

Thursday, November 6, 2025

Racine Wastewater Utility
c/o Nate Tillis
800 Center Street, Room 227
Racine, WI 53403

RE: Village of Caledonia Sanitary Sewer Capacity Peak Flow Mitigation Plan 2025 Update

Dear Mr. Tillis:

The Village of Caledonia Sanitary Sewer Capacity Peak Flow Mitigation Plan consists of the following Improvements:

COMPLETED IMPROVEMENTS

- Incorporated High Flow Alarms into the SCADA system.
 - High Flow Alarm at 72% of the Peak Hour Flow (Central, Riverbend & Hwy V)
 - High Flow Alarm at 72% of the Peak Day Flow (Central, Riverbend, & Hwy V)
 - Diversion Activates at 68% of Peak Hour Flow at the Hoods Creek Attenuation Basin, Diversion gate modulates flow to 60% of Peak Hour Flow (Riverbend)
 - Full Diversion at 72% of Peak Day Flow at Hoods Creek Attenuation Basin (Riverbend)
- The Central Lift Station Wet Well has been marked to indicate the level that the wet well can be surcharged to maximize in-system storage but prevent basement backups.
- The Central Lift Station Facility Plan has been approved by the Wisconsin DNR.
- Performed Condition Assessment and Capacity Analysis of the existing 3 Large Pumps at the Central Lift Station.
- Rebuilt the 3 Large Pumps at the Central Lift Station to bring them back to factory tolerances.
- Replaced 4 of the 10 Air Release Valves on the Central Lift Station Forcemain.
- The Central Lift Station Attenuation Basin Construction Plan has been approved by the Wisconsin DNR.
- The Riverbend Lift Station Wet Well has been marked to indicate the level that the wet well can be surcharged to maximize in-system storage but prevent basement backups.
- 142 Sanitary Sewer Frames and Grates were swapped with seal down lids (2019-2025)
- 12 Sanitary Manhole Chimneys replaced or sealed (2019-2025)
- 16 Sanitary Manholes were replaced due to damage and infiltration (2019-2025)
- 162 Manholes Grouted to remove leaks (2019-2025)
- 2 Sanitary Manholes were abandoned/removed (2019-2025)
- 26,383 lineal feet of Seal Joint Grouting (2019-2025)
- 31,274 lineal feet of Cure in Place Lining (2019-2025)
- 3,156 lineal feet of Sanitary Sewer Main Replacement (2019-2025)
- 110 Sanitary Laterals for a total of 3,429' were relayed in the Right of Way (2019-2025)

- 718 Sanitary Laterals for a total of 11,445' were Grouted in the Right of Way (2019-2025)
- 2 Sump Pumps removed from Sanitary Sewer
- Televised 21,007 lineal feet of Sanitary Sewer Main and 2,344 lineal feet of 71 Sanitary Sewer Laterals (2025)
- The Hoods Creek Attenuation Basin Expansion (additional 3 MG) has been completed and placed online as of June 9, 2023. There is now 4.5 MG of Wet Weather Storage at this location (Riverbend)
- Increased Sanitary Sewer Rates from \$123.00 to \$190.00 from 2019 to 2025. Sanitary Sewer Rates are anticipated to continue to rise to approximately \$285.00 per quarter to fund CIP for Sanitary Sewer Improvements by 2029.
- Requested additional Sanitary Sewer Capacity which prompted the Racine Wastewater Utility Facility Plan. (Racine Wastewater Utility Facilities Plan indicates that a 12 MGD satellite plant would be constructed in the future)

IMPROVEMENTS IN PROGRESS

- Central Lift Station Improvements
 - Rebuild the 2 Small Pumps to reduce ragging and bring back to factory tolerances.
 - Replace the remaining (6) Air Release Valves on the Forcemain
 - Review the overall condition of the Forcemain and explore the possibility of converting a portion of the forcemain to gravity main.
 - Construct a 3.6 MG Attenuation Basin at the Central Lift Station.
 - Review the 21" Interceptor from the South of the Central Lift Station to ensure proper sizing and review of I & I.
 - Review the potential for an additional forcemain discharge to be installed for redundancy.
- Riverbend Lift Station Improvements
 - Complete the Riverbend Lift Station Facility Plan and submit to the DNR for approval.
 - Rehab the existing 16" Forcemain
 - Rehab the existing 27" Sanitary Sewer along North Green Bay Road
 - Install a new 20" Forcemain from the lift station to the Racine collection system (Golf Avenue) for redundancy.
 - Review for a location to install an additional 0.6 MG of storage capacity.
- Continue Closed Circuit Television Inspection of Sanitary Sewer System – To focus on structural defects and address I & I as discovered by televising. Working in conjunction with road repaving projects with the Village as a priority.
- Continue to repair and replace Sanitary Sewer Manholes in conjunction with road repaving projects.
- Finalize the Point-of-Sale Ordinance requiring sanitary sewer laterals to be televised and repaired/replaced as necessary as part of the sale of properties/existing homes.
- Continue to review sump pump/foundation drain discharges on existing homes when replacing water meters to ensure that discharge is not to the sanitary sewer system.

The information below is the anticipated schedule for the completion of the various Capital Projects associated with the Village of Caledonia Sanitary Sewer Capacity Peak Flow Mitigation Plan

- Central Lift Station Attenuation Basin
 - Anticipated Public Bid 12/2026
 - Construction 3/2027 – 8/2028
 - Estimated Cost \$27,000,000
- Riverbend Facility Plan
 - To be completed and forwarded to the DNR for approval 12/2026
 - Anticipated approval 2/2027
- Riverbend Lift Station Improvements
 - Preliminary Design
 - Anticipated submission to DNR 8/2027
 - Anticipated Public Bid 11/2027
 - Construction 3/2028 – 12/2028
 - Estimated Cost \$7,543,000
- Closed Circuit Televising Program
 - To continue in 2026. \$75,000 has been budgeted for 2026.
- Sanitary Sewer Manhole Rehabilitation
 - On going and follows the Village's Road repaving schedule. Will also perform manhole rehabs based on results from televising program. \$128,676 has been budgeted for 2026.
- Point-of-Sale Ordinance/Policy
 - Looking to finalize in 2025. If approved, proposed to implement program in 2026.
- Review of Sump Pump/Foundation Drain Discharges
 - On going with the replacement of water meters.

The Village of Caledonia Sanitary Sewer Capacity Peak Flow Mitigation Plan can be completed as funding is received and Sanitary Sewer rates are increased. Being mindful of Sanitary Sewer rates for Caledonia residents/customers, the Village of Caledonia annually updates its cash flow analysis for the Caledonia Sanitary Sewer Utility District. This cash flow analysis and its results may revise the completion schedule.

If there are any questions about this information, please feel free to contact me.

Sincerely,



Anthony A. Bunkelman P.E.
Public Services Director
Village of Caledonia