



Wastewater Treatment Facility Improvements

The Situation

- The WWTF serves the City of Cold Spring (population 4,258) and the City of Rockville (population 2,414), and major industries in each community.
- The City's wastewater treatment facility (WWTF) is a Class A facility that discharges to the Sauk River. WWTF components range in age from 20 to 60 years. The average day design flow for the WWTF is 1.37 million gallons per day (MGD).
- The 60-year-old Trickling Filter process treats about 30 percent of the flow through the WWTF.
- Biosolids generated at the WWTF are treated using an anaerobic digester process of which most of the equipment is 30 to 60 years old.
- Biosolids are land applied in a liquid form on agricultural land (about 1.5 million gallons per year). Spring and fall application events are required given the City's limited sludge storage capacity. Access to land application fields is becoming more difficult.
- A Facility Plan was submitted to the MPCA in March 2024. The estimated capital cost for the proposed improvements is \$52.46 million. We have been in communication with the City of Rockville throughout the Facility Plan process to obtain their input when needed and keep them informed of the project status.
- The City's sewer user rates are currently similar to those of nearby communities. Without grant support, rates would need to be increased significantly, which would be unaffordable and unsustainable.
- With no grant support, the annual loan payment for the project will be an additional \$3 million per year. This would require rates to be raised to a level of 260 percent of the current rates.
- Cold Spring takes pride in operating an effective WWTF and maintaining permit compliance. The City has been recognized by the MPCA in 2023 and 2024 for outstanding operations of the WWTF.

Our Solution

- The project includes an increase the permitted pollutant treatment capacity but does not increase the design hydraulic flow rate. The facility design will also provide nitrogen treatment capabilities, which is a new requirement related to the MPCA's April 2024 release of the statewide Nitrogen Reduction and Implementation Strategy.
- The project aims to replace the 60-year-old infrastructure and update the 20- and 30-year-old infrastructure as needed. Key benefits will include:
 - Improved ability to handle peak inflows/loads with new influent equalization system.
 - Improved effluent quality from activated sludge compared to trickling filter (for nitrogen removal).
 - Safety improvements to anaerobic digester for biosolids treatment related to biogas handling.
 - Improved flexibility for biosolids disposal options with new dewatering system.
 - Electrical service and controls upgrades to improve reliability of the WWTF.
 - Upgraded plant effluent water reuse system.
- We expect to increase user rates to help fund the project but are also pursuing grant funding through state and federal programs. The residents of Cold Spring and Rockville cannot afford the large cost of this project on their own.

Please contact us for more information:

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