June 16, 2006

TO: INTERESTED PARTIES

RE: Forest Lake - Section 21 Trunk Sewer Line

Enclosed is the Environmental Assessment Worksheet (EAW) for the proposed Forest Lake - Section 21 Trunk Sewer Line project, Washington County. The EAW was prepared by the Minnesota Pollution Control Agency (MPCA) and is being distributed for a 30-day review and comment period pursuant to the Environmental Quality Board (EQB) rules. The comment period will begin the day the EAW availability notice is published in the EQB Monitor, which will likely occur in the June 19, 2006, issue.

Comments received on the EAW will be used by the MPCA in evaluating the potential for significant environmental effects from this project and deciding on the need for an Environmental Impact Statement (EIS).

A final decision on the need for an EIS will be made by the MPCA Commissioner after the end of the comment period. If a request for an EIS is received during the comment period, or if the Commissioner recommends the preparation of an EIS, the MPCA Citizens' Board (Board) will make the final decision. The final EIS need decision will also be made by the Board if so requested by the project proposer, other interested parties or MPCA staff and if this request is agreed to by one or more members of the Board or the MPCA Commissioner. The Board meets once a month, usually the fourth Tuesday of each month, at the MPCA office in St. Paul. Meetings are open to the public and interested persons may offer testimony on Board agenda items. A listing of Board members is available on request by calling (651) 296-7306.

Please note that comment letters submitted to the MPCA do become public documents and will be part of the official public record for this project.

If you have any questions on the EAW, please contact Kevin Kain of my staff at (651) 296-7432.

Sincerely,

[Signature]

Richard Newquist
Supervisor, Environmental Review Unit
Environmental Review and Operations Section
Regional Division

RN:mbo

Enclosure
## Environmental Assessment Worksheet

**Note to reviewers:** The Environmental Assessment Worksheet (EAW) provides information about a project that may have the potential for significant environmental effects. This EAW was prepared by the Minnesota Pollution Control Agency (MPCA), acting as the Responsible Governmental Unit (RGU), to determine whether an Environmental Impact Statement (EIS) should be prepared. The project proposer supplied reasonably accessible data for, but did not complete the final worksheet. Comments on the EAW must be submitted to the MPCA during the 30-day comment period, which begins with notice of the availability of the EAW in the Minnesota Environmental Quality Board (EQB) Monitor. Comments on the EAW should address the accuracy and completeness of information, potential impacts that are reasonably expected to occur that warrant further investigation, and the need for an EIS. A copy of the EAW may be obtained from the MPCA by calling (651) 297-8510. An electronic version of the completed EAW is available at the MPCA Web site at http://www.pca.state.mn.us/news/eaw/index.html#open-eaw.

### 1. Project Title:

<table>
<thead>
<tr>
<th>Forest Lake - Section 21 Trunk Sewer Line</th>
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### 2. Proposer:

<table>
<thead>
<tr>
<th>City of Forest Lake</th>
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<table>
<thead>
<tr>
<th>Contact Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chip Robinson</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>and Title</th>
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<tbody>
<tr>
<td>City Administrator</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Address</th>
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</thead>
<tbody>
<tr>
<td>220 Lake Street North</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>(651) 464-3550</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fax</th>
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</thead>
<tbody>
<tr>
<td>(651) 464-4968</td>
</tr>
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### 3. RGU:

<table>
<thead>
<tr>
<th>Minnesota Pollution Control Agency</th>
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<table>
<thead>
<tr>
<th>Contact Person</th>
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<tbody>
<tr>
<td>Kevin Kain</td>
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<table>
<thead>
<tr>
<th>and Title</th>
</tr>
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<tbody>
<tr>
<td>Project Manager</td>
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</table>

<table>
<thead>
<tr>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>520 Lafayette Road North</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>(651) 296-7432</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Fax</th>
</tr>
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<tbody>
<tr>
<td>(651) 297-2343</td>
</tr>
</tbody>
</table>

### 4. Reason for EAW Preparation:

<table>
<thead>
<tr>
<th>EIS Scoping</th>
<th>Mandatory EAW</th>
<th>Citizen Petition</th>
<th>RGU Discretion</th>
<th>Proposer Volunteered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If EAW or EIS is mandatory give EQB rule category subpart number and name: 4410.4300, subpart 18 Wastewater and Sewage Systems

### 5. Project Location:

<table>
<thead>
<tr>
<th>County</th>
<th>Washington</th>
<th>City</th>
<th>Forest Lake</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4</td>
<td>1/4</td>
<td>21</td>
<td>32 North</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section</th>
<th>Township</th>
<th>Range</th>
<th>21 West</th>
</tr>
</thead>
</table>
Figures for the EAW:

Figures:
- Figure 1 General Site Location;
- Figure 2 Site Location (U.S. Geological Survey Topographic Map);
- Figure 3 Proposed Trunk Sewer;
- Figure 4 Project Service Area;
- Figure 5 National Wetlands Inventory;
- Figure 6 DNR Public Waters Inventory; and
- Figure 7 Washington County Soils.

6. Description:

a. Provide a project summary of 50 words or less to be published in the EQB Monitor.

Over the next 14 years, the city of Forest Lake (City) proposes to construct approximately 4,065 feet of 12, 18, and 21-inch diameter trunk sewer line to serve approximately 280 acres of the City in accordance with their approved Comprehensive Plan.

b. Give a complete description of the proposed project and related new construction. Attach additional sheets as necessary. Emphasize construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes. Include modifications to existing equipment or industrial processes and significant demolition, removal or remodeling of existing structures. Indicate the timing and duration of construction activities.

The City updated their Comprehensive Plan in 2004. Part of that plan includes phased development of the project service area discussed in this document. The City proposes to construct approximately 4,065 feet of 12, 18, and 21-inch diameter trunk sewer line to serve approximately 280 acres of the City. Figures 1 and 2 depict the location of the project, Figure 3 depicts the proposed alignment, and Figure 4 depicts the service area for the project.

The proposed alignment begins as a 21-inch pipe at County Road 50/202nd Street North and proceeds along the south side of County Road 50 for 865 feet. The alignment turns north as an 18-inch pipe and proceeds for 1,350 feet; then it turns to the northeast and proceeds for an additional 400 feet as an 18-inch pipe. The alignment then turns west and proceeds for 1,100 feet as a 12-inch pipe; at that point, it turns north again and proceeds as a 12-inch pipe for 350 feet to a junction with an existing sewer line on Greystone Avenue North. The trunk line will be constructed entirely within future road right of way.

Sanitary sewer flow will be conveyed from the Greystone Avenue junction to the junction at County Road 50 and Goodview Avenue. Flow volumes are anticipated to be 0.04 million gallons per day (MGD) initially and 1.23 MGD ultimately at full build-out of the service area.

Construction of the trunk line will involve grading, excavation, backfilling, potential dewatering, and re-vegetation activities. Equipment to be used will include standard construction machinery such as trucks, backhoes, graders, compactors, bobcats, cranes, loaders, compressors, and possibly dewatering pumps. Construction of the initial phase of the project is anticipated to begin July 2006 and be completed by September 2006. Future phases will occur over time as development occurs.
c. Explain the project purpose; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.

The proposed Section 21 Trunk Line will be needed to convey future wastewater flow from a 280-acre area of Forest Lake (see Figure 4). Eventual beneficiaries of the project will include residents and business operators in this area.

d. Are future stages of this development including development on any outlots planned or likely to happen?

Yes  No

If yes, briefly describe future stages, relationship to present project, timeline and plans for environmental review.

Local sewers within future planned developments will be constructed as needed to connect with the Section 21 trunk line after construction of the trunk sewer is complete. The locations of these future local sewer lines have not been determined yet. The locations will depend on street layouts, and where and when development occurs within the service area. Sewer extension permits must be obtained from the MPCA for the connecting sewer lines.

e. Is this project a subsequent stage of an earlier project?

Yes  No

If yes, briefly describe the past development, timeline and any past environmental review.

Approximately 1,800 feet of 21 and 24-inch trunk line was previously constructed along County Road 50/202nd Street North from Forest Road North to Goodview Avenue North. Flows expected to be conveyed by that segment of pipe at the time of construction did not exceed the threshold for an EAW. With construction of the currently proposed segment, flows to be conveyed in the new and old segments will exceed the threshold.

7. Project Magnitude Data

<table>
<thead>
<tr>
<th>Total Project Area (acres)</th>
<th>~ 5.6</th>
<th>Length (miles)</th>
<th>~ 0.77 (~ 4,065 feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Residential Units:</td>
<td>Unattached 0</td>
<td>Attached 0</td>
<td>maximum units per building NA</td>
</tr>
<tr>
<td>Commercial/Industrial/Institutional Building Area (gross floor space):</td>
<td>total square feet 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicate area of specific uses (in square feet):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>0</td>
<td>Manufacturing</td>
<td>0</td>
</tr>
<tr>
<td>Retail</td>
<td>0</td>
<td>Other Industrial</td>
<td>0</td>
</tr>
<tr>
<td>Warehouse</td>
<td>0</td>
<td>Institutional</td>
<td>0</td>
</tr>
<tr>
<td>Light Industrial</td>
<td>0</td>
<td>Agricultural</td>
<td>0</td>
</tr>
<tr>
<td>Other Commercial (specify)</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building height</td>
<td>NA</td>
<td>If over 2 stories, compare to heights of nearby buildings</td>
<td>NA</td>
</tr>
</tbody>
</table>

The approximate length and total project area of the proposed project is indicated above, and has been estimated using approximate construction limits (60-foot temporary construction easement).
8. **Permits and approvals required.** List all known local, state and federal permits, approvals and financial assistance for the project. Include modifications of any existing permits, governmental review of plans, and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure.

<table>
<thead>
<tr>
<th>Unit of Government</th>
<th>Type of Application</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Army Corps of Engineers</td>
<td>Wetland/Water Project – Public Linear Utility Project (GP/LOP-98-MN-Section 404 Activities in Minnesota)</td>
<td>Application to be submitted</td>
</tr>
<tr>
<td>MPCA</td>
<td>Review and approval of Construction Plans and Specifications</td>
<td>Application to be submitted</td>
</tr>
<tr>
<td>MPCA</td>
<td>National Pollutant Discharge Elimination System (NPDES) General Permit for Discharge of Stormwater During Construction Activities</td>
<td>Application to be submitted</td>
</tr>
<tr>
<td>MPCA</td>
<td>Sewer Extension Permit</td>
<td>Application to be submitted</td>
</tr>
<tr>
<td>DNR</td>
<td>General Permit 97-0005 for Temporary Water Appropriations, if needed</td>
<td>Application to be submitted by construction contractor if more than 10,000 gallons per day of water is appropriated</td>
</tr>
<tr>
<td>Minnesota Department of Health (MDH)</td>
<td>Water Well Permits</td>
<td>Application to be submitted (if dewatering wells are necessary)</td>
</tr>
<tr>
<td>Washington County Highway Department</td>
<td>Permit for Utility Construction on County Highway Right-of-Way</td>
<td>Application to be submitted</td>
</tr>
<tr>
<td>Rice Creek Watershed District (RCWD)</td>
<td>Minnesota Wetland Conservation Act (WCA) Certificate of No Loss or Exemption for temporary wetland, if proposed</td>
<td>Application to be submitted</td>
</tr>
<tr>
<td>RCWD</td>
<td>Review and approval of erosion and sediment control plans (Rule D)</td>
<td>Plans to be submitted</td>
</tr>
</tbody>
</table>
9. **Land use.** Describe current and recent past land use and development on the site and on adjacent lands. Discuss project compatibility with adjacent and nearby land uses. Indicate whether any potential conflicts involve environmental matters. Identify any potential environmental hazards due to past site uses, such as soil contamination or abandoned storage tanks, or proximity to nearby hazardous liquid or gas pipelines.

Land use adjacent to the proposed Section 21 Trunk Line includes rural residential, some farm fields, and vacant areas. Wetland and wooded areas are also present along or near the alignment. Newer residential developments are present north and northwest of the alignment. A landscape nursery/tree farm and a well drilling company are also present in the area. The project is generally located in an area transitioning in land use from rural to urban/suburban land. The proposed project is compatible with existing and proposed land uses in the area.

Contamination is not known to be present in the project area, although it is likely that chemical substances have been and continue to be used at the agricultural properties and at the landscape nursery/tree farm.

If unanticipated contamination is encountered during construction, the State Duty Officer would be notified and work would be ceased until direction from the MPCA has been received.

10. **Cover Types.** Estimate the acreage of the site with each of the following cover types before and after development:

<table>
<thead>
<tr>
<th>Types 1-8 wetlands</th>
<th>Before</th>
<th>After</th>
<th>Lawn/landscaping</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.34 acres</td>
<td>0.34 acres</td>
<td></td>
<td>0.30 acres</td>
<td>0.30 acres</td>
</tr>
<tr>
<td>Wooded/forest</td>
<td>1.65 acres</td>
<td>1.65 acres</td>
<td>Impervious Surfaces</td>
<td>0.46 acres</td>
<td>0.46 acres</td>
</tr>
<tr>
<td>Brush/grassland</td>
<td>0.53 acres</td>
<td>0.53 acres</td>
<td>Other (describe)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Cropland</td>
<td>2.32 acres</td>
<td>2.32 acres</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>5.6 acres</td>
<td>5.6 acres</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. **Fish, Wildlife, and Ecologically Sensitive Resources.**

a. Identify fish and wildlife resources and habitats on or near the site and describe how they would be affected by the project. Describe any measures to be taken to minimize or avoid impacts.

Fish and wildlife species are likely to include primarily those species common to agricultural and developing areas. Such species might include: fox, deer, muskrat, rabbit, mice and other small rodents, geese, ducks, raptors, a variety of other common bird species, and small reptiles. Amphibians and small fish may also be present in wetland areas.

Short-term impacts on wildlife will include the disruptive effects of construction, including excavation, stockpiling of soils and materials, noise, limited erosion and sedimentation, and vehicle movement. Habitat and individual animals will be destroyed by the actual excavation or placement of stockpiled earth or bedding, and tree/forest cutting. Surviving small species may be forced to leave their territories and compete with established individuals in other areas. Larger species may be forced to relocate to portions of their territories that are not impacted. Seasonal activities such as nesting may be disrupted or curtailed, depending upon the season of construction.
The project itself will not permanently displace wildlife; however, urban development enabled by the trunk sewer line will cause a shift in the species present. Species tolerant of urban areas will remain, while others less tolerant may be permanently displaced. Adherence to the comprehensive plan and stormwater ordinances adopted by the local municipality and watershed district will mitigate stormwater impacts resulting from development.

Permits/approvals requiring mitigation measures include the MPCA NPDES General Permit for Discharge of Stormwater during Construction Activities, the RCWD approval of the Grading Plan and Sediment and Erosion Control Plan, and the Certificate of Exemption for temporary wetland impacts to be obtained from the WCA local governmental unit (LGU)—the RCWD—if applicable. These and other permits listed in Item 8 of this EAW will include specific mitigation measures to be provided for erosion and sediment control, stormwater runoff, and potential wetland impacts. Measures will include erosion control best management practices, such as use of erosion control blankets and prompt re-vegetation of disturbed areas.

It appears that construction through wetland areas will be necessary. Original grade contours will be restored after construction and, therefore, pre-construction drainage patterns will not be altered by the project. In addition, wetland vegetation will be restored by seeding with a native wetland seed mix.

Construction through wooded areas will also be needed. If required, tree replacement will be completed.

b. Are any state (endangered or threatened) species, rare plant communities or other sensitive ecological resources such as native prairie habitat, colonial waterbird nesting colonies or regionally rare plant communities on or near the site?  
   Yes  No

If yes, describe the resource and how it would be affected by the project. Indicate if a site survey of the resources has been conducted and describe the results. If the DNR Natural Heritage and Nongame Research program has been contacted give the correspondence reference number.  

Describe measures to minimize or avoid adverse impacts.

The DNR Natural Heritage and Nongame Research Program was contacted regarding the potential presence of threatened or endangered species, as well as other rare or sensitive biological resources in the vicinity of the project. According to the response received (see Attachment 1), there are four known occurrences of rare species or natural communities in the vicinity of the project site; however, based on the nature and location of the proposed project, DNR staff does not believe it will affect any known occurrences of rare features.

12. Physical Impacts on Water Resources. Will the project involve the physical or hydrologic alteration (dredging, filling, stream diversion, outfall structure, diking, and impoundment) of any surface waters such as a lake, pond, wetland, stream or drainage ditch?  
   Yes  No

If yes, identify water resource affected. Describe alternatives considered and proposed mitigation measures to minimize impacts. Give the DNR Protected Waters Inventory (PWI) number(s) if the water resources affected are on the PWI.

According to the National Wetlands Inventory (NWI) Map (see Figure 5), the proposed alignment will pass through or near several NWI wetland areas. Other wetlands not identified by the NWI may also be present. Prior to construction of the trunk sewer line, wetlands within the project corridor will be delineated. There are no DNR public water bodies close to the proposed alignment (see Figure 6).
Impacts to wetlands due to construction of the trunk sewer pipe will occur during construction, but will be temporary. Minn. R. 8420.0122, subp. 6a provides an exemption from wetland replacement for utilities/public works projects, such as this sanitary sewer project. Therefore, an application for a Certificate of No Loss or Exemption will be submitted to the LGU with regard to WCA approval of temporary wetland impacts, if proposed. For this area of the City, the WCA LGU is the RCWD. Approval for temporary impacts to wetlands will be obtained from the RCWD as required prior to initiation of construction activities. Original grade contours will be restored after construction and, therefore, pre-construction drainage patterns will not be altered by the project. Wetland vegetation will be restored by seeding with native wetland/buffer seed mixes. Trench dams could be utilized to prevent unintentional draining of wetlands due to the pipe trench potentially acting as a conduit.

Significant dewatering along the alignment is unlikely, but may be necessary in some areas, as discussed in item 13. Should dewatering be necessary, discharge would be directed to sediment traps or vegetative buffer strips if the discharge is laden with sediment. A filter sock may also be used to trap the sediment and filter the water prior to discharge. If dewatering wells are needed, clean discharge from well point dewatering would be dissipated over the adjacent wetland areas located beyond the construction limits. The contractor would be responsible for obtaining permits from the DNR and the MDH for temporary water appropriations and temporary dewatering wells, respectively.

An NPDES General Stormwater Construction Activity Permit will be obtained for the project, as required from the MPCA. As part of the permit, temporary and permanent erosion and sediment control plans will be prepared for approval by the MPCA. Erosion and sediment control plans will also be submitted to the RCWD for review and approval as required. Approved plans will be implemented during and after construction as appropriate until site stabilization has been achieved. The sediment and erosion control plans will provide more detail as to the specific measures to be implemented and will also address phasing of construction, vehicle tracking of sediment, inspection of erosion control measures, and the time frames in which the erosion control measures will be implemented.

Development enabled by the trunk sewer project will be subject to the WCA rules for replacement, as well as other permits and approvals required from the watershed district and/or the DNR. Potential wetland or other surface water impacts associated with future development in the area will be addressed during the planning and permitting processes of the City.

13. **Water Use.** Will the project involve installation or abandonment of any water wells, connection to or changes in any public water supply or appropriation of any ground or surface water (including dewatering)? □ Yes □ No

If yes, as applicable, give location and purpose of any new wells; public supply affected, changes to be made, and water quantities to be used; the source, duration, quantity and purpose of any appropriations; and unique well numbers and DNR appropriation permit numbers, if known. Identify any existing and new wells on the site map. If there are no wells known on site, explain methodology used to determine.

City water service is expanding to the project area as development occurs, but the farmsteads and rural residences in the area are currently served by individual private wells.

Information from the MDH indicates that a minimum separation or “isolation” distance must be maintained between a well and a source of contamination to protect the well and the ground water. The distance applies to the construction of new wells, and to the placement of contamination sources near existing wells.
The well rules contain specific isolation distances from contamination sources such as petroleum tanks, chemical storage, and septic systems, including the most common contamination source encountered on building projects - sewers.

A minimum separation of 50 feet must be maintained between a buried sewer and a well. This distance may be reduced to 20 feet if the sewer is constructed of cast iron or plastic pipe meeting the standards of the Well Code and the Minnesota Plumbing Code, and if the sewer has been successfully air-tested. The separation applies to all buried pipes carrying sewage, both outside a building, and under the building floor. The separation applies not only to wells used to provide drinking water, but also to wells used for other purposes, such as irrigation.

At this time, it does not appear that abandonment of the wells identified in the project area will be needed due to 50-foot separation requirement. A field survey will be completed to accurately determine the distances of wells on adjacent properties from the final trunk sewer alignment. Appropriate measures will be taken to maintain required separation distances, or if it is determined that water wells are present within minimum setbacks from the final alignment, they will be properly abandoned in accordance with MDH regulations.

The need for significant dewatering (and/or the construction of dewatering wells) is not expected and, therefore, a DNR General Permit for Temporary Water Appropriations is not expected to be needed. The threshold for this permit is 10,000 gallons per day. Total gallons pumped cannot exceed 50 million gallons, and water appropriations must be completed within one year from the start of pumping.

If dewatering is necessary, the pumped water would be discharged as discussed in item 12 of this document. Temporary dewatering withdrawals would not be expected to have a negative impact on surface water bodies or ground water supplies.

Trench dams may be incorporated into the project, if necessary, to prevent unintentional draining of wetlands. The position of trench dams would depend on observed ground water conditions. Perched wetlands will be identified using soil borings. If necessary, a confining layer of low-permeability soils will be restored to maintain perched conditions.

14. **Water-related land use management districts.** Does any part of the project involve a shoreland zoning district, a delineated 100-year flood plain, or a state or federally designated wild or scenic river land use district? ☐ Yes ☒ No

If yes, identify the district and discuss project compatibility with district land use restrictions.

The project is not located in or adjacent to a state or federally designated wild or scenic river land use district, nor is it located within a shoreland zoning district or 100-year floodplain area. However, the project is located within the jurisdiction of the RCWD. The project will comply with all applicable RCWD requirements.

15. **Water Surface Use.** Will the project change the number or type of watercraft on any water body? ☐ Yes ☒ No

If yes, indicate the current and projected watercraft usage and discuss any potential overcrowding or conflicts with other uses.

The project will not directly change the number of watercraft on any waterbody. However, it will enable additional residential and other development in the City. It is possible that some of the residents might engage in boating activities on area lakes.
16. **Erosion and Sedimentation.** Give the acreage to be graded or excavated and the cubic yards of soil to be moved: ~5.6 acres; ~112,920 cubic yards. Describe any steep slopes or highly erodible soils and identify them on the site map. Describe any erosion and sedimentation control measures to be used during and after project construction.

Steep slopes are generally considered to be slopes greater than 12 percent. Soils with slopes greater than 12 percent are not identified by Washington County soils information in the project area (see Item 19 and Figure 7).

Regardless of the soil erosion potential, erosion control measures will be implemented. Specific measures to be used will be detailed in the erosion control plans required as part of the NPDES and watershed permits. In general, high flow areas will be protected with turf reinforcement mats. Any potential high flows from off site will be mitigated as they enter the construction site. Measures may include the use of high flow silt fence, checkdams, biologs, and/or stilling basins. Disturbed areas will be seeded and stabilized as soon as possible after construction. A fiber blanket or hydraulic seed stabilizer may also be used. Erosion control is also discussed in Item 12 of this EAW.

The majority of excavated soil will be returned to the construction trench after placement of the pipe. Any excess soil will be disposed of in upland areas where sediment will not impact water resources or other sensitive areas. Soil erosion control practices will be implemented to minimize impacts to wetlands immediately adjacent to or in the vicinity of the project. Best management practices will be utilized. Construction practices will be managed to limit the duration of exposed soil to wind and rain.

Detailed temporary and permanent sediment and erosion control plans must be prepared in accordance with the MPCA NPDES General Stormwater Construction Permit and RCWD Rule D. Erosion control measures will be implemented prior to the start of any construction activities and will remain in place until site stabilization has been achieved. Specific measures may include silt fence, rock construction entrance, sedimentation basins, check dams, erosion control blankets, and prompt re-vegetation of disturbed areas via seeding and mulch. Regular inspection will insure that measures implemented remain effective.

17. **Water Quality – Surface-water Runoff.**

   a. Compare the quantity and quality of site runoff before and after the project. Describe permanent controls to manage or treat runoff. Describe any storm-water pollution prevention plans.

Because the sewer pipe will be buried, the quantity and quality of runoff before and after the project will not change significantly. Discharge from dewatering activities during excavation is discussed in Item 12 and will be conducted as stipulated in applicable permits and approvals (see Items 8, 12 and 16).

   b. Identify routes and receiving water bodies for runoff from the site; include major downstream water bodies as well as the immediate receiving waters. Estimate impact runoff on the quality of receiving waters.

Receiving water bodies in the vicinity of the proposed project include wetlands, Clear Lake and Forest Lake. As discussed in Items 12 and 16, appropriate erosion and sediment control measures will be implemented during construction, and runoff from the site will be minimized. Because the sewer pipe will be placed below grade, and because the disturbance caused by construction of the pipe will be temporary, permanent significant impacts to receiving water bodies are not anticipated.
Vegetation will be restored as soon as possible after construction. Fiber blankets, mulch and/or hydraulic seeding will be used where necessary to ensure prompt revegetation. The NPDES General Permit for Discharge of Stormwater during Construction Activities will outline specific time line provisions for re-vegetation. The contractor will comply with these time lines.

18. **Water Quality – Wastewater.**

a. Describe sources, composition and quantities of all sanitary, municipal and industrial wastewater produced or treated at the site.

The proposed project is located within Forest Lake Sewer District FL-8. Flow to be conveyed through the proposed Section 21 Trunk Line will originate in a developing area of the City, approximately 280 acres in size (see Figure 4). The trunk system has been sized to accommodate peak flows to be generated in the service area. Initial flows in the trunk line are estimated to be 0.04 MGD; at full build-out, flows are estimated to be 1.23 MGD.

The flow conveyed by the Section 21 Trunk sewer system will discharge to the Forest Lake Interceptor and ultimately be conveyed to the main MCES Metropolitan Wastewater Treatment Plant (Metro WWTP) located in St. Paul, Minnesota for treatment. The wastewater is expected to be within the range of normal strength domestic wastewater. The City’s 2004 Amendment to Comprehensive Sewer Policy Plan has been approved by the Metropolitan Council.

b. Describe waste treatment methods or pollution prevention efforts and give estimates of composition after treatment. Identify receiving waters, including major downstream water bodies, and estimate the discharge impact on the quality of receiving waters. If the project involves on-site sewage systems, discuss the suitability of site conditions for such systems.

The flow conveyed by the Section 21 Trunk Sewer system will ultimately be treated at the MCES Metro WWTP located in St. Paul, Minnesota. The wastewater will be within the range of normal strength domestic wastewater. The discharge impacts will be relevant to the discharge permit of the Metro WWTP.

c. If wastes will be discharged into a publicly owned treatment facility, identify the facility, describe any pretreatment provisions and discuss the facility’s ability to handle the volume and composition of wastes, identifying any improvements necessary.

The flow conveyed by the Section 21 Trunk Sewer system will ultimately be treated at the MCES Metro WWTP located in St. Paul, Minnesota. The treatment facility will have capacity to accommodate the projected additional average daily flow of 1.23 MGD at full build-out of the service area.

d. If the project requires disposal of liquid animal manure, describe disposal technique and location and discuss capacity to handle the volume and composition of manure. Identify any improvements necessary. Describe any required setbacks for land disposal systems.

Not applicable.
19. **Geologic hazards and soil conditions.**

<table>
<thead>
<tr>
<th>Soil Unit Symbol</th>
<th>Soil Name</th>
<th>Permeability</th>
<th>Special Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>Bluffton loam</td>
<td>Moderately slow</td>
<td>Hydric</td>
</tr>
<tr>
<td>123</td>
<td>Dundas fine sandy loam</td>
<td>Moderately slow</td>
<td>Hydric, prime farmland where drained</td>
</tr>
<tr>
<td>132B</td>
<td>Hayden fine sandy loam, 2 to 6 percent slopes</td>
<td>Moderate</td>
<td>Prime farmland</td>
</tr>
<tr>
<td>169B</td>
<td>Braham loamy fine sand, 1 to 6 percent slopes</td>
<td>Rapid in upper sandy areas, moderate in underlying glacial sediments</td>
<td>Farmland soil of statewide importance</td>
</tr>
<tr>
<td>225</td>
<td>Nessel fine sandy loam, 1 to 4 percent slopes</td>
<td>Moderate</td>
<td>Prime farmland</td>
</tr>
<tr>
<td>544</td>
<td>Cathro muck</td>
<td>Moderately slow to moderately rapid in organic layers, moderately slow to moderate in underlying mineral material</td>
<td>Hydric</td>
</tr>
<tr>
<td>1055</td>
<td>Aquolls and histols, ponded</td>
<td>(Permeability information not provided in soil survey)</td>
<td>Hydric</td>
</tr>
</tbody>
</table>

According to the Geologic Atlas for Washington County (1990), surficial geology at the project site is comprised of glacial till. The material is chiefly loam textured, unsorted sediment with scattered pebbles, cobbles and boulders. A few lenses of stratified sediment are present, and in some areas, the glacial material is capped by a thin layer of sand.

The uppermost bedrock units are the St. Lawrence and Franconia Formations. The depth to bedrock is estimated to be 151-200 feet below grade.

The depth to water is shallow in wetland areas, but in general appears to be greater than 25 feet below grade, based on conditions observed during construction of the earlier segment of the sewer line west of Goodview Avenue.

Environmental hazards such as sinkholes, shallow limestone formations or karst conditions are not known to be present in the area.

Soils data for Washington County are maintained as a SSURGO database by the U.S. Department of Agriculture Natural Resources Conservation Service. A brief description of soil mapping units occurring in the project area is provided below in the table below. A map of the soil unit locations is provided as Figure 7.
In general, water moves through coarse textured soils at a faster rate than through medium or fine textured soils. Therefore, potential impacts to ground water from spilled chemicals would be expected to be greater in areas with coarse textured soils. However, many factors in addition to soil granularity can affect infiltration and percolation rates in soils. Some of these factors include: soil water content, soil frost, the temperature of soil and water, surface roughness, the nature of the soil pore openings, vegetative ground cover, and the degree of soil compaction.

The ground water sensitivity map from the geologic atlas indicates ground water in the project area has a low or moderate sensitivity to pollution. Due to the nature of the project (sanitary sewer line), the potential for impacts to ground water is minimal.

20. **Solid Wastes, Hazardous Wastes, Storage Tanks.**

   a. Describe types, amounts and compositions of solid or hazardous wastes, including solid animal manure, sludge and ash, produced during construction and operation. Identify method and location of disposal. For projects generating municipal solid waste, indicate if there is a source separation plan; describe how the project will be modified for recycling. If hazardous waste is generated, indicate if there is a hazardous waste minimization plan and routine hazardous waste reduction assessments. Construction activities will generate waste materials. These materials will be disposed of by the contractor in accordance with applicable state and local rules and regulations. A temporary lift station in use at Greystone Avenue and 207th Street will be decommissioned when the proposed project is constructed. Materials from the lift station will be disposed of properly by the contractor.

   b. Identify any toxic or hazardous materials to be used or present at the site and identify measures to be used to prevent them from contaminating ground water. If the use of toxic or hazardous materials will lead to a regulated waste, discharge or emission, discuss any alternatives considered to minimize or eliminate the waste, discharge or emission.

   During construction, equipment and vehicles utilizing gasoline, diesel fuel, antifreeze, and oil will be used at the project site. Portable storage tanks of fuel may be temporarily located at the site during construction. Fueling of vehicles and equipment will be conducted away from sensitive areas.

   c. Indicate the number, location, size and use of any above or below ground tanks to store petroleum products or other materials, except water. Describe any emergency response containment plans.

   As discussed above, portable storage tanks of fuel may be temporarily located at the site during construction.

21. **Traffic.** Parking spaces added: 0  Existing spaces (if project involves expansion): 0

   Estimated total average daily traffic generated: NA  Estimated maximum peak hour traffic generated (if known) and its timing: NA  Provide an estimate of the impact on traffic congestion affected roads and describe any traffic improvements necessary. If the project is within the Twin Cities metropolitan area, discuss its impact on the regional transportation system.

   A noticeable permanent increase in traffic will not occur directly due to construction of the project per se. The only increase in traffic resulting directly from the project would be that due to construction of the project, and that due to maintenance of the sewer line. During the construction process, construction vehicles will be utilizing county roads and local streets. Delivery of pipe, concrete and other materials will be restricted to the county roads where possible. In addition, tunneling under County Road 50 is not
expected to result in major traffic impacts, although minimal traffic disruption, such as minor slow-downs, may occur during the short period of tunneling.

In the future, traffic in the vicinity of the project is likely to increase with increased urban development. Residential development and a small amount of commercial development will be enabled by the project and as a result, vehicular traffic will increase. It will be necessary for the Minnesota Department of Transportation, Washington County, and the City to work together to provide appropriate roadway improvements and measures to mitigate traffic congestion.

22. **Vehicle-related Air Emissions.** Estimate the effect of the project’s traffic generation on air quality, including carbon monoxide levels. Discuss the effect of traffic improvements or other mitigation measures on air quality impacts. Note: If the project involves 500 or more parking spaces, consult *EAW Guidelines* about whether a detailed air quality analysis is needed.

Vehicle emissions directly associated with the project will not have a significant effect on air quality. However, residential and other development enabled by the construction of wastewater conveyance capacity may result in measurable, but not likely, significant impacts. If traffic increases due to the enabled development result locally in future deterioration in levels of service and/or air quality violations, mitigative measures are available. These measures include roadway improvements, signal installation, and provision of alternative transportation choices.

23. **Stationary Source Air Emissions.** Describe the type, sources, quantities and compositions of any emissions from stationary sources of air emissions such as boilers, exhaust stacks or fugitive dust sources. Include any hazardous air pollutants (consult *EAW Guidelines* for a listing), any greenhouse gases (such as carbon dioxide, methane, and nitrous oxides), and ozone-depleting chemicals (chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons or sulfur hexafluoride). Also describe any proposed pollution prevention techniques and proposed air pollution control devices. Describe the impacts on air quality.

There will be no stationary source air emissions associated with the proposed project.

24. **Odors, noise and dust.** Will the project generate odors, noise or dust during construction or during operation? ☒ Yes ☐ No

If yes, describe sources, characteristics, duration, quantities or intensity and any proposed measures to mitigate adverse impacts. Also identify locations of nearby sensitive receptors and estimate impacts on them. Discuss potential impacts on human health or quality of life. (Note: fugitive dust generated by operations may be discussed at item 23 instead of here.)

Dust and noise will be generated by equipment and machinery during construction. Odors may also be generated from stationary equipment exhaust. Equipment will include trucks, backhoes, graders, compactors, excavators, bobcats, cranes, loaders, compressors, and possibly dewatering pumps. Dust may be controlled by daily cleanup of the construction site; water will be used to wet appropriate surfaces to reduce airborne dust when necessary. Noise and odor impacts from construction equipment will be controlled by restricting the hours of operation to daylight hours, or those permitted by local ordinances.

The nearest receptors are farmsteads, residences, and businesses along or near the proposed alignment. Average exposure times are estimated to be of short duration.
As in any sanitary sewer system, there is potential for odors to form during operation of the proposed system. Hydrogen sulfide has the potential to form in sewage material under anaerobic conditions, and can produce a rotten-egg odor, particularly where flow turbulence releases gas from solution in the wastewater. This project is similar to most sanitary sewers in the Metropolitan area, where slopes are mild and turbulence is low, which helps minimize the release of odors. The need for odor control is not anticipated for this project. However, if it becomes necessary in the future, there are a number of options to consider, such as adding chemicals to the sanitary system to suppress growth of odor-causing bacteria, and filtering air ventilated from the sewer system through a biofilter or through a carbon filtration system.

25. **Nearby resources.** Are any of the following resources on or in proximity to the site?

   a. Archaeological, historical, or architectural resources?  [ ] Yes  [ ] No  
   b. Prime or unique farmlands or land within an agricultural preserve?  [ ] Yes  [ ] No  
   c. Designated parks, recreation areas, or trails?  [ ] Yes  [ ] No  
   d. Scenic views and vistas?  [ ] Yes  [ ] No  
   e. Other unique resources?  [ ] Yes  [ ] No  

   If yes, describe the resource and identify any project-related impacts on the resources. Describe any measures to minimize or avoid adverse impacts.

**Archaeological, Historical, or Architectural Resources**

The Minnesota Historical Society SHPO was contacted regarding the potential presence of cultural resources in the project corridor vicinity. SHPO’s review of the Minnesota Archaeological Inventory and Historic Structures Inventory did not identify archaeological sites or historic structures in the project area (see Attachment 3).

**Prime or Unique Farmlands, Lands within an Agricultural Preserve**

There are soils within the project area that have been designated as important to farming. Dundas fine sandy loam (where drained), Hayden fine sandy loam (two to six percent slopes), and Nessel fine sandy loam (one to four percent slopes) are designated prime farmland soils; Braham loamy fine sand (one to six percent slopes) has been designated as a state-wide important farmland soil. The land within the project service area is planned for urban development; therefore, some areas of prime farmland soil currently in crop production will be taken out of production. Development will be subject to the comprehensive plan and zoning regulations of the City. Conversion of agricultural land to urban land is a consequence of population growth.

**Designated Parks, Recreation Areas or Trails**

The trunk sewer line does not extend through any designated park areas, although there are several parks or recreation areas near the proposed project. In addition, a regional trail, or greenway, extends along 202nd Street/County Road 50.

Permanent impacts to these amenities are not anticipated as the project will be placed below grade. However, temporary indirect impacts (such as noise, dust, and general disruption caused by construction machinery) may occur to users of the facilities during construction of the project. These impacts are expected to be short-lived and not significant.

**Scenic Views and Vistas**

The project corridor extends through a developing area of the City. Some wooded and wetland areas are present as are some agricultural areas. There are no officially designated scenic views or vistas along the corridor. Due to the sub-grade nature of the project, any scenic views and vistas that might be considered present would not be impacted once construction has been completed.
Other Unique Resources
According to the City of Forest Lake 2020 MUSA Wetland Inventory and Assessment Report (May 2002), a DNR High Quality Natural Area is identified to the east of the northern portion of the proposed trunk line. The Minnesota County Biological Survey identifies the areas as a high quality Mesic Oak Forest-Rich Fen (sedge meadow) complex. The natural area is contiguous with the wooded area through which the proposed alignment extends. Direct impacts to the DNR High Quality Natural Area are not proposed, but tree removal in the contiguous area will be needed for construction of the trunk line.

26. Visual impacts. Will the project create adverse visual impacts during construction or operation? Such as glare from intense lights, lights visible in wilderness areas and large visible plumes from cooling towers or exhaust stacks? ☐ Yes ☒ No
If yes, explain.

No such impacts are anticipated.

27. Compatibility with plans and land use regulations. Is the project subject to an adopted local comprehensive plan, land use plan or regulation, or other applicable land use, water, or resource management plan of a local, regional, state or federal agency? ☒ Yes ☐ No
If yes, describe the plan, discuss its compatibility with the project and explain how any conflicts will be resolved. If no, explain.

The proposed project is subject to the City of Forest Lake Comprehensive Plan (November 2004), the City of Forest Lake 2004 Amendment to Comprehensive Sewer Policy Plan (December 2004, revised July 2005), City ordinances, RCWD rules, and Metropolitan Council plans for sanitary service. The service area (see Figure 4) for the proposed trunk line includes approximately 280 acres of Forest Lake.

The 1976 Metropolitan Land Planning Act requires local governments to prepare comprehensive plans and submit them to the Metropolitan Council to determine their consistency with metropolitan system plans. These are known as Tier I Plans. The local comprehensive plan is to include a sewer element addressing the collection and disposal of wastewater generated by the community. Further, under Minn. Stat. § 473.513, local governments are required to submit a Comprehensive Sewer Plan (CSP) describing service needs from the MCES to the Metropolitan Council for its approval. These are known as Tier II Plans. The CSP is broader in scope than the sewer element of the local comprehensive plan and provides detailed sewer system engineering information.

The project is consistent with City plans and will comply with watershed district requirements. The City review and approval process will regulate land use changes within the project service area.

28. Impact on infrastructure and public services. Will new or expanded utilities, roads, other infrastructure or public services be required to serve the project? ☒ Yes ☐ No
If yes, describe the new or additional infrastructure or services needed. (Note: any infrastructure that is a connected action with respect to the project must be assessed in the EAW; see EAW Guidelines for details.)

Although the Section 21 Trunk Sewer will not require additional infrastructure, the development planned for its service area will. As development of the area progresses, other utilities and infrastructure, such as roads, collector streets, collector and lateral sewer lines, potable water distribution systems, stormwater
collection and treatment systems, schools, police, and fire protection, and other urban services will be needed to service the area. Adherence to City development plans and ordinances will ensure coordination of infrastructure for enabled development.

29. **Cumulative impacts.** Minn. R. 4410.1700, subp. 7, item B requires that the RGU consider the “cumulative potential effects of related or anticipated future projects” when determining the need for an environmental impact statement. Identify any past, present or reasonably foreseeable future projects that may interact with the project described in this EAW in such a way as to cause cumulative impacts. Describe the nature of the cumulative impacts and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to cumulative impacts (or discuss each cumulative impact under appropriate item(s) elsewhere on this form).

Future residential and commercial development of the service area has been considered in the planning of this project. The trunk sewer has been sized to accommodate long-range wastewater flows after development of the area. The potential environmental impacts from future planned development will be mitigated through enforcement of local, state, and federal ordinances and regulations. Individual development projects may be subject to environmental review and the preparation of project-specific EAWs or an Alternative Urban Areawide Review. Any sanitary sewer extensions will require a permit from the MPCA.

30. **Other Potential Environmental Impacts.** If the project may cause any adverse environmental impacts not addressed by items 1 to 28, identify and discuss them here, along with any proposed mitigation.

Environmental impacts other than those previously discussed in this EAW are not anticipated as a result of the proposed project.

31. **Summary of issues.** List any impacts and issues identified above that may require further investigation before the project is begun. Discuss any alternatives or mitigative measures that have been or may be considered for these impacts and issues, including those that have been or may be ordered as permit conditions.

The City must acquire the previously mentioned permits and approvals prior to proceeding with construction. Detailed plans and specifications must be reviewed and approved prior to construction. Issues identified in this EAW that may require additional investigation include:

- Wetlands that may be impacted by the project must be delineated. The delineation must be approved and any proposed impacts must be authorized by the LGU (RCWD) prior to impacting the wetlands.
- Erosion and sediment control plans will be prepared and approved by the MPCA and RCWD prior to any construction.
- The potential need for tree replacement will be investigated as the project design moves forward.
RGU CERTIFICATION.

I hereby certify that:
• The information contained in this document is accurate and complete to the best of my knowledge.
• The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minn. R. 4410.0200, subps. 9b and 60, respectively.
• Copies of this EAW are being sent to the entire EQB distribution list.

Name and Title of Signer: Richard Newquist, Supervisor, Environmental Review Unit
Environmental Review and Operations Section
Regional Division

Date: 6/16/06

The format of the Environmental Assessment Worksheet was prepared by the staff of the Environmental Quality Board at Minnesota Planning. For additional information, worksheets or for EAW Guidelines, contact: Environmental Quality Board, 658 Cedar St., St. Paul, MN 55155, (651) 296-8253, or at their Web site http://www.eqb.state.mn.us/review.html.
GENERAL SITE LOCATION
CITY OF FOREST LAKE
SECTION 21 TRUNK SEWER LINE
PROPOSED TRUNK SEWER
FOREST LAKE, MINNESOTA
SECTION 21 TRUNK SEWER LINE

FIGURE 3

Scale in feet

APRIL 2006
NATIONAL WETLANDS INVENTORY

CITY OF FOREST LAKE
SECTION 21 TRUNK SEWER LINE

K:/165/16506195/Cod/Dwg/EAW Figures/EAW Figures.dwg

FIGURE 5

Bonestroo
Rosene
Anderlik &
Associates

Engineers & Architects

2003 AERIAL PHOTO
APRIL 2006
DNR PUBLIC WATERS INVENTORY

CITY OF FOREST LAKE
SECTION 21 TRUNK SEWER LINE

FIGURE 6

Scale in feet
2003 AERIAL PHOTO
APRIL 2006
SOILS (* Whole Unit Hydric)
*75 - Bluffton loam
*123 - Dundas fine sandy loam
132B - Hayden fine sandy loam, 2-6% slopes
169B - Brahan loamy fine sand, 1-6% slopes
225 - Nessel fine sandy loam, 1-4% slopes
*544 - Cathro muck
*1055 - Aquolls and histols, ponded

WASHINGTON COUNTY SOILS
CITY OF FOREST LAKE
SECTION 21 TRUNK SEWER LINE

FIGURE 7

Bonestroo
Rosen,Rose
Andersik &
Associates
Engineers & Architects

Scale in feet
2003 AERIAL PHOTO
APRIL 2006