INTRODUCTION

The Duluth/North Shore Sanitary District (D/NSSD) and the Knife River/Larsmont Sanitary District (KR/LSD) propose to construct sewage collection systems along a portion of the north shore of Lake Superior between Duluth and Two Harbors. The wastewater from this area would be discharged to the Western Lake Superior Sanitary District (WLSSD) system in Duluth. Pursuant to rules of the Environmental Quality Board (EQB), Minn. R. 4410 (1999), the Minnesota Pollution Control Agency (MPCA) prepared an Environmental Assessment Worksheet (EAW) for the proposed construction project. Based on the MPCA environmental review, comments and information received during the comment period, and other information in the record of the MPCA, the MPCA hereby makes these Findings of Fact, Conclusions of Law, and Order:

FINDINGS OF FACT

Project Background

The project area is a proposed sewer service area that extends from the Lester River in Duluth, Minnesota, to the southern limits of the city of Two Harbors, lying between U.S. Highway 61 and the shore of Lake Superior. This corridor is approximately 18 miles long and ranges in width from less than 0.1 mile near the Lester River to 1.1 miles near the city of Two Harbors. Four local units of government have jurisdiction in the planning corridor. They are the city of Duluth, Duluth Township and Lakewood Township (all within St. Louis County), and unorganized areas in Lake County. Lake County administers planning and zoning for the unincorporated communities of Knife River and Larsmont. Larsmont is within the KR/LSD but is not proposed to be sewered at this time, although it may be in the future.

At present, domestic wastewater generated within the project area is treated either by numerous individual sewage treatment systems (ISTSs) that serve private residences and businesses, or by three smaller wastewater treatment facilities that serve one resort, one private residence, and the unincorporated community of Knife River in Lake County. Based on past inspections and surveys conducted by or for local units, it is believed that 55 percent of the ISTSs are non-complying because they either discharge effluent to the surface of the ground or were not constructed in conformance with
current state and county codes. The principal factors associated with these non-conforming systems are the site limitations imposed by shallow bedrock and unsuitable soil conditions, poor construction, and lack of maintenance.

The purpose of this project is to correct health and safety problems arising from inadequate wastewater systems for the benefit of homeowners, business owners, and recreational users of the North Shore and Lake Superior. The D/NSSD and the KR/LSD were created to manage the proposed wastewater collection systems in their respective service areas.

**Related Permitting History in the Project Area**

Over the years, ISTSs have been constructed on private property to treat and dispose of wastewater on site. These systems, the majority of which were installed prior to 1972, were designed and/or permitted according to standards and codes that existed at the time of construction.

The KR/LSD owns and operates the collection system and wastewater treatment facility (WWTF) that serves the community of Knife River. The district holds a National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Permit to discharge up to 43,000 gallons per day (GPD). This discharge is to Lake Superior and has a one mg/L monthly average phosphorus effluent limitation to reduce the fertility of the wastewater.

NPDES/SDS Permits have also been issued to two other WWTFs in the proposed sewer service area. These facilities are located at the Gardenwood Resort (max. permitted flow = 4,600 GPD), and the French River trout hatchery (max. permitted flow = 1,000,000 GPD). The WWTF at the French River trout hatchery treats water returned from the fish culture ponds and filter backwash water to Lake Superior; it does not treat domestic wastewater. Each of these discharges has a one mg/L monthly average phosphorus effluent limit.

A WWTF with discharge is also operating at what was formerly the Wonderland Resort but is now a private residence. An NPDES/SDS Permit has not been issued for this discharge.

**Previous Environmental Review in the Project Area**

There has been no previous environmental review of wastewater facilities in the project area.

**Compliance/Enforcement History in the Project Area**

During the summers of 1991 and 1992, the WLSSD surveyed residences and businesses in the proposed project area as part of a larger survey to determine the status of ISTSs along a 32-mile segment of the North Shore. Fifty-five percent of the systems surveyed were determined to be in a state of failure based on Minn. R. 7080.0050 (namely, seepage, or other discharge).

The WWTFs at Knife River, Gardenwood Resort, and Wonderland Resort are, to some degree, non-complying discharges. The Knife River WWTF was constructed in 1984. Its continued operation is of concern because of aging equipment and a lack of redundancy. A Compliance Management Survey, completed in 1997, rated the facility non-compliant based on excessive total chlorine residuals, failure to maintain flow composite sampling equipment, and significant infiltration/inflow problems. More recently, frequent violations of permitted levels for chlorine residuals have continued at the facility and
there has been one phosphorus effluent violation; however, influent flow volumes have been consistently below design. An NPDES/SDS Permit number was assigned to the former Wonderland Resort; however, the permit was not issued. The resort has closed, and the property sold to an owner now using it as a private residence. The Gardenwood Resort has not submitted Discharge Monitoring Reports as required by its permit.

Proposed Project Description

The D/NSSD and KR/LSD propose to construct a wastewater collection system to extend sewer service along the Lake Superior shoreline between the city of Duluth and Knife River community in Lake County. The wastewater from this collection system will be discharged to the WLSSD system and treated at the WLSSD WWTF in Duluth. The sewer service areas for the districts are bounded by the Lake Superior shoreline on the south, the U.S. Highway 61 expressway to the north and west, and the limits of the existing collection system for Knife River to the east. The D/NSSD manages the St. Louis County portion of the project area, and the KR/LSD manages the Lake County portion.

The new collection system will connect to a WLSSD gravity interceptor at the intersection of 47th Avenue East and Superior Street, about 1.3 miles from the Lester River in Duluth. The project will connect the existing Knife River collection system to the proposed system, and the Knife River WWTF will be taken out of service. Existing tanks at the Knife River facility will be used to store wastewater during periods of high flow. An additional storage facility will be constructed at the lower end of the proposed D/NSSD system. This storage is needed to minimize the potential for bypassing in the downstream WLSSD system.

Mainline and lateral sewers will be extended to residential and commercial areas in the districts with pressure sewers with grinder pumps primarily used for individual connections. Initially, there will be approximately 359 grinder pump stations and 69 gravity sewer connections. The system will include approximately 14.5 miles of mainline pipe with three pumping stations and 17.3 miles of branch piping. The mainline system would be constructed within existing right-of-way and easements along Scenic Highway 61 and the North Shore Scenic Railroad. Branch piping would follow existing easements on several minor roads, wherever possible.

Construction will utilize a combination of open-cut and directionally drilled techniques. The majority of construction will use opencutting to install pipe in road right-of-way. In certain areas, shallow bedrock depths will require open-cut construction and blasting. The project will require the crossing of numerous rivers (Lester, Talmadge, French, and Little Sucker), creeks (Big Sucker and Schmidt), and smaller streams. Many of these watercourses are public waters protected by the Minnesota Department of Natural Resources (DNR). Some are also designated trout streams. All watercourses are planned to be crossed without direct contact to the streambed. Where bridges are present, the pipe will be suspended from the bridge deck. In most cases, the pipe will be installed in the road fill above watercourses. The installation of pipe in the road fill will be accomplished by either directional drilling or open-cut, depending on the location and sensitivity of the watercourse.

Some crossings are pre-determined to be directionally drilled based on watercourse sensitivity and subsurface conditions. Other crossing technique selections will be determined at a later date. The areas pre-determined to be directionally drilled and the criteria used to select construction methods were discussed in greater detail in the EAW, pp. 4-6. The construction is anticipated to range over portions of
three construction seasons. The construction is anticipated to start in the spring of 2002 and be completed in the spring of 2004.

**Environmental Concerns**

The following environmental issues were identified and addressed during preparation of the EAW, in comments on the EAW, in responding to those comments, and during preparation of these Findings:

- Water quality effects related to erosion and sedimentation during construction (Findings 8-12);
- Water quality effects related to operation and maintenance of the system (Findings 13-17);
- Effects of tree removal due to sewer installation (Findings 18-22);
- Effects on the WLSSD collection and treatment system from the new sewage flow (Findings 23-27);
- Effect of dust, noise generated during construction (Findings 28-32);
- Effects of odor impacts related to operation of the collection system (Findings 33-37); and
- Cumulative effects of secondary growth and development enabled by providing sewer service (Findings 38-63).

**Permitting Requirements**

Local, state and federal permits, approvals, and financial assistance for the project are listed below. See Findings 64-84.

- Minnesota Department of Trade and Economic Development State Revolving Fund loan and Wastewater Infrastructure Funding;
- MPCA review and approval of construction plans and specifications;
- MPCA SDS permits for sewer installation and operation;
- MPCA NPDES construction storm water general permit;
- Minnesota Department of Transportation (MnDOT) utility installation permit;
- Minnesota Department of Natural Resources (DNR) utility crossing license;
- DNR temporary water appropriation permit;
- WLSSD sewer extension permit;
- WLSSD wastewater flow and waste load allocation permit;
- WLSSD inflow and infiltration abatement plan;
- City of Duluth special use permit for excavation and grading in shoreland area;
- St. Louis and Lake Counties, approval for utility installation in right-of-way; and
- U.S. Army Corps of Engineers letter of notice for Section 404 general permit.
Community Involvement in Process

Community involvement in the process has consisted of publication of the EAW Notice of Availability in the EQB Monitor, distribution of the EAW to interested parties, notification of EAW availability to property owners in the districts, a press release concerning the availability of the EAW for review, and receipt of public comments. In addition, the D/NSSD and Lake County prepared a North Shore Land Use Plan that examined land use, natural resource, and development issues within the proposed sewer service corridor. This planning process was guided by a Steering Committee made up of residents, government officials, and business owners. The Steering Committee held public meetings during the development of the plan, at which residents and other interested parties were invited to participate in goal setting to reaffirm present land use practices or to shape alternative land use plans. See EAW Exhibit 8, draft Land Use Plan, p. 1.

PROCEDURAL HISTORY

1. The project involves the expansion of a municipal sewage collection system. Pursuant to Minn. R. 4410.1000, subp. 3, a discretionary EAW was prepared on the proposed project with the MPCA as the responsible governmental unit (RGU). The EAW is hereby incorporated by reference.

2. Copies of the EAW were mailed to individuals, organizations and governmental units as required by Minn. R. 4410.1500, A. The MPCA also sent letters to all residents and property owners within the D/NSSD and KR/LSD notifying them of the availability of the EAW for public comment. A news release was provided to media in the project area on August 24, 2001. The EAW was also available for review on the MPCA Website at http://www.pca.state.mn.us/news/eaw/index.html.

3. The EAW Notice of Availability was published in the EQB Monitor on August 20, 2001, to begin the comment period for the EAW. The comment period, initially extended for two weeks, ended on October 3, 2001. The MPCA received thirteen letters and e-mails from private citizens, environmental groups and governmental units during the 44-day comment period. Copies of the comment letters and e-mails are hereby incorporated as Appendix A.

4. The MPCA prepared responses to the comments received during the comment period. These responses are hereby incorporated as Appendix B.

CRITERIA FOR DETERMINING THE POTENTIAL FOR SIGNIFICANT ENVIRONMENTAL EFFECTS

5. Under Minn. R. 4410.1700, subp. 3 (1999), an Environmental Impact Statement (EIS) “… shall be prepared when the RGU determines that, based on the EAW and any comments or additional information received during the EAW comment period, the proposed project has the potential for significant environmental effects…” In deciding whether a project has the potential for significant environmental effects, the MPCA must compare the impacts that may be reasonably expected to occur from the project with the four criteria set forth in Minn. R. 4410.1700, subp. 7 (1999). These criteria are:
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A. the type, extent, and reversibility of environmental effects;
B. cumulative potential effects of related or anticipated future projects;
C. the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority; 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.

MPCA FINDINGS WITH RESPECT TO EACH OF THE FOUR CRITERIA

Type, Extent, and Reversibility of Environmental Effects

6. The first criterion that the MPCA must consider, when determining if a project has the potential for significant environmental effects that are reasonably expected to occur, is the "type, extent, and reversibility of environmental effects." Minn. R. 4410.1700, subp. 7.A (1999) The MPCA findings with respect to this factor are set forth below.

7. The information gathered during the EAW process identified the following areas in which environmental effects could occur as a direct result of the proposed sewer construction project:

- Water quality effects related to erosion and sedimentation during construction;
- Water quality effects related to operation and maintenance of the system;
- Effects of tree removal due to sewer installation;
- Effects on the WLSSD collection and treatment system from the addition of sewage flow.
- Effects of dust and noise generated during construction; and
- Effects of odor impacts related to operation of the collection system.

Water quality effects related to erosion and sedimentation during construction.

8. Type of Effects. Excavation and other disturbances during the installation of sewer pipe typically impact a defined construction corridor. The removal of vegetation and other protective covering during construction may result in erosion and sedimentation whenever rainfall, storm water, or other runoff comes into contact with exposed areas. The transport of sediment and nutrients to drainage ways may adversely affect the quality of downstream waters by increasing turbidity, depositing sediment in streambeds, or increasing the fertility of the waters. The potential for erosion and sedimentation does exist in these areas during construction. Furthermore, the proposed sewer will cross a number of rivers, smaller streams and creeks; some of which are designated trout streams. Some comment letters expressed concern about stream sedimentation (See Comments 9h, 9i, 13d, and responses.)

9. Extent of Effects. Collectively, approximately 165 acres will be excavated or graded during construction of the mainline sewer. A smaller amount will also be affected during the installation of lateral sewer pipe to serve residential and commercial connections. The installation of the mainline sewer will occur within the existing Scenic Highway and railroad right-of-way. Lateral sewer
installation will use county road right-of-way to the greatest extent possible. Potential erosion and sedimentation impacts will be addressed in these areas by the construction technique selected and the application of erosion prevention and sedimentation control measures.

All river and stream crossings will be done without contact to the streambed during construction. Streams that have bridges will have the carrier pipe attached directly to a bridge substructure. Most other watercourses without bridges will be crossed by directionally drilling the carrier pipe into the road fill and avoiding contact with the stream or drainage bed. It is preliminarily estimated that directionally drilled segments will total 3100 feet in length. Open-cut excavation will be utilized as the primary construction technique for the installation of the remaining mainline and lateral piping.

The project will incorporate measures for immediate and future erosion control. Continuous and intermittent streams, including trout streams, will be protected with silt fencing, sediment traps, hay bale traps, fiber blankets, and/or other similar measures. Regular inspection by D/NSSD will be required to ensure proper erosion controls are put in place and are properly maintained, especially after rainfall events. Inspections will also be conducted by the MPCA. Disturbed areas would be regraded to original contours and re-seeded to a cover crop of native grasses. All disturbed areas that drain to waterways would be stabilized prior to any winter shutdown. After construction is completed, seeding and mulching must be maintained until permanent drainage and erosion control is re-established. These activities will be guided by the project Erosion Control and Stormwater Management Plan (EAW Exhibit 11); but, ultimately, proper use of Best Management Practices (BMPs) will rely on the expertise and judgement of the contractor and the inspectors.

10. Reversibility of Effects. If properly designed, the installation of the sewer pipe will not result in permanent impacts related to erosion and sedimentation. Areas temporarily impacted by construction would be returned to pre-construction condition so that existing hydrologic conditions, including drainage patterns, are restored.

11. The MPCA finds that the environmental review is adequate to address these concerns because:

All potential impacts to water quality related to erosion and sedimentation during construction that are reasonably expected to occur from the proposed project have been considered by MPCA staff during the review process and methods to prevent these impacts have been developed.

12. The MPCA finds that the project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of erosion and sedimentation during construction.

Water quality effects related to operation and maintenance of the system.

13. Type of Effects. The proposed wastewater collection system will consist of several hundred individual service grinder pumps, small diameter pressure sewers, one intermediate pump station, three main pump stations, forcemains, gravity sewer, and storage facilities for excess flows. These facilities will be relied on to transport untreated domestic wastewater to a treatment facility and to do so with minimal incidence of accidental sewage releases to the environment. Failure of any portion
of these systems could result in adverse impact to the eventual receiving waters including fish kills due to oxygen depletion and hazards to human health due to exposure to pathogenic organisms present in the wastewater.

14. Extent of Effects. The design, operation, and maintenance of this complex system require numerous safeguards to ensure that interruptions in service or system failures are minimized. Several areas were highlighted in EAW Item 6 as receiving special attention. Comments on the EAW also raised concerns or provided information about the performance, reliability and safety of these systems. Some of the specific areas that were addressed included: pipe capacities (Comment 13b), emergency power for the collection system (EAW p. 7), the effects of power outages on individual users of the system (EAW p. 7, Comments 13f, 13g), the use and powering of heat tracing to prevent freezing (EAW p. 7, Comment 13h), leak detection and repair (EAW p. 8, Comments 8g,13j), the location and use of isolation/protection valves needed in case of backups, line rupture or repair (EAW pp. 7, 9, Comment 13i), the use of trench dams to prevent water from travelling through pipe bedding material to surface waters (EAW p. 8), emergency repair procedures and operation of the system during repair (EAW pp. 8, 9), and storage of D/NSSD and KR/LSD flows during periods of excess flow in the downstream WLSSD system (see Findings 23-27). The principal mitigating factor is, therefore, prevention by the incorporation of conservative design parameters. Additionally, emphasis is also placed on the ability of the system operator to rapidly detect and correct problems.

15. Reversibility of Effects. Water quality impacts related to the accidental release of untreated sewage are temporary in nature; however, the effects on aquatic communities or human health can be serious. A useful prediction of the frequency of such occurrences cannot be made; nevertheless, such impacts would tend to be temporary and reversible relatively soon after the source is eliminated. In part, this is because the vast majority of the streams and their watersheds will be above the location of sewer pipe crossings. In addition, the recreational uses of these waters that involve whole body contact, such as swimming, are somewhat limited because of accessibility and cold water temperatures.

16. The MPCA finds that the environmental review is adequate to address these concerns because:

All potential impacts to water quality related to operation and maintenance of the system that are reasonably expected to occur from the proposed project have been considered by MPCA staff during the review process and methods to prevent these impacts have been developed.

17. The MPCA finds that the project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of operation and maintenance of the system.

**Effects of tree removal due to sewer installation.**

18. Type of Effects. The project area consists of a mixture of woodlands and small developments with paved surfaces limited to arterial roads and some driveways. Forests and wetlands in the area provide habitat for a variety of wildlife. Some comments expressed concerns about the amount of tree removal that would occur and the resulting adverse effects with respect to wildlife habitat loss (see Comments 9h, 13n, and responses) and visual impacts (Comment 13l and response).

19. Extent of Effects. The majority of the mainline sewer alignment will be located in previously cleared right-of-way areas along Scenic Highway 61 and the North Shore Scenic Railroad. Trees and shrubs
do exist along some of the alignment in this section. Tree and shrub removal will be necessary along these portions. The area of tree removal along the mainline is estimated at 14.5 acres. The project proposer believes that reasonable efforts have been made to reduce the impacts to wooded areas throughout design and has indicated that these efforts will continue through the actual construction staking process.

Generally, the installation of lateral sewers and other facilities related to residential and commercial services will tend not to occur in areas with significant wildlife habitat. Some tree and shrub removal will be necessary in areas of public right-of-way in front of private property; however, the project design engineer has indicated that reasonable efforts will be made to avoid or minimize tree removal wherever possible.

20. Reversibility of Effects. Trees that are removed will not be replaced. Tree growth over sewer pipelines is not desired due to the potential for damage to the pipeline from roots. The amount of wooded acreage is believed to be very small when compared to the amount of forest in the adjacent areas.

21. The MPCA finds that the environmental review is adequate to address these concerns because:

All potential impacts related to tree removal due to sewer installation that are reasonably expected to occur from the proposed project have been considered by MPCA staff during the review process and methods to minimize these impacts have been developed.

22. The MPCA finds that the project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of tree removal due to construction.

**Effects on the WLSSD collection and treatment system from the new sewage flow.**

23. Type of Effects. A proposal to expand a wastewater collection system requires a demonstration that the capacity of the system and the wastewater treatment facility to convey and properly treat the additional water and waste loading is sufficient. If new flows added to a system cause the total influent loading to exceed the design parameters for the facility, violations of effluent limitations or other operating parameters regulated by the permit may result. This may cause adverse water quality impacts, typified by water quality standards violations. Wet weather flow volumes generally receive added attention because of the potential for bypassing of untreated wastewater from the collection system due to system inadequacies, or bypassing of undersized treatment units because of the need to protect their operation during periods of exceptionally high flow.

24. Extent of Effects. The project design has used an initial estimated service population equivalent of 1,300 based on growth projections over a 20-year period. The capacity of the piping network has not been modeled under maximum build-out within the service territories. However, if additional
capacity is needed in the future to accommodate more flow, larger pumps could be installed at the pumping stations, the wetwell capacity of the stations could be enlarged, or an additional pumping station could be constructed.

The proposed D/NSSD collection system would discharge to the WLSSD. The NPDES permit for the WLSSD WWTF contains effluent concentration and loading limitations, and removal efficiency requirements that are based on a design flow of 43.6 million gallons per day (MGD). In general, the existing wastewater treatment plant is working well and is dependably producing a high quality effluent. The capacity of the facility was reviewed in April 2001 by the WLSSD to ensure that hydraulic and treatment capacities are maintained so that operations will remain in compliance with permit conditions. Portions of the treatment system were upgraded as recently as summer 2001.

Wet weather flow volumes frequently exceed capabilities of the WLSSD and city of Duluth wastewater collection systems. Currently, the WLSSD treatment facility receives flows at rates averaging 38 – 40 MGD; however, during periods of wet weather and higher runoff, flows well in excess of the design flow have been received at the plant and treated to levels that comply with permit requirements. Most recently, compliance with all effluent limits was maintained during April and May 2001 when peak daily flows in the range of 60 – 70 MGD were experienced.

WLSSD, the city of Duluth, and the MPCA have been meeting to resolve bypassing issues. Conditions are being negotiated for a new Sanitary Sewer System Permit which will have joint permitees (city of Duluth and WLSSD). There will also be a reissued NPDES Permit for the WLSSD discharge public noticed concurrently with the sewer permit. It is targeted that these permits be put on public notice by April 2002.

The addition of the flow from D/NSSD and KR/LSD is not expected to contribute significantly to the existing wet weather flow problem of the WLSSD system. This will be accomplished by requiring sufficient offline storage for both districts to accommodate the storage of all the D/NSSD and KR/LSD flow for up to 24 hours during wet weather conditions. In addition, the volume produced by the districts will be relatively small compared to the WLSSD flow. The operation of the proposed storage units will be initiated whenever a capacity problem exists within the downstream WLSSD system. See the Response to Comment 8c for additional information.

The potential for bypassing from the D/NSSD pump stations is mitigated by the availability of approximately three hours of storage for average wet weather flow within the collection system. This will allow time for the problem to be corrected, e.g., putting an emergency generator into service. Bypassing at the KR/LSD pump station, located near the Knife River treatment plant, would not be a significant concern because of the large amount of storage capacity available at the existing tankage at the Knife River treatment plant.

25. Reversibility of Effects. There are no irreversible environmental effects that are reasonably expected to occur from the project related to the capacity of the proposed D/NSSD and KR/LSD wastewater collection systems, or with respect to the capacity of the WLSSD systems that will be accepting wastewater from the project area. As discussed above, the expected effects on the WLSSD system are minimal. There is no reason to believe that this project is reasonably expected to cause a significant adverse effect on the operations or performance of the WLSSD system.
26. The MPCA finds that the environmental review is adequate to address these concerns because:

All potential impacts related to collection and treatment of wastewater within the WLSSD system that are reasonably expected to occur from the proposed project have been considered by MPCA staff during the review process and methods to minimize these impacts have been developed.

27. The MPCA finds that the project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of the increased water and waste loading to the WLSSD system associated with this project.

**Effects of dust and noise generated during construction.**

28. Types of Effects. The construction of the sewer system may cause temporary impacts related to noise and dust generated by construction activities. Equipment generating noise would include directional drilling rigs, backhoes, loaders, trucks, and compressors. Portions of the project may involve rock excavation, which would increase noise and dust levels related to the activities. Generally, construction disturbances may include vegetation removal and excavation within the construction corridor.

29. Extent of Effects. The sensitive receptors for the project are private residences and small businesses. The generation of noise will be limited by maintaining properly muffled equipment and by limiting construction periods to Monday through Friday from 7:00 a.m. to 7:00 p.m. Limiting periods of operation and applying moisture to traveled areas wherever necessary will mitigate dusty conditions.

30. Reversibility of Effects. Some impacts related to dust and noise generated by construction activities are unavoidable; however, such impacts are temporary and of limited duration. Proper construction practices, as required by the project plans and specifications, can further reduce impacts in residential areas. There is no reason to believe that this project will cause significant adverse effects related to the generation of dust and noise during construction.

31. The MPCA finds that the environmental review is adequate to address these concerns because:

All potential impacts related to dust and noise generated during construction that are reasonably expected to occur from the proposed project have been considered by MPCA staff during the review process and methods to minimize these impacts are available if needed.

32. The MPCA finds that the project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of dust and noise generated during construction.
33. Type of Effects. The conveyance and storage of domestic wastewater has the potential to produce objectionable odors from the operation of pumping, transport, and storage facilities.

34. Extent of Effects. Odor control and treatment would be a major operational feature of the proposed system. Odor control facilities will be incorporated in the design of each main pump station. Odor control facilities are anticipated at the following locations: the main D/NSSD pump stations (no. 1 and no. 2); the final gravity discharge location at 47th Avenue East; the D/NSSD storage facility for excess flow; and the pressure sewer discharge location to the gravity sewer segment in the Greenwood Beach area of Duluth Township. Odor control would be accomplished at these locations by drawing odorous air from areas of the system that are under atmospheric pressure. The odorous air would flow from the wastewater collection system through a polyethylene duct through a dry drum scrubber. Negative air pressure would be applied to the wastewater system from a motor/blower mounted on the effluent of the dry drum scrubber.

Odor removal occurs in the dry drum scrubber by passing the air through a replaceable dry scrubbing media. The media consists of impregnated activated carbon, active-oxidant impregnated alumina, potassium permanganate and other binders. All the scrubbers are to be installed in pre-cast concrete buildings. In the case of the two main D/NSSD pump stations and storage tank, the pre-cast building will also contain pump station controls. In the case of the two gravity sewer sections, the pre-cast buildings will house only the drum scrubbers.

35. Reversibility of Effects. Although the release of odor from these facilities may not be completely preventable, considerable attention has been given to incorporating odor controls in the project design. Such impacts, if they do occur, would reasonably be expected to be of limited duration and low intensity and not likely to cause significant adverse effects related to the generation of odor due to operation of the collection system.

36. The MPCA finds that the environmental review is adequate to address these concerns because:

All potential odor impacts related to the operation of the collection system that are reasonably expected to occur from the proposed project have been considered by MPCA staff during the review process and methods to minimize these impacts will be incorporated into the project design.

37. The MPCA finds that the project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of odor related to the operation of the collection system.

Cumulative Potential Effects of Related or Anticipated Future Projects

38. The second criterion that the MPCA must consider, when determining if a project has the potential for significant environmental effects that are reasonably expected to occur, is the "cumulative potential effects of related or anticipated future projects.” Minn. R. 4410.1700, subp. 7.B (1999) The MPCA findings with respect to this criterion are set forth below.

39. According to EQB Rules:
“Cumulative impact” means the impact on the environment that results from incremental effects of the project in addition to other past, present, and reasonably foreseeable future projects regardless of what person undertakes the other projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Minn. R. 4410.0200, subp. 11. (1999)

40. The EAW identified increased amounts of residential and commercial secondary growth and development enabled by the project as related or anticipated future projects that could result in cumulative impacts. The potential cumulative impacts that may result from the residential development enabled by the project are related to the following:

- The effects related to land use and the adequacy of local controls to manage anticipated increases in growth and development;
- Adverse water quality effects on sensitive streams and Lake Superior due to increasing amounts of storm water runoff from developing areas; and
- Traffic congestion and deterioration of air quality due to increased development.

**Effects related to land use and the adequacy of local controls to manage anticipated increases in growth and development.**

41. The project will provide sewer service to the unsewered Lake Superior shoreland between the Lester River and Lake County. This service corridor has predominantly large lot residential development and some larger tracts of undeveloped or natural areas. Approximately 96 percent of the land is privately owned. While the project does not directly conflict with existing land uses, it may accelerate new development in the project area and could enable more intensive land use patterns than currently exist or are planned for by local governments.

42. The density and rapidity of development in any area depends primarily on the market demand. Other important factors include access to transportation, zoning or other land use regulation, regulatory protection of natural resources, access to drinking water and access to wastewater treatment, either through centralized systems or ISTS. The poor soils typical of the project area mean large lots are needed for an adequate on-site system. This potential constraint on development in the unsewered portion of the D/NSSD service territory will be removed by the construction of a centralized sewer system.

43. As development progresses or becomes more intense, the amount of impervious surface in the developing area increases. In the project area, this means that surface waters, such as Lake Superior and its tributaries, may be exposed to additional nonpoint source pollution. Other potential impacts include adverse effects on sensitive natural areas, undesirable changes in the character of the area’s existing communities, and over-taxing of the capacity of existing public infrastructure.

44. Numerous comments were made concerning the cumulative impacts of secondary growth and development and the need for effective mitigation. Such comments were raised by the National Wildlife Federation, the Minnesota Center for Environmental Advocacy, Janet Green, and the Isaac Walton League. Generally, these comments expressed serious concerns about the severity of potential impacts from growth and development enabled by the sewer project, and the uncertainties
related to the future actions of local governments to enact the zoning and other restrictions needed to mitigate adverse effects. These comments also expressed doubts as to whether it was appropriate for the MPCA to rely on future, but as yet uncompleted, actions of local units as a basis for its decision on the significance of potential cumulative environmental effects.

45. The review of the effects of future growth and development in the EAW was limited and qualitative in nature because specific proposals for new residential or commercial development in the area have not been identified. Therefore, the estimate of future growth and development was based on the maximum build-out that could occur under existing zoning. The review focussed on the efforts of local units to carry out planning processes to determine the desired future characteristics of the areas under their jurisdiction and to adopt new or revised policies and regulations to mitigate the potential adverse effects of development. These efforts and the results achieved to date were described in EAW Items 27 and 29 and in the responses to Comments 9f and 12b. The mitigation of future effects related to land use is also addressed in Finding 80.

46. The MPCA finds that the environmental review is adequate to address concerns related to land use. The MPCA staff has considered the potential impacts on existing and future land uses from secondary growth and development that are reasonably expected to occur because of the proposed project. Methods to minimize these impacts have been identified for local and state jurisdictions and reasonable assurances exist that they will be applied for the management of future growth and development in the project area.

47. In considering the potential cumulative effects on existing and future land uses reasonably expected to occur as a result of secondary growth and development enabled by the project, the MPCA finds that the project does not have the potential for significant environmental effects.

**Adverse water quality effects on sensitive streams and Lake Superior due to increasing amounts of storm-water runoff from developing areas.**

48. In general, storm-water runoff from developed area has the potential to adversely affect surface water quality. Storm-water runoff volumes and flow rates tend to increase in proportion to the amount of impervious surface (driveways, streets, roofs, and parking lots) in new development, and the quality of runoff tends to decrease as natural vegetative cover is changed by human activities. Rainwater contains small concentrations of nutrients, which will then be carried in storm-water runoff. Storm-water runoff can entrain nutrients that promote the growth of algae and can cause erosion and sedimentation, which may increase turbidity or the deposition of soil in streambeds.

49. The project area consists of a mixture of woodlands and small developments with paved surfaces limited to arterial roads and some driveways. Storm-water runoff from the area flows to the rivers, streams and ditches that carry runoff to the nearshore waters of Lake Superior. The quality of these waters may be impacted by increased nutrient and sediment loading. The future extent and
significance of the cumulative effects of storm water in the area will depend on the amount of land
that is or will be developed, the relative amount of impervious surface, and the effectiveness of storm-
water management practices.

50. A number of streams run through the project area; however, the watersheds of these streams lie
mostly outside (north of) the sewer service corridor. These areas are mostly undeveloped; therefore,
future land use outside the project area will have a substantial effect on the condition of the lower
stream segments that flow through the project area. With this in mind, the D/NSSD and the KR/LSD
have adopted ordinances prohibiting the extension of sewer service to areas outside of the legally
established boundaries of their respective service corridors. See also Finding 76.

51. All developments in Minnesota that result in the disturbance of more than five acres of vegetation are
required to submit an application to the MPCA to obtain a General NPDES Storm Water Permit for
Construction Activity. This permit mandates BMPs to be employed during construction.
Enforcement action can be taken against the developer and contractor to correct permit violations.
See also Finding 69.

52. The D/NSSD has recently adopted a regulation for storm water that will apply to all individuals who
connect to the sewer line. This will apply to existing development and to those who will build and
hook-up in the future. This regulation will require compliance with specific BMPs, restrict shoreline
vegetation removal, control fertilizer application, and for new properties, limit the amount of
coverage by impervious surfaces. Lake County, which has jurisdiction over land use in the KR/LSD
service area, has the similar provisions in the county land use ordinance. See also Finding 77.

53. In March 2003, storm-water controls will be expanded under the U.S. Environmental
Protection Agency Storm Water Phase II Final Rule. Therefore, the MPCA, under its NPDES
Permit authority, shall require all development that results in one or more acres of land
disturbance to receive coverage under the General Storm Water Permit for Construction
Activity. This permit will require sediment and erosion control BMPs implementation
during construction. For sites that result in one acre or more of additional impervious
surface, storm-water detention must be provided to treat runoff from the additional
impervious surfaces. Also in March 2003, the city of Duluth will be required to receive
coverage under a General Storm Water Permit for Municipal Activities. This permit would
require the city of Duluth to develop a storm-water management plan, conduct public
education regarding storm water and its impacts, and adopt management strategies to protect
area resources from polluted runoff. See also Findings 69 and 79.

54. Additional development enabled by the project is an unavoidable and, in part, intended result of the
project and is not reversible. As discussed above, the means are available to mitigate potential effects
of storm water derived from developed areas on the quality of surface waters. This mitigation can
and should be applied on a consistent basis as future development takes place within the project area.
Adverse impacts related to storm water, should they occur, are reversible only to the extent that
nonpoint sources of pollution can be reduced or eliminated or that additional treatment methods can
be put into place.
55. The MPCA finds that the environmental review is adequate to address concerns related to storm water attributable to secondary growth and development. All potential water quality impacts that are reasonably expected to occur due to secondary growth and development enabled by the project have been considered by MPCA staff during the review process and mitigation has been identified.

56. The MPCA finds that the project as it is proposed does not have the potential for significant environmental effects on water quality due storm water attributable to secondary growth and development.

57. In considering the potential cumulative effects of storm water from related or anticipated future projects, the MPCA finds that the reasonably expected effects from this project will not be significant.

Air quality effects from air emissions related to increased traffic from development enabled by the sewer project.

58. The EAW did not identify potential air quality impacts from increased vehicle-related air emissions related to secondary growth and development. However, such potential air quality effects were mentioned in comments made by the National Wildlife Federation. It can reasonably be expected that traffic congestion will tend to increase as residential and other development increases after wastewater collection services become available and as recreational use of the area continues and grows. With congestion, the level of service deteriorates, and air quality is potentially affected by idling vehicles and by the number of vehicles.

59. The amount of any traffic congestion and resultant air quality impacts reasonably expected to occur will depend upon the existing and future transportation infrastructure, traffic volumes, and the physical setting. In the project area, the combination of these factors that exists is not believed to be likely to result in significant air quality impacts. In addition, the project area has a roadway (U.S. Highway 61) available for higher speed through-traffic traveling from Duluth to Two Harbors and a Scenic Highway available to accommodate local residential and recreational trips.

60. Traffic congestion and the potential air quality impacts associated with it are subject to mitigation. However, it is believed that future traffic improvements are more likely to be made due to safety considerations or for purposes of convenience rather than deterioration in air quality. Future improvements could include roadway improvements, such as turn lanes, signalization, or limiting access points. These measures may be considered by future transportation planning activities of the each governmental unit in the project area with responsibility for transportation facilities and are implemented routinely as communities undergo development.

61. Secondary growth and development that may be enabled by providing sewer service is not reversible. However, any traffic congestion or air quality impacts resulting from vehicular traffic from enabled development are reversible, or even preventable, provided appropriate mitigation measures are employed. As discussed above, the expected effects on air quality are believed to be minimal. There is no reason to believe that this project is reasonably expected to cause a significant negative effect on air quality.

62. The MPCA finds that the environmental review considered but was unable to identify significant impacts to air quality that could reasonably be expected to occur due to secondary growth and development enabled by the proposed extension of sewer service to the project area.
63. The MPCA finds that the project does not have the potential for significant cumulative environmental effects that could reasonably be expected to occur as a result of vehicular air emissions associated with traffic from secondary growth and development.

The Extent to which the Environmental Effects Are Subject to Mitigation by Ongoing Public Regulatory Authority

64. The third criterion that the MPCA must consider, when determining if a project has the potential for significant environmental effects that are reasonably expected to occur, is "the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority," Minn. R. 4410.1700, subp. 7.C (1999). The MPCA findings with respect to this criterion are set forth below.

65. The following local, state and federal permits, approvals, and/or financial assistance will be required for the project:

- Minnesota Department of Trade and Economic Development (MnDTED) State Revolving Fund Loan and Wastewater Infrastructure Funding;
- MPCA review and approval of construction plans and specifications;
- MPCA SDS permits for sewer installation and operation;
- MPCA General NPDES Permit for Storm Water during Construction Activity;
- Minnesota Department of Transportation (MnDOT) utility installation permit;
- Minnesota Department of Natural Resources (DNR) utility crossing license;
- DNR temporary water appropriation permit;
- WLSSD sewer extension permit;
- WLSSD Wastewater Allocation Agreement;
- WLSSD Inflow and Infiltration Abatement Plan;
- City of Duluth special use permit for excavation and grading in shoreland area;
- St. Louis and Lake Counties, approval for utility installation in right-of-way;
- U.S. Army Corps of Engineers letter of notice for Section 404 general permit; and
- City of Duluth special use permit for excavation and grading in shoreland area.

66. MnDTED State Revolving Fund Loan and Wastewater Infrastructure Funding. Financial assistance for qualifying wastewater projects is available through the State Revolving Fund loan program. Grant money may also be available through the Wastewater Infrastructure Funding program. Funding for these programs is determined annually by the Minnesota Legislature. Priority for funding is based on a point system that combines the environmental and financial needs of each proposed project. Funding is subject to approvals by the MnDTED and the MPCA.
67. **MPCA review and approval of construction plans and specifications.** Construction plans and specifications for the project have been submitted to the MPCA for technical review and approval. This review is performed to ensure that the facility design is consistent with good engineering practice and state and federal criteria.

68. **MPCA SDS permits for sewer installation and operation.** After the completion of administrative and technical reviews by MPCA staff, SDS permits will be required for each sanitary district establishing appropriate requirements for sewer construction and operation. This review will also verify that hydraulic capacity exists in the receiving wastewater interceptor systems and treatment facility. The MPCA will include a condition in the sewer extension permits requiring enforcement of storm-water requirements contained in D/NSSD regulations and the Lake County land use ordinance.

69. **MPCA General NPDES Permit for Storm Water during Construction Activity.** Prior to construction, the project proposer(s) and contractor(s) must also submit to the MPCA an application for a General NPDES Permit for storm water during Construction Activity. This permit requires the development of an erosion and sedimentation control plan that specifies the types of BMPs to be implemented and identifies the party or parties who will be responsible for installing and maintaining the BMPs. Staff from the MPCA Duluth office will conduct occasional inspections to check for compliance with permit requirements and respond to any complaints received during the construction phase of the project.

70. **MnDOT utility installation permit.** MnDOT will review plans for the installation of sewer in the state highway right-of-way. The MnDOT utility installation permit ensures that the project does not adversely affect transportation facilities.

71. **DNR utility crossing license.** The required DNR utility crossing license describes permitted activities to be conducted. This license will also set forth requirements intended to minimize potential adverse effects on public water resources.

72. **DNR temporary water appropriation permit.** Hydrostatic testing of all mainline piping will be conducted before putting the new sewer system in operation. Lake Superior would be the likely source of this water and a temporary water appropriation permit from the DNR will be required. The contractor performing the pipeline testing must obtain the appropriate permit and ensure compliance with permit conditions to be set by the DNR.

73. **WLSSD sewer extension permit.** Project plans will be submitted to the WLSSD for technical review and approval of construction of collection facilities discharging to the WLSSD system.

74. **WLSSD Wastewater Allocation Agreement.** The D/NSSD and KR/LSD have drafted a Wastewater Allocation Agreement that must be approved by the WLSSD. The agreement will define water and waste constituent loading parameters that will be required for discharge to the WLSSD system in order to maintain good operating conditions at WLSSD conveyance and treatment facilities.
75. **WLSSD Inflow and Infiltration Abatement Plan.** This plan must be submitted to WLSSD for the proposed D/NSSD sewer system and the existing KR/LSD collection system. Both districts must meet the requirements of the proposed U.S. Environmental Protection Agency (EPA) Capacity, Management, Operation and Maintenance Rules.

76. **D/NSSD and KR/LSD, ordinances on sewer service beyond boundaries.** Sewer extensions outside the present boundaries of the D/NSSD will be prohibited by D/NSSD Sewer Ordinance No. 2, Section 3. Restriction on Utility Extensions. Utility service to the KR/LSD will not be extended to properties located outside of the jurisdictional boundaries of the district. Prior to any new areas being served, the boundaries of the district would have to be changed in the same manner as that which was used for the formation of current district boundaries.

77. **D/NSSD and KR/LSD, connection requirements pertaining to stormwater.** The D/NSSD and the KR/LSD will each issue permits to property owners for connection to the sewer system. These permits will require all new and existing properties seeking sewer services to meet stormwater management standards contained in D/NSSD and Lake County regulations.

78. **City of Duluth special use permit.** A city of Duluth special use permit for excavation and grading in a shoreland area will be required to ensure that the proposed facility will comply with applicable codes, plans and ordinances.

79. **City of Duluth Phase II stormwater permitting.** The city of Duluth will be subject to the Phase II NPDES Storm Water Rule issued by EPA.

80. **City of Duluth, Duluth Township, Lake County, comprehensive planning and land use ordinance revision.** Each governmental unit within the sanitary districts has regulatory authority over land development within their jurisdiction. Land use goals and policies are developed through comprehensive planning processes and incorporated into zoning ordinances. Although not part of the sewer projects per se, comprehensive plans and zoning ordinances provide the means by which each local governmental unit in the district will regulate growth and development after installation of sewer services. These jurisdictions have participated in the development of the North Shore Land Use Plan sponsored by the D/NSSD and are conducting comprehensive plan revision processes as a prelude to changes in zoning provisions. These planning processes have not yet been completed, and the recommendations of the North Shore Land Use Plan are not binding on the elected officials acting within boundaries defined by law. Nevertheless, the MPCA believes that the actions taken by the local units so far evidence the desire to properly plan for and manage future growth, consistent with the policy goals, strategies and other recommendations of the Land Use Plan.

81. **St. Louis and Lake Counties, approval for utility installation in right-of-way.** The project will be subject to review by the St. Louis and Lake County Highway Departments prior to the installation of utilities within the rights-of-way of county roadways.
82. **U.S. Army Corps of Engineers, letter of notice for Section 404 general permit.** The proposed piping alignments do not appear to cross any wetlands. The permitting processes through the Corps of Engineers, as well as St. Louis County, Lake County and the city of Duluth, will determine the need for wetland delineation associated with the project. St. Louis County has surveyed the proposed alignment for wetlands. The county will work with the Corps of Engineers to evaluate potential wetland disturbance and mitigation strategies that may be required.

83. The MPCA finds that ongoing public regulatory authority will address significant potential environmental effects that were identified as reasonably expected to occur.

**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.**

84. The fourth criterion that the MPCA must consider is "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." Minn. R. 4410.1700, subp. 7.D (1999). The MPCA findings with respect to this criterion are set forth below.

85. MPCA staff, as part of the environmental review for the proposed D/NSSD sewer project, used information from the following documents. This list is not intended to be exhaustive. The MPCA also relies on other information from the project proposer, commentors, staff experience, and local governmental units.


86. MPCA staff routinely considers and issues SDS permits for the installation and operation of wastewater-related facilities. It has developed substantial experience and expertise with regards to the design and construction of these systems, including the operation and maintenance provisions needed for their safe and reliable performance. MPCA staff also administers stormwater permitting programs in the project area and has developed substantial experience and expertise with regards to the sources and control of stormwater.

87. The potential environmental effects of the project can be addressed in the project design and permit development processes, and through application by local governmental authorities of the information developed through regional or local plans and studies.

88. Based on the information available from previous environmental studies, facility planning processes, local land use planning processes, and the expertise of MPCA staff related to similar projects, the MPCA finds that the environmental effects of the project that can reasonably be expected to occur can be anticipated and controlled.
CONCLUSIONS OF LAW

A. The MPCA has jurisdiction in determining the need for an EIS for this project. The EAW for the Duluth/North Shore Sewer Project, the permit development process, the facility planning process, local planning processes, the responses prepared by MPCA staff in response to comments on the EAW, and the evidence in the record are adequate to support a reasoned decision regarding the potential significant environmental effects that are reasonably expected to occur from this project.

B. Areas where the potential for significant environmental effects may have existed have been identified and appropriate mitigation measures have been incorporated into the project design and permits. The project is expected to comply with all MPCA standards.

C. Based on the criteria established in Minn. R. 4410.1700 (1999), there are no potential significant environmental effects reasonably expected to occur from the project.

D. An EIS is not required.

E. Any findings that might properly be termed conclusions and any conclusions that might properly be termed findings are hereby adopted as such.

ORDER

The MPCA determines that there are no potential significant environmental effects reasonably expected to occur from the Duluth/North Shore Sewer Project, St. Louis and Lake Counties, and that there is no need for an Environmental Impact Statement.

IT IS SO ORDERED

__________________________________________
Commissioner Karen A. Studders
Chair, Citizens’ Board
Minnesota Pollution Control Agency

______________________________
Date
1. **Comments by Dwight and Barbara Tschetter**

   **Comment:** Concern was expressed that the Duluth/Northshore central sewer project would not extend to the Larsmont area. The difficulty related to the use of septic tank/drainage disposal systems in a bedrock area was noted.

   **Response:** Larsmont was not included in this project due to the inability to secure needed financial assistance. The Knife River portion of the Knife River/Larsmont Sanitary District (KR/LSD) was included because of the aging condition of the Knife River wastewater treatment plant (WWTP). The district is continuing to pursue financial assistance through a variety of sources in an attempt to make the Larsmont segment affordable.

2. **Comments by Anita Kovic**

   **Comment:** Support was expressed for the proposed project. The question was asked, would the project serve the areas in Two Harbors that are located next to Lake Superior up to Old North Shore Road?

   **Response:** The project will not serve any area in Two Harbors. The northeastern boundary will be the northeastern most portion of the existing Knife River collection system located in the general area of the Salaka Road. Please note that the Knife River portion consists of mainline wastewater conveyance to the Duluth/North Shore system, not any expansion of the existing collection system.

3. **Comments by Carly Swirtz**

   a. **Comment:** It was commented that many residents in the area do not want the sewer project. The question was asked, where did this project originate and who is supporting it?

   **Response:** This project was preceded by the completion of the Western Lake Superior Sanitary District (WLSSD) Water Quality Management Plan. The plan, adopted in September 1996, called for closer study of suspect areas of water quality concerns within the WLSSD statutory boundaries. Surveys indicated that more than fifty percent of the on-site septic systems were failing with associated drinking water problems as a result. A previous survey, prepared for the WLSSD in 1994, also reported high failure rates for on-site systems. Subsequently, the city of Duluth, along with the Townships of Lakewood and Duluth, formally requested assistance in solving the problem of failing systems along the shoreline.

   In October 1999, the Minnesota Pollution Control Agency (MPCA) received a petition to form a sanitary district from Duluth, Lakewood Township, and Duluth Township. A public meeting was held on July 14, 1999, at the Lakeview Castle to consider creation of the sanitary district. Residents within the proposed district were mailed a notice of the meeting. On November 15, 1999, the MPCA
sent a Notice of Intent to approve the creation of the sanitary district. A copy of the notice was sent to all residents of the proposed sanitary district and was published in the State Register. On January 31, 2000, the MPCA sent a copy of the Notice of Publication of Findings of Fact, Conclusions of Law, and Order in the Matter of the Petition to Create the Duluth/North Shore Sanitary District (D/NSSD), to all residents of the proposed district. The notice was also published in the State Register.

The KR/LSD went through a similar process. On January 16, 2001, the Notice of Publication of Findings of Fact, Conclusions of Law, and Order in the Matter of the Petition to Create the KR/LSD, was sent to all residents of the proposed district and was published in the State Register.

b. **Comment:** Concern was expressed about having to abandon a one-year-old septic system that cost over $9,000 and having to hook up to a new sewer system. The project will provide financial hardship for many residents and family owned businesses that have established septic systems.

**Response:** The author of this comment lives in Larsmont which is not in the project area defined for this EAW. Please see the responses to Comment 1 and 4.

4. **Comments by Barb and Steve Lulay**

**Comment:** Concern was expressed about the prospect of disconnecting from a five-year-old mound system that cost $30,000 and paying to hook up to and use a new sewer line. The hook-up should be optional if the residence has a functioning, modern system.

**Response:** According to D/NSSD Ordinance No. 1, connection to the District’s system is mandatory within 90 days of written notification by the District. Failure to connect within that time will subject the property owner to penalties, including the District making the connection and charging the property owner for the cost. A property owner can also be fined $700 per day until they have connected to the D/NSSD system.

It should be noted that the cost of a connection made at the time of project construction may be spread over a 15-20 year period at a nominal interest rate. If the connection to the system is made at a later date, the cost would have to be paid in a lump sum.

The debt incurred to extend sewer service must be repaid from special assessments levied against benefited properties. Consequently, the district is unlikely to grant exceptions to connecting to the sewer system. A single exception to connecting to the system is provided for a currently existing experimental system pursuant to D/NSSD ordinance. A committee of the D/NSSD Board of Managers would consider circumstances under which an additional exemption or an exception to the connection requirement would be granted. The committee’s recommendations would be brought to the Board of Managers for future consideration and action.
The total project cost is based on an engineer’s estimate and is subject to change. The estimated project costs at this point are as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total project cost</td>
<td>$13 million</td>
</tr>
<tr>
<td>Up-front Special Assessment, per REU</td>
<td>$8,850 - $10,500</td>
</tr>
<tr>
<td>OR Annual Special Assessment, per REU</td>
<td>$640 - $760</td>
</tr>
<tr>
<td>Equivalent Monthly Special Assessment, per REU</td>
<td>$53 - $63</td>
</tr>
<tr>
<td>User Charge (cost of operation)</td>
<td>$29 - $34</td>
</tr>
<tr>
<td>TOTAL MONTHLY COST per REU (2004)</td>
<td>$82 - $97</td>
</tr>
<tr>
<td>Estimated Up-front Connection Costs (Non-fundable)</td>
<td>$600 - $3,500</td>
</tr>
</tbody>
</table>

*REU = residential equivalent unit*

The D/NSSD has indicated that it has received a $500,000 grant from the U.S. Army Corp of Engineers which will lower the cost to each property owner by $1,000. The district will also be eligible next year for the same amount. Also according to the district, the city of Duluth has available $150,000 of community development block grant funds to assist low and moderate income homeowners. This should provide $5,000 to be applied to their assessment. The district will be applying for St. Louis county community development block grant funds in the spring.

5. **Comment by Clair A. Nelson, Chairman, Lake County Board of Commissioners**

**Comment:** The Lake County Board recognizes that stringent land use controls and special efforts must be expended to protect the North Shore. The Board has committed in excess of $250,000 in research and engineering studies and participated intensely in supplemental planning and environmentally related projects to protect the waters of Lake Superior. The Board is actively participating in supplemental planning projects directed to the area to be served by the sewer project and are integrating those results with a revised County Comprehensive Land Use Plan to be taken to hearing in September.

**Response:** Comments noted. See also the response to Comment 12b concerning Lake County land use planning activities.

6. **Comment by Dennis A. Gimmestad, Government Programs and Compliance Officer, Minnesota Historical Society**

**Comment:** The indication in EAW Item 25a that archaeological, historical, or architectural resources are not present on or in proximity to the site is not accurate. As stated in previous letters, the buildings at the Lakewood [water treatment] Plant may be eligible for the National Register of Historic Places. However, it does not appear that the historical characteristics of the plant will be affected by the proposed work.

**Response:** This comment is correct; the response in Item 25a should have been “yes” to reflect that the project area does contain the Lakewood Water Treatment Plant located near the Ryan Road on Scenic Highway 61. As noted in the comment, the plant may be eligible for National Register of Historic Places. Subsequent review of the design has indicated that the plant would not be affected by the proposed project.
7. **Comment by Helen and Gerald Drewett**

   **Comment:** Agreement was indicated with respect to the plan for the Duluth/North Shore Sewer Project.

   No response necessary.

8. **Comment by Kurt W. Soderberg, Executive Director, Western Lake Superior Sanitary District (WLSSD)**

   a. **Comment:** The WLSSD provided an account of wastewater planning activities related to the proposed Duluth/North Shore and Knife River/Larsmont sewer projects and the District’s wastewater treatment facility.

   No response necessary.

   b. **Comment:** It was noted that the project description states that the gravity sewer pipe will be polyvinylchloride (PVC). The WLSSD does not recommend the use of PVC.

   **Response:** Ten States Standards 33.7 states, “Any generally accepted material for sewers will be given consideration….” The MPCA does not prohibit the use of PVC. At this time it is probably the most commonly used pipe material for wastewater sewer construction.

   Efforts were made to use polyethylene piping for all of the forcemain portions of the project. The use of PVC was included for the gravity portion due to the common use of PVC in the industry for gravity sewers. The project contains approximately 13,000 feet of PVC piping. This accounts for seven percent of the total piping for the project. When comparing the use of PVC to polyethylene, the advantages of PVC include cost and ease of construction. Durability and reliability are comparable. When comparing the use of PVC to ductile iron pipe, the advantages of PVC include cost, ease of construction and durability.

   c. **Comment:** With respect to emergency power, it is stated in the EAW that “[t]he agreement with the WLSSD would have a period of time, probably 24 hours, during which the storage facility could be offline after a bypass to allow the tank to be emptied.” (EAW at 7) A reasonable amount of time would be allowed to empty the storage tank but not preclude the need to use the tank again within that period.

   **Response:** The design average wet weather flow was used in designing the D/NSSD storage tank volume for a 24-hour storage condition. This volume was estimated at approximately 200,000 gallons. A safety factor of 1.5 was applied to this flow value to come up with a 300,000-gallon storage tank capacity. Recent flow data from the Knife River WWTP was used in designing the storage tank volume for a 24-hour storage condition. This volume is estimated at approximately 60,000 gallons. A safety factor of 1.5 was applied to this flow value to come up with a 90,000-gallon storage tank capacity.

   The current design for the Duluth/North Shore storage facility includes a pumping capacity of 800 gallons per minute (gpm) under isolated operation. Isolated operation means that the detention storage pumps are operating without any grinder pumps or Pump Station #1 operating.
gallon tank would drain in 6.25 hours under this condition. The pumping capacity of the Knife River storage facility would be 125 gpm under isolated operation. The 90,000-gallon tank would drain in 12 hours under this condition.

The WLSSD has indicated it will require the D/NSSD to completely stop their flows when the Endion pumping station is in high alarm mode. For a 24-hour storm event with a recurrence interval of 50 years, this condition could exist for 20-30 hours. The D/NSSD would be required to store their flows for a 24-hours period in order not to accentuate overflow conditions in the downstream WLSSD system. Given the above conditions, the project proposers would request a 24-hour period of time to empty the tanks, realizing that the above drainage times would be realized under optimum conditions.

d. Comment: The maps provided as Exhibit 2A do not give the locations of pressure sewer vs. gravity sewers or the location of main pump stations.

Response: This information was provided on the design drawings. Copies of the design drawings were available for review at the Duluth office of the MPCA, the Duluth Public Library, and at the office of Ayres Associates, engineering consultants for the DNSSD. A copy will be provided to WLSSD, if requested.

e. Comment: References are made to stations (e.g., Station 433+00, EAW at 5); however, no map is provided to reference the station’s location.

Response: Station location information was provided on the design drawings. Copies of the design drawings were available for review at the Duluth office of the MPCA, the Duluth Public Library, and at the office of Ayres Associates, engineering consultants for the DNSSD.

f. Comment: It is indicated that the pipeline will have a looped mainline segment. (EAW at 8) What exactly is a looped segment and why was it incorporated into this project? How will the looped segment function for this project?

Response: The looped segment breaks up the mainline wastewater flow from one pipe into two separate pipes for a certain length and then back to one pipe. The looped section was incorporated into this project because the locations of the connections called for piping alignments along both of the current looped piping alignments. The decision was made to go with a looped section as opposed to a single mainline and separate branch line. According to the project engineers, this will provide increased flexibility in operation (wastewater can be kept flowing through one of the loops while the second is isolated) and decreased cost (the single mainline with separate branch required an additional main pump station to convey branch wastewater to the mainline).

The looped segment will function by splitting the flow from a 14-inch diameter mainline pipe into 10-inch and 8-inch looped segments, then back into a single 14-inch diameter mainline pipe.

g. Comment: With respect to leak detection, it is indicated that “[a] leak from a broken or ruptured pipe could be detected through the use of a system alarm on the main pump stations. This alarm could come from a drop in either static or live pressure at the pump station.” EAW at 8 WLSSD recommended that an additional alarm be placed on the flow meter (gpm). This is based on WLSSD experience that the use of static pressure alone has proved to be unreliable.
Response: Monitoring wastewater volumes through the flow meters incorporated in the design is an excellent method of detecting leaks in the system. This method will be communicated to the eventual operator(s) of the system. However, coordinating an alarm based on flow measured through a meter would be difficult due to the dynamic flow variations that will be seen from grinder pumps operating simultaneously with main pump stations.

It should be noted that the intent of the pressure alarms is not to use static pressure alone as a measure, but rather the combination of live pressure (while main pump station is operating) and static pressure (when main pump station is not operating).

h. Comment: The D/NSSD and KR/LSD have drafted a Wastewater Allocation Agreement and have been working closely with the WLSSD in ironing out details. The [WLSSD] Sewer Extension Permit application process is where most of the technical evaluation on the project will take place. The Inflow and Infiltration Abatement Plan will eventually need to be submitted to the District not only for the new project but also for existing systems located primarily within the KR/LSD. Both the D/NSSD and the KR/LSD will be required to meet the requirements of the proposed U.S. Environmental Protection Agency Capacity, Management, Operation and Maintenance Rules.

Response: The Sewer Extension Permit applications associated with the project have been started but not submitted. These comments have been provided to the project proposer. It is understood that further technical review will occur during the review of these documents. Issuance of the MPCA sewer extension permit to D/NSSD will require the MPCA to review bypass prevention procedures (storage capacity, bypass alarms, etc.).

i. Comment: It appears that the projected flow contributions (EAW at 21) are consistent with the present WLSSD Wastewater Capacity Allocation Table approved in December 2000 and effective January 1, 2001.

Response: Comment noted.

j. Comment: It is noted that WLSSD is currently in the process of increasing their ability to treat organic loading. (EAW at 22) In August 2001, WLSSD completed significant changes to the plant to increase its loading capacity for the existing and planned service areas.

Response: Comment noted.

k. Comment: It was noted that the WLSSD does not make any determination or evaluation in regards to the size of the DNSSD wastewater storage facility, only that 24 hours of storage will be required.

Response: The estimated volume required to meet the 24-hour storage duration requirement was calculated by multiplying the future (20-year) average daily wet weather flow volume by a safety factor of 1.5. See the response to Comment 8c.

l. Comment: With respect to the monitoring of surface waters in the project area, it was indicated that the WLSSD does not assume the responsibility to monitor surface waters in the area but will conduct monitoring activities as needed and/or as comprehensive planning dictates. However, the DNSSD and KRLSD ought to review and/or monitor future impaired surface waters.
Response: Bypassing or overflow points are not part of the design for this system and it is not anticipated that such events will normally occur. Consequently, the MPCA sewer extension permit will not contain water quality monitoring requirements. Bypassing under virtually any circumstances is considered a violation of MPCA regulations and must be reported to the MPCA. If a significant amount of bypassing were to occur, the MPCA has the authority to modify permits to require monitoring and reporting such as bypass frequency, duration, volume, and water quality conditions. The MPCA also has the authority to require corrective action to bring the operation of the system into compliance with applicable regulations.

m. Comment: The WLSSD does and will encourage communities within the project area to adopt and implement the proposed Draft Comprehensive Land Use Plan. The WLSSD Board has supported and will continue to support all efforts within this project area and within the WLSSD statutory boundary in resolving failed on-site ISTS. The WLSSD does not believe the preparation of an EIS for the project is necessary.

Response: Comment noted.

9. Comments by Jane Reyer, National Wildlife Federation (NWF)

a. Comment: The NWF supports efforts to address the problem of failing septic systems in the project area. NWF is also encouraged by the recognition from all parties that extending sewer service to the area is likely to result in secondary impacts due to increased development. However, a discussion of possible alternatives to the sewer extension has not been provided. An EIS should be prepared in order to ensure that alternatives are considered before embarking on a project that may result in significant secondary impacts.

Response: A detailed evaluation of alternatives was made during the facility planning process for this project. The Alternative Wastewater Management Study-North Shore Study Area (December 1996) considered three alternatives to upgrade wastewater treatment service to each property owner within the study area. These alternatives included collection systems to convey wastewater to a treatment facility, management of on-site systems, or a combination of the two. The conclusion of this study indicated that before an alternative could be selected, a full facility plan would need to be prepared to evaluate total monetary and non-monetary costs.

The Wastewater Facilities Plan (July 1998) evaluated four principal alternatives for wastewater collection and/or treatment for the project area. These alternatives included:

- Alternative 1 – (selected alternative) Grinder pump collection system with discharge to Duluth collection system.
- Alternative 2 – Continued use of on-site systems in some areas, with a pressure collection system and treatment facility in the more densely developed areas in Duluth Township.
- Alternative 3 – Continued use of on-site systems in some areas, with a grinder pump collection system and discharge to a forcemain running to the Duluth collection system.
- Alternative 4 – Replacement of on-site systems with holding tanks; pumping and hauling to the WLSSD treatment facility.

The above four alternatives were economically evaluated under a net present value analysis. This represents the total present-day funds required to construct and operate the associated facilities for the 20-year planning period.
The alternatives were also ranked according to non-monetary factors such as ease of construction, construction-related environmental impacts, long-term environmental impacts, reliability, and expansion potential. The lowest score is the most favorable alternative in terms of the non-monetary factors.

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Capital Cost</th>
<th>O&amp;M Costs</th>
<th>Total Present Worth*</th>
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</thead>
<tbody>
<tr>
<td>1</td>
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<td>$1.59 million</td>
<td>$11.256 million</td>
</tr>
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<tr>
<td>4</td>
<td>$2.48 million</td>
<td>$16.14 million</td>
<td>$18.993 million</td>
</tr>
</tbody>
</table>

* Contingency, engineering, legal and administrative costs included.

Although Alternative 3 had the lowest opinion of probable present worth cost and the most favorable ranking for the non-monetary factors, it was not selected for the recommended alternative for the following reasons:

- It fails to correct the failing on-site treatment conditions that exist in the northeast portion of the project area.
- It does not provide access to the collection system for other areas of the North Shore.

Alternative 1 was the recommended alternative because it would provide a system that could be expanded to service other areas along the North Shore that may need access to a collection system to solve wastewater problems. Alternative 1 had the second lowest opinion of probable present worth cost and the second most favorable ranking for the non-monetary factors.

b. Comment: It is clear from the EAW that this project does have the potential for impacts to the environment: [quoting from the last paragraph on p. 36 of the EAW concerning cumulative effects from secondary development]. Potential impacts from increased vehicle air emissions, and increased clearing of forest and shoreline vegetation were not included with the identified impacts of increased impervious surfaces and run-off. These impacts would potentially impact water quality and fish and wildlife. The EAW does not discuss the potential extent of these impacts.

Response: The environmental review of the DNSSD project has recognized the existence of potential cumulative environmental effects that may result from secondary growth and development including changes in vegetative cover, runoff patterns, etc. However, the extent of cumulative impacts and their mitigation is difficult to address in a project-specific or site-specific manner because there are no identifiable projects, such as new housing developments, new roadways, or new commercial facilities, that are proposed for construction at this time. Under these circumstances, accurate portrayals of specific types of effects on specific resources are not possible.
Rather, the review of secondary growth and development has emphasized the activities of local jurisdictions that are relevant to the management of future growth. These activities seek to increase awareness and understanding of the range of potential impacts from secondary development, the types of mitigation strategies needed to minimize or avoid adverse effects, and the need to implement these measures in a timely manner. Ultimately, these local units have the responsibility to enact and enforce local zoning and other ordinances that must be in place to ensure that the development goals of the community are met.

With respect to storm-water management in the project area, the D/NSSD has recently adopted a regulation for individuals that will be hooked into the sewer line, both those presently existing and those who will build and hook-up in the future. This regulation will require compliance with specific Best Management Practices (BMPs), restrict shoreline vegetation removal, control fertilizer application, and, for new properties, limit the amount of coverage by impervious surfaces. Lake County, which has jurisdiction over land use in the KR/LSD service area, has similar provisions in their county land use ordinance. By March 2003, the MPCA, under its National Pollutant Discharge Elimination System (NPDES) Permit authority, shall require all development that results in one or more acres of land disturbance to receive coverage under the General Storm Water Permit for Construction Activity. This permit will require sediment and erosion control BMPs implementation during construction. For sites that result in one acre or more of additional impervious surface, storm water detention must be provided to treat runoff from the additional impervious surfaces. Also in March 2003, the city of Duluth will be required to receive coverage under a General Storm Water Permit for Municipal Activities. This permit would require the city of Duluth to develop a storm-water management plan, conduct public education regarding storm water and its impacts, and adopt management strategies to protect area resources from polluted runoff.

**c. Comment:** It is indicated in the EAW that development in the area may double as a result of this project. The maximum build-out scenario, which would increase the number of developed lots from approximately 2,000 to approximately 4,800, is not even the worst case scenario!

**Response:** The potential maximum build-out scenario to approximately 4800 buildings was based on the combined total number of existing and new buildings that could be constructed in all jurisdictions on the lands within the sanitary districts. The actual estimate obtained from Table 3 of the North Shore Land Use Plan is 4828 buildings. These estimates were based on the zoning classifications in each jurisdiction, the estimated number of available acres in each classification, and the maximum development densities allowed under pre-existing zoning standards for areas with sewer service.

The North Shore Land Use Plan found that, in the absence of new initiatives, there was general belief and agreement that the secondary impacts associated with the sewer line (i.e., the maximum build-out scenario) were unacceptable to the planning area’s character, aesthetics, and natural resources. Therefore, the Land Use Plan identified specific strategies for local units to establish goals and policies that will “[d]iscourage commercial and residential development that increases the density of North Shore communities, increases the intensity of land use, or results in sprawling development patterns.” Land Use Plan, p. 32-33.

At the present time, the city of Duluth and Duluth Township are in the process of updating their Comprehensive Plans. The city plan, currently in draft form dated October 1, 2001, contains more protective goals and objectives for land use, including maintaining the current allowable development density in the D/NSSD service territory at an average of one dwelling per two acres (two-acre lot size). This compares to the approximately one-sixth to one-third acre lot sizes allowable under
current zoning and presented in the EAW as part of the worst-case scenario. Although these comprehensive plan revisions have not been completed, there is a reasonable expectation that allowable development densities in the D/NSSD area will decrease in the future. In this light, a potential maximum build-out to 4800 buildings is believed to be a reasonable worst-case scenario because it assumes all zoning ordinances existing at the time of the EAW would remain unchanged.

d. Comment: The amount of effort that has gone into the land use planning project alone indicates that no one questions that the potential environmental effects of this project are significant. An EIS is thus required under the Minnesota Environmental Policy Act. Minn. Stat. § 116D.04. subd. 2(a) (2000)

Response: The information-gathering EAW process has been conducted to make it possible to reasonably determine whether the potential environmental effects of this project are significant, thus requiring further study in an Environmental Impact Statement (EIS). An EAW was not mandatory for this project; rather, the EAW was prepared at the request of the Joint Powers Board of the Duluth/North Shore Wastewater Project, the predecessor of the D/NSSD. The subsequent decision by the MPCA to prepare a discretionary EAW was based on the belief that the project may have the potential for significant environmental effects. See Minn. R. 4410.1000, subp. 3D. After reviewing the information gathered during this process, the MPCA has concluded that the proposed design and permitting of the sewer project will mitigate the adverse effects related to the installation of the sewer. The MPCA has further concluded that the state and local regulatory mechanisms that are and will be put into place provide reasonable assurances that the environmental effects related to future growth and development in the sewer service area will also be mitigated.

e. Comment: The efforts of the North Shore Land Use Planning Steering Committee are appreciated and it is hoped that they will lead to significant changes in zoning and future development in the project area; however, this process cannot substitute for an EIS.

Response: The land use planning processes conducted for the D/NSSD and KR/LSD service areas have not been offered as a substitute form of environmental review. Rather, these local planning processes are seen as complementary to the environmental review process conducted for the proposed sewer system expansion. These planning efforts have provided information that constitutes part of the record supporting the MPCA conclusion that an EIS is not necessary.

f. Comment: The recommendations of the Land Use Planning Steering Committee have no force of law and may never be implemented. The EAW discusses the recommendations of the Land Use Plan as “options” for mitigating increased development, but does not and cannot identify the mitigation measures that will actually be used because those measures are discretionary with the applicable jurisdictions and have not yet been decided on. Because these options are neither certain nor enforceable, the MCPA cannot assume they will be employed to decrease the impacts of this project to insignificance.

Response: The North Shore Land Use Plan was intended to be “… the policy framework that communities use to guide development and land use activities.” Land Use Plan, p. 1. The Steering Committee for the Land Use Plan set goals for development within the North Shore planning corridor and adopted policies and strategies needed to achieve these goals. Land Use Plan, pp. 31-43. These policies and strategies describe both mandatory and voluntary measures to mitigate the potential effects of secondary development including ordinances, recommended practices, education, etc. See also Item 29 of the EAW.
It is correctly noted in the above comment that some of the mitigation measures that are intended to supplement or replace existing policies and regulations are not yet adopted. The North Shore Land Use Plan process has an implementation phase to provide assistance to communities in adopting the Plan’s recommendations. Implementation of the planning process is still in the early stages, although it should be complete before the sewer line is built.

The implementation phase of the Land Use Plan addresses the concern that recommended policies and strategies may never be implemented. The result of any planning process is only advisory until formally adopted by the community’s elected representatives following designated hearing and publication processes as per local ordinance. The North Shore Land Use Plan is no different from a local comprehensive planning process, except being subject to four or five distinct publication and hearing processes instead of one. As such, the Land Use Plan is no more or less advisory than any other plan and is subject to rejection, modification, or adoption according to the judgement of the elected officials acting within boundaries ultimately defined by the legislature.

The enforceability of mitigation should also be viewed in the context of the existing policies and regulations that limit or prevent impacts from secondary development. Existing, enforceable limitations relative to secondary development in the planning area were discussed in the EAW in Item 27 (p. 27–35). These limitations, adopted by local governments, include zoning regulations and performance standards, moratoriums, land use polices, and natural resource protection policies.

The existing limitations to secondary development include a development moratorium in the city of Duluth that runs to September 19, 2002, and a moratorium on conditional use permits in Duluth Township that will be in effect while the community’s Comprehensive Plan and Zoning Ordinance are revised. Existing zoning restrictions in Duluth Township, Lakewood Township, and Lake County already provide some mitigation of impacts from secondary development. See also the response to Comment 12b.

The D/NSSD, Lake County, and the MPCA will also provide for enhanced, mandatory storm-water management practices as indicated in the responses to Comments 9b and 10a.

g. Comment: While the possible mitigation factors may reduce the ultimate amount of development that can occur, the project is still likely to increase development significantly because lot sizes will no longer be limited by the cost or area needed to install a septic system (up to five acres). It does not appear that any jurisdiction is considering limiting lot sizes in this area to five acres. Despite any foreseeable changes to current zoning ordinances, some increased development is inevitable and is likely to result in significant environmental impacts. Thus an EIS would be required even if the mitigation measures were certain.

Response: As with most any human activity, growth, and development have the potential to adversely affect the environment. County, township, and city governments in the project area are reviewing zoning and other land use issues in anticipation of increased development following construction of the sewer project. A principal goal of this activity is to ensure that the associated environmental effects are controlled to the extent that they are no longer considered significant. The authority to address these issues and regulate land use has been granted to the local units by the legislature. Local decisions related to the control of shoreland development are also subject to the standards set by the North Shore Management Board as authorized by the legislature. The MPCA defers to and relies on the local jurisdictions to set appropriate goals and implement policies that regulate land use. However, the manner in which a given parcel of land will be developed, or if it
will be developed at all, ultimately depends on the objectives of the individual landowners, subject to the restrictions imposed by local ordinances or physical site limitations. In this light, the MPCA has concluded that sufficient opportunities and assurances exist at the state and local levels to reduce the potential environmental effects of secondary growth to the point where they are not considered significant.

**h. Comment:** The listing of mitigation measures to “minimize” impacts does not eliminate the need to discuss the impacts that may occur despite the mitigation measures. What will be the impacts after the mitigation measures are put in place? The EAW lacks information on any potential increase in stream sedimentation despite mitigation measures, as well as the potential or likely increase in development and related impacts on habitat and wildlife even if the identified mitigation measures are taken.

**Response:** A considerable amount of detail concerning the direct impacts of the project on terrestrial and aquatic wildlife resources located in the construction corridor was presented in the EAW: Item 6 (Project Description, pp. 3-6, 9), Item 11 (Fish, Wildlife, and Ecologically Sensitive Resources, pp. 16-19), Item 12 (Physical Impacts on Water Resources, p. 19), Item 16 (Erosion and Sedimentation, p. 20), Item 17 (Water Quality – Surface Water Runoff, p. 21), Exhibit 4 (Mitigation Plan for Environmental Impacts of Construction and Operation), and Exhibit 5 (Erosion Control and Storm Water Management Plan). With respect to terrestrial resources, the conversion of 14.5 acres of wooded area to brush or grassland is minor given the size of the project area (5264 acres of zoned land). With respect to water quality and sedimentation, it is recognized that land disturbance during construction will tend to temporarily increase erosion and sedimentation; however, an accurate, useful portrayal of such impacts during construction is virtually impossible for many reasons: The final alignments of the sewer pipe will not be determined until the final design phase, the range of possible site conditions will vary along the long construction corridor, weather conditions that may be encountered are not known, construction schedules may not be adhered to, etc. What is known, however, is that the direct impacts of construction related to sedimentation and water quality will occur in proportion to the extent that ground is disturbed and erosion control measures are applied. The principal construction techniques to be employed at stream crossings, i.e., directional drilling and pipe suspension from bridges, are believed to be among the least disturbing and intrusive practices that could reasonably be applied to the project. Added to this will be the limiting of main line construction to almost entirely within existing road rights-of-way.

The impacts of future secondary development taking place after the DNSSD sewer project have been reviewed in a qualitative way because specific project proposals in the area are not known at this time. Nevertheless, this review is conducted in recognition that human activities that involve the physical alteration of the environment may have a profound and often adverse effect on the environment. See Minn. R. 4410.0300, subp. 3. The estimate of future development was based on a long-range build-out scenario with allowable densities being reached over a relatively short 20-year period of time. This has helped to sharpen the focus of this environmental review as well as the local units on seriously considering the desired future characteristics of the project area and the policies and regulations that should be in place to mitigate the potential adverse effects.

**i. Comment:** It was requested that monitoring be required to ensure that this project does not increase sedimentation in trout streams that this pipeline will cross. Any impact on the habitat or water quality in these streams is unacceptable.
Response: Monitoring during construction would be of little value given the time and expense needed to collect samples, transport samples, do lab analysis, etc. Effective mitigation measures are available to control erosion and sedimentation until vegetation or other cover is established. Regular inspection and maintenance will be required on the part of the contractor and the project proposer to make sure this is done, especially after significant rainfall. The MPCA staff from the Duluth Regional Office will also conduct inspections during construction.

10. Comments by Mark F. Ten Eyck, Minnesota Center for Environmental Advocacy

a. Comment: Concern was expressed about potential impacts due to accelerated development in the area, particularly with respect to land use which is more intensive than which currently exists or is more intensive than currently planned for by local governmental bodies. An EIS should be required because enforceable limitations do not exist to ensure that development projects constructed to bring sewer use to full capacity will not have significant potential impacts.

Response: Several mandatory measures are or will be in place to mitigate the potential impacts of future development. These will include local comprehensive plans and zoning ordinances adopted and enforced by city, township and county governments to regulate land use and development within the sewer service areas. The Duluth/North Shore and the Knife River/Larsmont Sanitary Districts have adopted ordinances that will limit development in adjacent areas by prohibiting the extension of sewer services outside their defined boundaries. The D/NSSD has recently adopted a regulation which sets preconditions for new properties to be served by sewer connections to the D/NSSD system including a requirement for an approved site plan to control runoff. The regulation also sets minimum requirements for the protection of lands served by the D/NSSD, including provisions applicable to vegetation removal, the protection of shore impact zones, the application of lawn fertilizers and chemicals, and lot coverage by impervious surfaces. These requirements were modeled after provisions of the Lake County Land Use Ordinance applicable to that portion of the sewer service project area located within Lake County. The MPCA sewer extension permit will also require that the D/NSSD regulations and Lake County Land Use Ordinance be enforced. If they are not enforced, there may be a moratorium placed on future hook-up to the sewer. The MPCA general NPDES permitting will also be required for storm water discharged from construction sites of five acres or more. In addition, the city of Duluth, after March 2003, will be required to develop and implement storm-water BMPs, citywide, which could include more restrictive ordinances, public education and outreach, storm water monitoring, etc. A more complete description of regulatory controls for potential impacts is provided in the Findings of Fact 64 through 83.

b. Comment: Concern was expressed about future environmental review as additional sewer lines and wastewater treatment facilities are proposed for the North Shore. Environmental review is the appropriate tool for identifying potential impacts with greater specificity and evaluating alternatives to best accommodate sustainable developments and the protection and enhancement of the North Shore environment. MCEA requests that the MPCA should ensure that either a) appropriate mitigation is required before proceeding without the benefit of an EIS, or b) an EIS is required to evaluate alternatives to find the feasible approach that best accomplishes the project’s goals and protects the environment.

Response: The Duluth/North Shore and KR/LSDs, the governmental units with land located within the sanitary districts, and the MPCA have made a concerted effort to anticipate and mitigate future impacts related to secondary development. The regional, multi-jurisdictional nature of this approach has produced a coordinated effort to review land use planning for the project area and to implement
mechanisms that will provide reasonable assurances that the risks associated with secondary development will be mitigated. It is believed that the planning and environmental review processes that have been undertaken for this project will serve as a model for future projects on the North Shore or in other environmentally sensitive areas. See the response to Comment 9a for a discussion of alternative evaluation for the project.

c. **Comment:** Concern was expressed about the limiting of environmental review of wastewater projects because of the prior listing of the proposed projects on the MPCA’s Intended Use Plan. This practice is inappropriate and may be unlawful. For example, is it possible to consider mitigation (in the EAW phase) or alternatives (in the EIS phase) that go significantly beyond or would result in something different than the project on the list. The opportunity to meet with appropriate MPCA staff was requested to discuss this issue.

**Response:** An acceptable facility plan must be submitted to the MPCA and given technical review and preliminary approval before a proposed wastewater project can be determined to be eligible for state financial assistance and be listed on the Intended Use Plan. Thereafter, project loan or wastewater infrastructure funding is based on project ranking derived from the relative environmental risks and benefits associated with each competing project. For practical reasons, the environmental review of a proposed wastewater project does not proceed until a facility plan has received preliminary approval and determined to be eligible to receive the necessary financial assistance. The wastewater facility plan is the primary vehicle by which project alternatives are identified and evaluated to determine technical and economic feasibility. Thereafter, the MPCA conducts an independent environmental review of each wastewater project determined to be subject to review on either a mandatory or discretionary basis (as is the case for the DNSSD project). This review does not prejudge the eventual outcome. Although positive declarations on the need for an EIS on wastewater projects are rare, projects typically change in any number of ways before they are permitted. This can occur during the facility planning conducted by the project proposer, during technical review performed by the MPCA, while information is being gathered and evaluated in conjunction with preparation of an EAW and completion of the EAW process, and during the permit development and issuance processes.

11. **Comment by Larry Moon, Chair, Knife River-Larsmont Sanitary District Board**

**Comment:** The Knife River-Larsmont Sanitary District Board recommended that a negative declaration be rendered for the environmental assessment worksheet.

**Response:** Comment noted.

12. **Comments by Janet Green**

a. **Comment:** As noted on p. 15 of the EAW, the sewer project may lead to accelerated and more intense development in the North Shore service area. Further, the Planning Advisory Council “is an ad hoc body that does not have any authority to augment, modify or restrict local, county, state, or federal plans or regulations.” Therefore, the mitigation mentioned in Items 17, 25 and 29 of the EAW are purely speculative and cannot be considered as fulfilling the criteria for a negative declaration for this EAW.
Response: It is correctly noted in this comment that the Land Use Planning Advisory Council is an advisory body with no authority to compel local jurisdictions to adopt or change land use policies or ordinances. However, as further noted in the EAW (p. 15), “the planning effort does include specific implementation steps for incorporating the North Shore Land Use Plan into local plans, programs, and ordinances through the planning processes of each local community in the project area.” Certain types of activities and their impacts, such as wastewater collection and disposal, pre-and post-construction storm-water runoff, the installation of utilities in rights-of-way, and stream crossings by utilities, are subject to direct control through permits to be issued by state and local authorities. Many other activities associated with future growth and development in the project area are regulated by local jurisdictions and it is reasonable for the MPCA to defer to these jurisdictions, who have been granted authorities in these areas by the Minnesota Legislature. See the response to Comment 10a. The EAW and its exhibits, particularly the North Shore Land Use Plan, and the Findings for Fact have described the nature of policies and controls affecting land use in the area. These documents and the responses to comments have also discussed the recommended policies and strategies to be considered by the local units and the progress being made to implement them. While all of these processes have not yet been completed, the MPCA believes that they provide evidence that desirable and reasonable actions are being taken by local units to manage future growth and development and to mitigate potential impacts.

b. Comment: The city of Duluth’s Comprehensive Plan dates to 1960 and the Duluth Township Comprehensive Plan to 1976. They were passed without considering this trunk sewer line. Updating the plans and the ordinances that implement them has not occurred in at least the last ten years. There is no assurance that the responsible governments will enact any final changes.

Response: The goal of the North Shore Land Use planning efforts is the adoption of policies and strategies by local governments and the sanitary district, and implementation of the recommended mitigation methods to manage growth and development. Local governments have taken the following steps, updated from the EAW, to adopt and implement mitigation through comprehensive planning and ordinances.

City of Duluth. The city of Duluth initiated a planning process for the D/NSSD service area and the larger surrounding neighborhood located within the city (District 9). The District 9 Planning Council unanimously supported the North Shore Land Use Plan recommendations, and adopted much of the Plan’s language in its recommendations for Duluth’s land use policies and regulations. The draft District 9 Neighborhood Plan, dated October 1, 2001, indicates the city’s intention to move forward with drafting and adopting new land use standards for this area. The draft plan includes a proposed two-acre residential classification that will fit between the existing R-1-A (14,000 s. f.) and the S (Suburban, minimum five acres) categories. Currently, a moratorium on development in this area remains in effect until September 19, 2002. The moratorium ordinance does allow the construction of single family homes meeting the lot size and frontage requirements of the proposed two-acre classification.

At the present time, the city is focusing on specific areas where more information is needed and will revise the process and schedule for completion of the plan.

Duluth Township. Duluth Township has expressed support for the planning process, and for the goals and policies of the Land Use Plan. The Township has imposed a moratorium to create time for policy and regulatory change. The Township is considering incorporating the Land Use Plan into its Comprehensive Plan update. According to representatives of the township, it is anticipated that a
draft of the new Comp Plan will be ready in April, and the plan will be adopted a short time thereafter, perhaps as early as May 2002. The process to revise the zoning ordinance will begin upon approval of the Comp Plan. Revision of the ordinance is projected to occur by September.

The Township has also adopted, by resolution, a commitment to mitigate the secondary effects of development on the Township’s natural environment, community character, and lakeshore areas. The Township’s priorities include protection of existing density in the mostly developed Greenwood Beach area, preserving the rural and exurban development patterns outside Greenwood Beach, and protecting environmentally sensitive areas and erodible shorelands.

Lakewood Township. Less than 100 acres of buildable land in Lakewood Township is located within the boundaries of the D/NSSD service territory. A substantial majority, 90 percent or more, of this area is already developed. The minimum lot size is 1.8 acres. The Township intends to maintain the current level of land use regulation, ensure consistent application of variance and conditional use permitting, and work with surrounding local governments to ensure a consistent development pattern across jurisdictions.

Lake County. Lake County has recently updated its comprehensive plan and adopted many policies that are similar to the North Shore Land Use Plan and is preparing to move into implementation through the Land Use Plan implementation workshops. Most of the area to be served is presently served by the collection system of the former city of Knife River. Since there are no current restrictions on service connections within the Knife River service area, it is not likely that development in this area will increase simply due to the D/NSSD project. The restrictions on growth that are provided by current zoning in this area will continue.

c. Comment: Units of government have passed moratoriums on various types of land use permits; however, no dates are given for the duration of these moratoriums so it is not clear if they are long enough to implement any changes to comprehensive plans or implementing ordinances. At a minimum, letters of intent by the affected units (not just goals and policies by ad hoc planning advisory groups) that they intend to implement plans and ordinances that will mitigate secondary development impacts are imperative.

Response: The Duluth moratorium took effect on March 20, 2000, and was extended on May 14, 2001. It will remain in effect until September 19, 2002. At this point in the planning process, the city of Duluth has chosen to use the period from January until July 2002 to focus on several specific areas where more information is needed and revise the process for the completion of the plan. The city of Duluth has indicated that an interim ordinance will be created for the sanitary district area that will reflect the current development density guidelines at about two acres per unit based on the language found in the October 1, 2001, draft District 9 plan. This temporary ordinance will bridge the gap between the end of the building moratorium and the adoption of permanent zoning standards and will sunset six months after the permanent zoning ordinance is adopted. The schedule for development of the interim ordinance will begin in early January 2002 and be adopted by the City Council and effective by September 1, 2002.

The Duluth Township moratorium was adopted on May 11, 2000, and later extended to November 11, 2002. It prohibits the granting of conditional use permits in that portion of the town that is within the D/NSSD.
13. Comments by Lynne Olson, Izaak Walton League

a. Comment: Questions were raised about the meaning of the statement that “the project proposer supplied reasonably accessible data for, but did not complete the final worksheet.”

Response: Project proposers are required to submit the completed data portions of the EAW to the governmental unit responsible for preparation of the EAW. The proposer fulfills this requirement by submitting a draft EAW to the MPCA environmental review project manager who then prepares comments and questions that are intended to clarify or fill gaps in the information supplied. After the project proposer has obtained the requested additional information, a revised draft EAW is submitted to the MPCA. The MPCA project manager then prepares a final EAW for distribution to interested parties. This is a process that may be completed several times before the final MPCA EAW is completed.

b. Comment: If the maximum build-out should occur, are the pipe sizes sufficient to handle the resulting sewage?

Response: Approximately 93 percent of the pipe systems to be installed will operate as pressure sewers or forcemains. The hydraulic capacities in pressure systems are based on the total dynamic heads (determined primarily by the pumping distances and elevations) and size of the pumps used to overcome the head conditions. The project design has used an initial estimated service population equivalent of 1,300 based on growth projections over a 20-year period. The hydraulic capacity of the piping network has not been modeled under the maximum build-out condition in the service territories. However, if additional capacity is needed in the future to accommodate more flow, the pumping station would be modified through the installation of larger pumps or enlarging the wetwell capacity to allow the existing pumps to operate for longer periods of time. Another option could be the construction of an additional pumping station.

Conventional gravity piping accounts for about seven percent of the proposed collection system. The capacities of gravity sewers are based primarily on the pipe sizes and slopes. The capacity of the 12-inch diameter gravity piping is approximately one million gallons per day. The gravity portion of the system is located approximately in the middle of the project. The 20-year flow projection for the area upstream of the gravity segment is approximately 150,000 gallons per day.

c. Comment: Is PVC the only pipe material available? Is there more earth friendly piping available?

Response: Please see the response to Comment 8b.

d. Comment: Concern was expressed about the potential impacts from open-cut construction of the sewer line, particularly in the area along the North Shore Scenic Drive. Right-of-way construction could still involve visual impacts and soil erosion related to the loss of trees, shrubs, gardens and other natural vegetation. Maximizing the use of directional drilling and the use of bucket technology to provide greater stability to and reduce the size of the construction corridor was suggested.
Response: The factors for selecting directional drilling as a construction method have been discussed extensively in the EAW text. These factors include the bid price for each technique, the depth to bedrock, the location (i.e., some watercourse crossings), and the pipe diameter. Directional drilling will be mandated for the following reasons:

- The slope of the road embankment prohibits an open-cut construction technique.
- The distance from the edge of the bituminous pavement to the point where the culvert meets the stream or drainage bed is not sufficient to establish erosion controls along an open-cut disturbance.

The removal of vegetation is an unavoidable impact of construction in some locations. However, the amount of vegetation at any given location is believed to be limited and is not considered significant. See also the responses to Comments 9g and 13l.

General erosion control measures that will be applicable to open-cut construction were listed in Item 16 of the EAW. The Erosion Control and Storm Water Management Plan (EAW Exhibit 5) provided a more detailed description. These controls and the responsibilities of the contractor are also defined in the construction plans and specifications that were submitted in December 2001.

e. Comment: Concern was expressed that the 300,000-gallon storage tank would be visually intrusive. Clarification was also requested concerning the location of the storage facility and the way in which rain or runoff events would be monitored so that the facility would be brought into service to prevent overflow problems.

Response: The storage tank would be 60 feet in diameter and have a 15-foot sidewall height. The location of the tank is currently being evaluated. The preferred site at this time is a tract of land bordered by the Scenic Railroad, Superior Street and U.S. Highway 61. The tract is located at the beginning of the four-lane U.S. Highway 61 where it intersects Superior Street.

It is planned that the operation of the storage facility would be based on monitoring by the WLSSD of downstream facilities. When the WLSSD experiences high flow conditions due to rainfall, the D/NSSD would be contacted by phone to reroute wastewater flow to the storage facility.

f. Comment: How are users hooked up to Duluth water supplies going to be educated on the need to restrict their water usage during times of power outages?

Response: The D/NSSD will be providing each user an information pamphlet at the time of connection to the proposed system. This pamphlet would cover operational information to each user including operability during power outages. Please also note that each grinder will be equipped with a visible alarm device that would alert users if the grinder pump canister was at a high level.

g. Comment: Where grinder pumps are used, could residents use generators to provide electricity for well pumps during power outages? Wastewater removal would then be required.

Response: Individual property owners could use generators to power the grinder pumps during power outages. This would require a 6,500-watt generator at a minimum. If the homeowners with a well water supply use a generator to power the water pumps during a power outage, they would be subject to the same operating conditions as those on a public water supply and would have one of the
following two options: 1) operate the grinder with a portable generator, or 2) restrict water use. With typical domestic water use volumes, the grinder pump canisters have approximately 24 hours of storage.

**h. Comment:** For heat traced pipe, will the sensors be located at a significant number of locations? Who will be responsible for making sure that these portable generators are in working order, and are they to be installed permanently or temporarily?

**Response:** A heat trace sensor would be located at each heat trace location. The system operator would be responsible for generator operability. The D/NSSD would hire or contract with a wastewater system operator/superintendent. This individual would be responsible for keeping all of the system components in working order.

The generators in question are not installed at the heat-traced segments. They are portable and would be brought to the heat traced segments as required in the case of a power outage.

**i. Comment:** Should isolation/protection valves be located on each side of each stream crossing?

**Response:** Isolation valves are to be located on both sides of major watercourse crossings. This will include crossings that appear to be significant based on the slope of the drainage, the size of the culvert present, or if the drainage was a protected public water.

**j. Comment:** Are the proposed leak detection monitoring system and response strategies sufficient in light of the significant damage that could take place quite quickly with a broken pipe? If the distance between main pump stations is approximately five miles, how quickly will a leak actually be detected and how quickly will personnel be able to respond? What is the back-up system for when the sewer superintendent is not available?

**Response:** The proposed leak detention system is intended to detect a ruptured pipe the moment a predetermined downstream pressure set-point is reached. At that time, the alarm would notify the system operator/superintendent of the drop in pressure. Once the alarm gives notification of a potential leak, the recommended procedure would be to shut down main pump station flows and isolate the suspected leak location. Response time for this would be an estimate at this time.

The dial-up alarm system that is planned for the main pump stations would have multiple inputs for phone numbers in the event of an alarm. Back-up contacts would be input into the alarm system in the event that the operator/superintendent is not available.

**k. Comment:** The North Shore Land Use Planning Steering Committee has no power to ensure that the five governmental units (city of Duluth, Lakewood Township, Duluth Township, St. Louis County and Lake County) will institute recommended land-use planning policies and zoning ordinances. Consequently, natural resources and the quality of rural life may be degraded. Therefore, the strategies intended to mitigate the impacts of secondary development (ref. Items 17, 25 & 29) have no guarantee of being implemented and cannot be considered as criteria for not doing an EIS.

**Response:** The three governmental units with jurisdiction over the vast majority of land and its use in the D/NSSD and KR/LSD are the city of Duluth, Duluth Township, and Lake County. All three of these entities have been active participants on the North Shore Land Use Plan process and are conducting comprehensive plan revision processes as a prelude to changes in zoning provisions.
These activities were initiated and are being carried out in direct response to the many concerns raised by the public and governments alike about the potential adverse effects of increase secondary growth and development prompted by the building of the sewer project. In this light, the preparation of an EIS by the MPCA on the D/NSSD sewer project is not viewed as an appropriate substitute for these efforts of local jurisdictions who are acting under the authorities granted to them by the legislature. See also the response to Comment 12b.

1. **Comment**: Exception was taken to statements in the EAW that the construction areas within the road and railroad rights-of-way are mostly cleared from trees and forest habitat (Item 11) and that the project does not involve visual impacts (Item 26). A significant number of trees, shrubs, and other vegetation exist along the Scenic Highway providing barriers from the highway for homeowners. Inquiry was also made concerning the nature of referenced woodlands to be removed, whether this included trees in front of residences, and whether the constructors of the sewer line will work with residents to minimize and mitigate impacts.

**Response**: The removal of trees and shrubs will be required in areas of public right-of-way in front of private property. The design engineer has indicated that efforts have been and will continue to be made to minimize tree removal wherever pipeline alignment changes can be made that don’t disturb or encroach on roadways, remain on public right-of-way, or otherwise increase project costs. Trees that are removed will not be replaced. Tree growth over sewer pipelines is not desired due to the potential for damage to the pipeline from roots.

m. **Comment**: How will the proposed erosion prevention strategies be monitored when construction goes over streams and rivers or along railroad and road rights-of-way? Will properly trained DNSSD personnel conduct the monitoring or inspections?

**Response**: As indicated in the EAW (p. 20), regular inspections will be conducted by D/NSSD personnel or their representatives during construction, and staff from the MPCA office in Duluth will conduct occasional inspections and respond to complaints. Contracts for construction observation have not been initiated at this time; however, it is expected that construction observation staff would be hired to ensure that erosion control is performed as called for in the plans and specifications.

n. **Comment**: How many trees will be removed in the riparian zones near the highway bridges, which would affect water temperatures for trout habitat and other fish species? Best Management Practices for Stream and River Riparian Zones should be followed.

**Response**: Disturbance from construction activities near the highway bridges will be limited to the bridge structure itself. It is not anticipated that any tree cover providing temperature control to the watercourse would be removed.

o. **Comment**: How would the sewer project be impacted by the proposed McQuade Road harbor construction and road modifications?

**Response**: The project would be impacted by potential pipe alignment changes and additional pressurized connection(s) to the collection system. The piping alignment changes would allow for the pipe to continue to be located in public right-of-way wherever possible. Design drawings have been forwarded to Minnesota Department of Natural Resources staff for their use during the design phase of the McQuade Road project.
p. **Comment:** There are no guarantees that any of the governmental units now in comprehensive planning processes will adopt the recommendations set forth by the North Shore Land Use Steering Committee. Moratoriums currently in place can best be seen as only temporary and not as assurances of well-planned future development.

**Response:** See the responses to Comments 9f and 12b.

q. **Comment:** The enactment of Steering Committee recommendations for the mitigation of the cumulative impacts of secondary development cannot be assured. Are there legal avenues for gaining those assurances from the governmental units that have jurisdiction?

**Response:** The mitigation of impacts on water resources in the sewer service areas will be addressed by requiring storm water management controls that apply to new and existing properties prior to connection to the sewer system. The Wetland and Stormwater Management Standards of the Lake County Land Use Ordinance will be implemented for the service territory of the KR/LSD, and the D/NSSD has recently enacted a regulation with similar requirements for its service territory. The MPCA permits to be issued to these units will also require that these provisions be enforced; failure to do so could result in the imposition of a moratorium on future sewer service connections.

The enactment of the recommendations of the Steering Committee pertaining to other land use issues is discussed in the responses to Comment 9f and 12b.

r. **Comment:** An EIS is needed because of the proximity of the sewer project to Lake Superior, the presence of other important resources, the potential for significant secondary development, the environmental impacts from development, and the lack of regulatory authority to use the North Shore Land Use Plan.

**Response:** The purpose of environmental review is to provide information to the public, to governmental units and to the project proposer to aid in understanding the impact a project will have on the environment. (See Minn. R. 4410.4300, subp. 3) The environmental review process for this project has, therefore, focused on gathering useful available information which will help governmental decision makers in carrying out their responsibilities to incorporate environmental considerations into the amending, granting, or denying of future permits and approvals. The MPCA has applied the four factors contained in Minn. R. subp. 4410.1700, subp. 7 and determined that the potential environmental effects of the project will not be significant.