enhanced vegetation and runoff retention at the base of hill slopes where soil conditions are more favorable to infiltration
- Implementation of the Mystery Mountain Road sediment reduction project that is identified in the draft TMDL Implementation Plan with an estimated sediment reduction of 40 tons/year

These mitigation measures can be considered by Cook County Planning and Zoning as potential permit conditions and can reasonably be expected to mitigate the potential for increased sediment from the proposed snowmaking and ski run expansions. Section 5.3 of the Cook County Stormwater Ordinance requires models and design methodologies for calculating runoff characteristics and analyzing stormwater management structures to be approved by the county engineer.

COMMENT: The pipeline trench has the potential to intercept ground and surface water that would prevent that water from reaching the Poplar River. This could reduce water within the Poplar River from groundwater seepage, which can be a very important cold water source for trout during summer low flow periods.

RESPONSE: After the pipeline is installed and the disturbed areas have been restored, the trench will not intercept surface water. During construction of the pipeline, surface water could enter the trench; however, by using phased construction of the pipeline, the extent of this occurring will be localized and temporary. Groundwater interception by the trench could occur. The potential for this to negatively affect flows in the Poplar River is greatest in those areas where the trench is near the Poplar River and in a location of shallow groundwater. The presence of wetlands within or adjacent to the proposed pipeline is a good indicator of areas where this potential is the greatest. Finite Earth Elemental L.L.C. prepared a wetland delineation report for the proposed pipeline. This report identifies that the proposed pipeline route crosses three intermittent streams, a floodplain, six hillside seeps, seven wet depressions, and a utility pond. Engineered plans for construction of the pipeline include test hole information along the entire route. This information identifies if the test hole was "wet". This information also can help identify where this potential exists. These areas will be evaluated as part of the Work in Public Water permit application to determine the need for, and requirement to construct, low permeable backfill areas within the pipeline trench to prevent the trench from acting as a conduit for groundwater flow. Additional geologic information from the United States Geological Survey was evaluated to determine if there was a potential for shallow bedrock with high levels of groundwater flow to be intercepted by the pipeline. No areas were identified that had this potential.

COMMENT: Mitigation measures for increased sedimentation are inadequate.

RESPONSE: The mitigation measures identified in the EAW are proposed projects that will and have reduced the sediment load from the ski area to the Poplar River. With the revision to the proposed project that reduces the proposed water appropriation from 225 MGY to the 150 MGY that is currently authorized from the Poplar River, there is very little potential for increased sedimentation. The ongoing TMDL and pending implementation plan are suitable mechanisms to address sedimentation from the existing water appropriation. Additional mitigation measures have been identified in Finding of Fact No. 22 to address potential increased sedimentation from proposed expansions in snowmaking and ski runs.

COMMENT: The EAW calculates additional water runoff as a percentage of the entire watershed, but only the lower watershed is impaired for turbidity. The evaluation should be focused on the lower watershed where the proposed actions would occur.

RESPONSE: Because the total spring flow includes water from the upper watershed and there is no stream flow data to separate the upper and lower watersheds, it was necessary to include that area when comparing natural stream flow to additional runoff from snow making. As far as changing the analysis of runoff from the ski area, the entire watershed

was used to get a per acre runoff estimate. This estimate would not substantially change if it was calculated using contributing water and watershed area of the Lower Poplar River. The comparison of runoff from the ski area of 7.5 million cubic feet (MCF) without snowmaking to the 9.2 MCF with an average water appropriation of 100 MGY would be unchanged if confined to the Lower Poplar River.

COMMENT: The snow making estimates in the EAW are too conservative. The EAW should evaluate the effect of 225 MGY of snow making.

RESPONSE: The additional 75 MGY beyond what is currently authorized from the Poplar River was intended to provide water for unusual weather circumstances such as no snow years combined with large scale mid-winter snow melt events. Lutsen Mountain has decided to not pursue this additional 75 MGY as part of this proposed water appropriation from Lake Superior. The revised water appropriation permit application requests 150 MGY for snowmaking, which is the same amount as currently authorized from the Poplar River.

COMMENT: Expansions to the ski area and other potential development need to be evaluated for potential increases in sedimentation.

RESPONSE: See response to comment from MPCA in Finding of Fact No. 10.

12. Comments submitted by Dyke Williams

COMMENT: Recreational uses of water such as golf course irrigation and snow for skiing should be limited by natural rainfall and not be allowed to appropriate water for these uses.

RESPONSE: Minnesota Statutes, section 103G.261 provides for water allocation priorities and the proposed snow making and golf course irrigation are classified as the lowest priority or nonessential uses. This does not prevent these types of uses, but in case of a water use <u>conflict</u>, nonessential uses would be the first uses required to stop appropriating water.

13. Comments submitted by John C. Green

COMMENT: Increases in domestic water from 5-6 MGY to 20 MGY will result in increases in wastewater. The suitability of the area for treatment of the additional wastewater is needed.

RESPONSE: The commenter misunderstood the reported 5-6 MGY currently used for the Lutsen Resort in the EAW as the only existing domestic water use that will be served by the water district and the rest of the proposed appropriation would be for new uses. The 5-6 MGY for Lutsen Resort in the EAW was the only existing domestic use for which water use data was available. There are many other existing domestic water uses with the proposed district that are not accounted for in the 5-6 MGY used by Lutsen

Resort. It is anticipated that many of the existing domestic uses in the area will abandon their drinking water wells and connect to the water district, thus having the same waste water production. Any additional development beyond the existing use would need to be evaluated when that use is proposed. It should be noted that Cook County prepared an AUAR for the Lower Poplar River that did evaluate several development scenarios in the area as well as a mitigation plan for any such development.

COMMENT: More information is needed on the depth to groundwater and bedrock.

RESPONSE: Additional information was not provided in the EAW because an environmental effect related to this information was not identified. The commenter did not identify a potential environmental effect that could be assessed by this additional information. However, another commenter did identify a potential environmental effect from the pipeline trench capturing shallow groundwater and preventing that water from reaching the Poplar River as a potential environmental effect that does relate to the depth to groundwater and bedrock. See response to MCEA comments in Finding of Fact No. 11.

COMMENT: What is the basis for the EAW indicating that there are no archaeological, historical, or architectural resources?

RESPONSE: There are no known resources in the area; however there have been no cultural resource surveys to confirm this. The State Historic Preservation Office (SHPO) was provided with the EAW and they commented that the project would not affect any above-ground resources, but due to land-disturbing portions of the project, an archaeological survey is recommended. This information is being provided to the project proposer and permitting agencies.

14. Comments submitted by Mary Ann Heidemann, State Historic Preservation Office

COMMENT: The SHPO believes that no above-ground cultural resources will be affected by the project, but given the nature and location of the project an archaeological survey is recommended.

RESPONSE: This recommendation is included as part of the record of decision and provided to the project proposer.

15. Comments submitted by Lloyd Speck

COMMENT: Stipulations for the use of water are needed to prevent future problems that need taxpayer money to fix.

RESPONSE: Any authorization of water appropriation from Lake Superior will include stipulations that are intended to prevent future problems. Specifically, Minnesota Statutes, section 103G.271, subdivision 2 requires that a water use permit may not be issued under this section unless it is consistent with state, regional, and local water and

related land resource management plans if the regional and local plans are consistent with statewide plans. The pending TMDL Implementation Plan, Cook County Water Plan, and the Lower Poplar River AUAR Mitigation Plan are relevant water and related land resource management plans that the proposed water district will need to comply with so that the appropriation can be consistent with these plans.

COMMENT: Concern that the water district will allow for expanded development.

RESPONSE: There currently is no plan for future development. It should be noted that Cook County did prepare an AUAR for the Lower Poplar River that did evaluate several development scenarios in the area as well as a mitigation plan for any such development.

16. Comments submitted by Brent Gurtek of the W.J. McCabe Chapter of the Izaak Walton League

COMMENT: Concern about potential effect of increased snow making on sediment to the already impaired Lower Poplar River. The proposed water appropriation should not allow for any expansion until more is known about addressing the river impairment.

RESPONSE: See response to comments on increased sediment and increased development in Findings of Fact No. 11 and Findings of Fact No. 10, respectively.

17. After reviewing the public comments the project proposer refined and revised the proposed project. The refinements consisted of a re-evaluation of proposed increases in snowmaking and additional ski run development. The initial estimates of increased snowmaking on existing ski runs were developed by the project proposer from older information. Closer review of this information by Lutsen Mountain determined that approximately 27 acres of existing ski runs that were identified in the EAW for increased snowmaking are what is called "gladed runs" or runs that include trees. Lutsen Mountain does not and will not make snow for these types of runs. These runs are fully dependent on natural snow. This refinement reduces the proposed snowmaking on existing runs from 32 acres identified in the EAW to 4.4 acres located at the top of Mystery Mountain.

It was also clarified that the 25 acres of new ski runs on the North face of Moose Mountain and the 2 acres of new trail between Caribou and White Wolf are located outside the Poplar River watershed and any sediment from these proposed expansions would not contribute to an increase in sediment delivery to the Poplar River. A 4 acre learning center was identified in the EAW, but after closer evaluation by Lutsen Mountain, the area of the potential learning center has been reduced to 0.3 acres and the area for this potential expansion is within the Lower Poplar River watershed.

Finally, Lutsen Mountain reduced the requested water appropriation amount for snow making from 225 MGY to 150 MGY. Public concern about increases in snowmaking and questions about the potential environmental effect of this increase in snowmaking led to this change in proposed water appropriation. The original intent for this increased water

appropriation was to provide water for unusual weather circumstances such as no snow years combined with large scale mid-winter snow melt events.

18. Based upon the information contained in the EAW and received as public comments the MDNR has identified the following potential environmental effects associated with the project:

Environmental hazards due to past site uses Fish, wildlife, and ecologically sensitive resources Physical impacts to water resources Water quality - erosion and sedimentation Cumulative potential effects

Each of these environmental effects is discussed in more detail below.

19. Environmental hazards due to past site uses:

There are two petroleum leak sites located in the general project area of pipeline construction. MPCA has identified these sites as Leak #16845 and Petroleum Brownfield site #4128. Although the planned pipeline construction route will not be in the immediate vicinity of these two sites, there is a possibility that soil and/or groundwater contamination could be encountered during construction activities. The project proposer is aware of these sites and it is recommended that their contractor develop a contingency plan in the event contamination is discovered. If contamination is encountered the State Duty Officer should be notified at (651) 649-5451, per requirements of Minnesota Statutes, chapter 115.061.

20. Fish, wildlife, and ecologically sensitive resources:

The construction of the water pipeline has the potential to affect fish, wildlife and ecologically sensitive resources due to direct disruption of habitat, temporary increased sedimentation in the Poplar River during construction and one pipeline crossing of the river. Specific resources that may be affected by this construction include deep lake habitat, gravel/cobble beach, the Poplar River, and Black hawthorn (*Crataegus douglasii*), a state-listed threatened plant species.

Deep lake habitat is identified in the MDNR 2006 Comprehensive Wildlife Conservation Strategy as a key habitat. The water intake for the proposed water district will be constructed within this habitat. The construction of the water intake will cause temporary disruption and is subject to ongoing public regulatory authority under the MDNR Work in Public Water Permit as well as the U.S. Army Corps of Engineers Section 10 Rivers and Harbors Act permit. Specific mitigation measures that can be considered as part of these authorizations include timing of construction, construction practices to minimize disturbances, site restoration, and compensatory mitigation.

The gravel/cobble beach in the area of proposed pipeline is a Site of High Biodiversity Significance that will be disturbed during construction of the pipeline and pump house.

The area of this proposed construction is in the same area that the Superior National at Lutsen golf course had an existing pipeline and pump house for irrigation of the golf course. The new pump house is proposed to be located within the previously disturbed area and the pipeline will be buried below the beach with site restoration afterward returning the beach to pre-construction conditions.

The habitat of the Poplar River will be affected directly during construction of the pipeline crossing the river and due to erosion and sedimentation from disturbed areas during construction of the pipeline. These temporary effects are subject to ongoing public regulatory authority under the MDNR utility crossing license, U.S. Army Corps of Engineers Section 10/404 permit, and MPCA general permit for construction stormwater. Specific measures to mitigate this potential environmental effect include development of a Stormwater Pollution Prevention Plan to limit runoff and river crossing construction that is timed during low water and not within fish spawning periods. The proposed location of the river crossing has a cobble island in middle of the river. Construction plans include the diversion of the river to one side of the island so construction can occur on the dewatered side of the river. The river will then be diverted to the other side of the island to complete construction on the second half of the crossing in a dewatered portion of the river. This will minimize sediment delivery downstream during the river crossing construction.

There are known occurrences of Black hawthorn (*Crataegus douglasii*), a state-listed threatened plant species within the proposed pipeline construction area. The project proposer contracted with a MDNR-qualified botanist to survey the area of construction and no Black hawthorn plants were identified in the area.

The proposed appropriation of water from Lake Superior has the potential for aquatic invasive species such as Zebra Mussel, Spiny Waterflea, Viral hemorrhagic septicemia (VHS) to enter the water system and be transferred to other water bodies with the proposed raw water uses (snow making, irrigation and firefighting). The potential for spread of aquatic invasive species through snow making and irrigation is low due to the cold temperatures associated with snow making and inhospitable environment associated with irrigation. It should also be noted that the golf course is currently irrigated from a Lake Superior water appropriation so there would be no increase in risk of the spread of invasive species due to irrigation. The risk for spreading aquatic invasive species is associated with the direct transfer of water from Lake Superior to other water bodies. The potential for this type of transfer through firefighting is limited, but it could occur if the water used to fight a fire is sprayed directly into a water body or if after the fire is over the remaining water in the tanker truck is discharged into a water body.

Minnesota Rules, part 6216.0500 addresses the appropriation for water from infested waters. Water from designated infested waters may not be diverted to other waters or transported on public roads unless it is an emergency that threatens human safety or property, or under a permit issued under this part. Although the firefighting water use would be covered under the emergency exemption, the water appropriation permit that would be issued under Minnesota Statutes, chapter 103G will include provisions to

prevent the spread of invasive species such as filtering of water and requirements for disposal of water not consumed as part of a fire fight.

21. Physical impacts to water resources:

The proposed construction of the pipeline has the potential for physical impacts to water resources from the intake in Lake Superior, crossing the Poplar River, pipeline crossing of wetlands, and the potential for the pipeline trench to intercept surface water and shallow groundwater preventing the water from reaching the Poplar River.

Environmental effects from construction of the water intake in Lake Superior and the pipeline crossing of the Poplar River are described in Findings of Fact No. 19. The same ongoing public regulatory authority and mitigation measures identified in Findings of Fact No. 19 will also address physical impacts to these water resources.

A wetland delineation report prepared by Finite Earth Environmental, L.L.C. identified approximately 2.6 acres of wetlands within the proposed pipeline corridor. Impacts to these wetlands will be temporary during construction of the pipeline and site restoration after construction will restore wetland areas. The project proposer has been advised to submit a Section 404 permit application to the U.S. Army Corps of Engineers for a jurisdictional determination of the wetlands potentially affected.

The pipeline trench has the potential to intercept surface water and shallow groundwater, preventing the water from reaching the Poplar River. After the pipeline is installed and the disturbed areas have been restored the trench will not intercept surface water. During construction of the pipeline surface water could enter the trench; however, by using phased construction of the pipeline the extent of this occurring will be localized and temporary. Groundwater interception by the trench could occur. The potential for this to negatively affect flows in the Poplar River is greatest in those areas where the trench is near the Poplar River and in a location of shallow groundwater. The presence of wetlands within or adjacent to the proposed pipeline is a good indicator of areas where this potential is the greatest. Finite Earth Elemental L.L.C. prepared a wetland delineation report for the proposed pipeline. This report identifies that the proposed pipeline route crosses three intermittent streams, a floodplain, six hillside seeps, seven wet depressions, and a utility pond. Engineered plans for construction of the pipeline include test hole information along the entire route. This information identifies if the test hole was "wet". This information also can help identify where this potential exists. These areas will be evaluated as part of the Work in Public Water permit application to determine the need for, and requirement to construct, low permeable backfill areas within the pipeline trench to prevent the trench from acting a conduit for groundwater flow. Additional geologic information from the United States Geological Survey was evaluated to determine if there was a potential for shallow bedrock with high levels of groundwater flow to be intercepted by the pipeline. No areas were identified that had this potential.

The existing appropriation of water for snowmaking by Lutsen Mountain from the Poplar River has adversely affected the Poplar River by reducing the amount of water in the river. The permit condition of the existing water appropriation permit from the Poplar River that requires Lutsen Mountain to secure a different source of water by October 5, 2016 was included to address this effect to the Poplar River. The proposed water appropriation from Lake Superior will have no measurable effect on water amounts within the lake. Changing the water source for snowmaking from the Poplar River to Lake Superior will result in a positive environmental effect to the Poplar River.

22. Water quality - erosion and sedimentation:

The proposed Poplar River Water District has the potential to affect water quality due to erosion and sedimentation during construction and as a result of increased runoff from snowmaking and golf course irrigation.

Increased sedimentation during construction of the pipeline is temporary and subject to ongoing public regulatory authority under the MPCA stormwater general permit for construction activities. Phasing of pipeline construction and rapid stabilization of disturbed areas are proposed to help prevent erosion during and after pipeline construction. Additional measures to prevent erosion as part of pipeline construction include rapid stabilization blankets for steep slopes, bioroll stream bank protection, silt curtains, wetland restoration details as well as both typical and heavy duty installation of silt fences. As part of the required Stormwater Pollution Prevention Plan, the MPCA will have an additional opportunity to evaluate proposed engineering controls and determine suitability to meet permit standards.

The potential for increased sedimentation from snowmaking is reduced from what was described in the EAW due to project changes and refinements by the project proposer that are described in Findings of Fact No. 17. Based on these changes the only potential for increased sedimentation beyond what is currently authorized is the increased snowmaking on 4.4 acres of existing runs. The proposed 27.3 acres of new runs, trails, and associated snowmaking could also result in an increase in sediment, but only 0.3 acres of the proposed new runs are within the Lower Poplar River watershed that could contribute to sediment delivery to the Poplar River. All of these proposed expansions are subject to ongoing public regulatory authority under the Cook County Stormwater Management Ordinance (Ordinance No. 51). Specific mitigation measures that can reasonably be expected to mitigate the potential increase in sediment and the associated estimate of sediment reductions are as follows:

- Installation of water bars on ski runs which will reduce the length of slope at on any specific run
- Permanent sedimentation basins
- Enhanced vegetation and runoff retention at the base hill slopes where soil conditions are more favorable to infiltration
- Implementation of the Mystery Mountain Road sediment reduction project that is identified in the draft TMDL Implementation Plan with an estimated sediment reduction of 40 tons/year

These mitigation measures can be considered by Cook County Planning and Zoning as potential permit conditions to mitigate the potential for increased sediment from the proposed snowmaking and ski run expansions. Section 5.3 of the Cook County Stormwater Ordinance requires models and design methodologies for calculating runoff characteristics and analyzing stormwater management structures to be approved by the county engineer.

23. Cumulative potential effects:

The proposed Poplar River Water District has potential cumulative effects from increases in sedimentation to the Lower Poplar River. The Lutsen Mountain ski area, snowmaking, the Superior National at Lutsen golf course, and irrigation are current activities that have the environmental effect of delivering sediment to the Lower Poplar River. The Lower Poplar River is currently listed as impaired for elevated sediment levels on the MPCA 303d list of impaired waters. Several studies have been performed to identify and assess sediment loading in the Poplar River. Poplar River Turbidity Assessment (2008 RTI International) assessed various sediment sources and used the WEPP model to allocate sediment loads from these sources. In this analysis the ski runs and roads were lumped together as a single sediment source. This study reported that ski runs and roads contribute a median sediment load of 661 tons/year, which is 33% of the total sediment load generated within the Lower Poplar River Watershed. A more recent study and draft report by Dr. Nieber, Poplar River Sediment Source Assessment (2010 University of Minnesota), provides a more detailed analysis of sediment sources within the Poplar River watershed including sediment from existing ski runs. Although Dr. Nieber's report is not finalized, his evaluation of sediment sources from the ski area has not shown significantly different results for the sediment load from the ski area. Dr. Nieber also conducted additional evaluation and modeling to help understand the effect of snow making on sediment load. For this evaluation Dr. Nieber looked at a single slope within the ski area and added precipitation as an input into the model during times when the temperature was below freezing so that the model would calculate the additional precipitation as snow. This evaluation was only done for a single slope so other slopes within the ski area could have different erosion rates. This evaluation showed that at typical snow making quantities of approximately 12 inches water equivalent the erosion rate increased from 4.11 tons/year/acre to 5.25 tons/year/acre.

After input from MPCA and the Poplar River Management Board, it was evident that the modeling was based on some parameters not generally representing the ski slopes. Tall grasses are present on ski slopes and water bars have been installed on some runs, whereas modeling used in the EAW was based on short grass as the cover type and the presence of water bars on the ski runs was not incorporated into the model. Dr. Nieber has conducted additional evaluation and modeling at the request of the MDNR, to help understand the effect of snow making on sediment load under various levels of water appropriation up to 225 MGY. For this evaluation Dr. Nieber looked at a single slope within the ski area and added precipitation as an input into the model during times when

the temperature was below freezing so that the model would calculate the additional precipitation as snow. This evaluation was only done for a single slope so other slopes within the ski area could have different erosion rates. Dr. Nieber further refined the evaluation of snowmaking on the single slope and tested the sensitively of the model to various model inputs. Dr. Nieber provided a memorandum to the MDNR that describes the results of this refined evaluation at various levels of water appropriation for snowmaking. This memorandum is included in this Record of Decision as Attachment B. This analysis shows that vegetative cover for a slope and slope length are important factors for the model's estimation of sediment delivery. With no additional water added from snowmaking the sediment delivery rates ranged from 0.3 tons/year/acre to 4.7 tons/year/acre. With the addition of 10.8 inches of water equivalents from snowmaking the sediment delivery rates ranges from 0.8 tons/year/acre to 7.2 tons/year/acre. If this water equivalent was applied to the entire 240 acres of ski hill it equates to an approximate water appropriation of 70 MGY. 20.9 inches of water equivalents from snowmaking, which would equate to an approximate water appropriation of 136 MGY, results in sediment delivery rates ranges from 0.5 tons/year/acre to 23.6 tons/year/acre. 31.5 inches of water equivalents from snowmaking, which equates to an approximate water appropriation of 205 MGY, results in sediment delivery rates ranges from 0.6 tons/year/acre to 100.1 tons/year/acre. While these modeling results have large ranges and the actual contribution of increased sediment from snowmaking is still in question, this information supports the hypothesis that increased snowmaking levels on the existing runs has the potential for causing increased sediment in the Lower Poplar River. Furthermore, this information supports the assessment that a proposed water appropriation above the currently authorized 150 MGY has the potential for increasing the sediment delivery to the Lower Poplar River and other streams in the area.

Lutsen Mountain is currently authorized to appropriate 150 MGY of water from the Poplar River for snowmaking. The proposed 150 MGY water appropriation for snowmaking from Lake Superior on the existing ski runs that currently benefit from snowmaking will not have any potential for increase in sedimentation. The maximum annual water that Lutsen has appropriated for snowmaking is 107 MGY. The proposed water appropriation of 150 MGY is associated with the proposed snowmaking expansions described above and to account for variability in natural snow conditions. If the entire existing water appropriation of 150 MGY is used for snowmaking on the entire ski area, including proposed additional ski runs (approximately 240 acres) the maximum water equivalent that could be added from snow making is 23 inches of water equivalents.

Any increased sediment load to the Poplar River would result from the 4.4 acres of increased snow making on existing runs within the watershed and creation of and snow making on the 0.3 acre expansion to the learning area. The 4.4 acres of increased snow making on existing runs is for an area on Mystery Mountain that currently does not have snow making infrastructure and relies completely on natural snow. The existing ski run that is proposed for additional snow making is in an area of the ski hill that is at relatively low risk for increased sediment from runoff because it is high in the watershed, away from streams or the river, and is also in an area of relatively shallow slopes. Lutsen has

provided the preliminary plan for developing the additional snow making on Mystery Mountain to Cook County Planning and Zoning. Cook County Planning and Zoning has determined that these activities would require Lutsen Mountain to apply for and receive a permit as a large site stormwater project.

The change in water source from the Poplar River to Lake Superior will not increase the potential for increased sedimentation, and this evaluation is limited to evaluating that environmental effect. However, the existing sediment from this source is an important environmental effect that is currently being evaluated as part of the TMDL process. The forthcoming Lower Poplar River TMDL will provide additional insight to the impacts from snowmaking. The TMDL implementation plan will define mitigation measures and best management practices as well as monitoring requirements to measure the success of sediment reduction efforts. In order for the water appropriation to be consistent with the implementation plan, Lutsen Mountain will need to be consistently working to meet sediment reduction goals outlined in the TMDL.

Lutsen Mountain has participated in implementation of several measures to reduce sediment loading to the Poplar River. The Poplar River Management Board is a non-profit organization of private landowners and public agencies that was formed to address sediment loading in the Poplar River. Examples of projects that have been implemented due to the efforts of this board include:

- Elimination of approximately 50% of service road and trails within the ski area
- Implementation of the Mega Slump project to stabilize a large rotational slump on the Poplar River
- Implementation of Brule tight line stormwater system
- Implementation of Eagle Ridge stormwater management system, and
- Planned project for 2012 season is the Ullr tight line stormwater system

Engineering estimates provided in grant applications identify approximately 500 tons/year of sediment load reductions attributable to the above projects.

In addition to previous efforts that have been implemented there are other efforts planned to continue sediment load reductions. The Caribou Highland Flowpath project is a proposed project that is partially funded by a GLC Grant to address existing development and steep slopes near the Poplar River. This flowpath area was identified as a potential area for sediment source reduction as part of the more detailed 2010 University of Minnesota (U of M) report. This project is currently planned for implementation during the 2012 construction season. Two additional projects are planned for design next winter with construction during the 2013 construction season. One of these projects is the Mystery Mountain Flowpath project that was also identified in the 2010 U of M report for potential sediment source reduction. The last currently planned project is associated with Eagle Mountain Road improvements to address sediment load from roads in that area. These past projects and planned projects for stormwater management will reduce sediment load to the Poplar River.

MPCA's TMDL process and pending implementation plan is a suitable mechanism to address past environmental effects from sediment delivery to the Lower Poplar River. Completion of TMDL implementation BMPs is voluntary for the non-point source (load) allocation. Its success as a tool rests largely with the ongoing efforts of local landowners and local government leadership. The EPA has remarked that a good implementation plan goes a long way to demonstrate there will likely be effort addressed to improve the water quality. In 2007, researchers provided a summary of factors that were positive aids in affecting successful implementation efforts. Specific factors that were found to aid effective implementation include: adequate funding, government agency interest and involvement, stakeholder meetings during the TMDL development, stakeholder interest and involvement, the presence of a TMDL where the pollutant and needed reductions were systematically assessed and quantified, targeted implementation, staged/phased implementation, and outreach/educational activities.

Potential increases in sedimentation of the Lower Poplar River from future actions includes 0.3 acres of the proposed new ski runs (learning area expansion), new snowmaking on 4.4 acres of existing ski runs, and planned expansion of the Superior National at Lutsen golf course. The potential increase in sedimentation from these proposed expansions is small compared to the existing sedimentation issue being addressed by the TMDL process. The Cook County Planning & Zoning department is currently evaluating the proposed golf course alterations to determine if the completed Lower Poplar River AUAR sufficiently addressed the proposed golf course expansion or if the AUAR needs to be updated. In either case the proposed expansion will need to comply with the approved mitigation plan within the current or updated AUAR to mitigate environmental effects.

The proposed project will have the following additional environmental effects that could combine with other projects for cumulative potential effects:

- Disturbance of Rock/Cobble beach native plant community within a Site of High Biodiversity.
- Disturbance to Black hawthorn (*Crataegus douglasii*), a state-listed threatened species that has been documented along the Poplar River in the immediate vicinity of the proposed pipeline crossing.

There are no other known future potential projects, for which a basis of expectation has been laid, that will contribute to the cumulative effects to the Rock/Cobble Beach native plant community or Black hawthorn plant species.

- 24. The MDNR requested and was granted a 15 day extension for making a decision on the need for an EIS as provided under the provisions of Minnesota Rules, part 4410.1700, subpart 2.b.
- 25. The following permits and approvals are needed for the project:

Unit of government

Type of application

MDNR Water Appropriation Permit
MDNR Work in Public Waters Permit
MDNR License to Cross Public Waters

MPCA NPDES Construction Storm Water General Permit

MPCA Section 401 Water Quality Certification

US Army Corps of Engineers Section 404 Permit

US Army Corps of Engineers Section 10 Rivers and Harbors Act

Cook County Stormwater Ordinance

CONCLUSIONS

1. The Minnesota Environmental Review Program Rules, Minnesota Rules, part 4410.1700, subparts 6 and 7 set forth the following standards and criteria, to which the effects of a project are to be compared, to determine whether it has the potential for significant environmental effects.

In deciding whether a project has the potential for significant environmental effects, the following factors shall be considered:

- A. type, extent, and reversibility of environmental effects;
- B. cumulative potential effects. The RGU shall consider the following factors: 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;
- C. the extent to which the environmental effects are subject to mitigation by ongoing public 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; and
- D. 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.
- 2. Type, extent, and reversibility of environmental effects

Based on the Findings of Fact above, MDNR concludes that the following potential environmental effects, as described in the Finding of Facts, will be limited in extent, temporary, or reversible:

Environmental hazards due to past site uses

Fish, wildlife, and ecologically sensitive resources Physical impacts to water resources

3. Cumulative potential effects. The RGU shall consider the following factors: 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;

Based on the Findings of Fact above, the MDNR concludes that the potential cumulative environmental effects, as described in the Finding of Facts, are not 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 cumulative potential effects; and the efforts the proposer has made to minimize contributions from the project:

Erosion and sedimentation Water quality

4. Extent to which environmental effects are subject to mitigation by on-going public regulatory authority.

Based on the Findings of Fact above, the MDNR concludes that the following potential environmental effects are subject to mitigation by on-going regulatory authority:

Impacts to fish, wildlife, and ecologically sensitive resources are subject to mitigation by MDNR Work in Public Waters Permit and MDNR License to Cross Public Waters.

Physical impacts to water resources are subject to mitigation by MDNR Work in Public Waters, MDNR License to Cross Public Waters, U.S. Army Corps of Engineers Section 404 permit and MPCA Section 401 Water Quality Certification.

Potential increases in erosion and sedimentation from proposed ski hill, trail and snowmaking expansions are subject to mitigation the by Cook County Stormwater Ordinance permitting requirements of large site stormwater project and MPCA general permit for construction stormwater.

5. Extent to which environmental effects can be anticipated and controlled as a result of other environmental studies undertaken by public agencies or the project proposer, or other EISs.

The following environmental studies can assist in anticipating and controlling environmental effects from the Poplar River Water District project:

Lower Poplar River Alternative Areawide Review for Cook County, Minnesota, March 2009, Cook County Planning & Zoning Dept.

Poplar River Turbidity Assessment, March 2008, RTI International

- 6. The MDNR has fulfilled all procedural requirements of law and rule applicable to determining the need for an environmental impact statement on the proposed Poplar River Water District project.
- 7. Based on considerations of the criteria and factors specified in the Minnesota Environmental Review Program Rules (Minnesota Rules, part 4410.1700, subparts 6 and 7) to determine whether a project has the potential for significant environmental effects, and on the Findings and Record in this matter, MDNR determines that the proposed Poplar River Water District project does not have the potential for significant environmental effects.

ORDER

Based on the above Findings of Fact and Conclusions:

The Minnesota Department of Natural Resources determines that an Environmental Impact Statement is not required for the Lake Superior – Poplar River Water District project.

Any Findings that might properly be termed Conclusions and any Conclusions that might properly be termed Findings are hereby adopted as such.

STATE OF MINNESOTA DEPARTMENT OF NATURAL RESOURCES

P. M. andll

Mary McConnell
Assistant Commissioner