

January 24, 2022

Bowerston Wastewater System Improvements

The Village must make improvements to their wastewater system. These improvements are needed to reduce wastewater overflows, increase operational efficiencies, and meet regulatory requirements.

Planned wastewater system improvements include

- Replacing and repairing wastewater lines and manholes in the collection system.
- Replacing existing Lift Station #1 and upgrade existing Lift Station #4
- Make improvements / upgrading the existing wastewater treatment plant (WWTP)

Communication Plan

The village will provide regular updates at council meetings and on the village web site.

Project Status

- Planning is 100% complete
- Design is underway
- The village is pursuing grant and low interest loan funds for the improvements.

Project Schedule:

The project schedule will be determined by the availability of affordable funding.

January 25, 2022

Bowerston Water System Improvements Project

The Village must make improvements to their water system. These improvements are needed to reduce water service interruptions, increase operational efficiencies, and meet regulatory requirements.

Justification of Need

The village water system continues to have issues that result in water service interruptions. These interruptions can result in depressurization of lines. If that occurs bacteria can enter the water system. The village issues boil orders when system issues occur.

- January 22, 2022-The village lost our # 1 pump at the water plant. We are running on our other pump. The village will attempt to get the pump back online.
- January 23, 2022- A resident had a line break in his crawl space. Our valve wouldn't shut off the water. The village crew had to dig it up and repair it.
- January 23, 2022- That night we had a main line break on Gordon street that was repaired today January 24, 2022. We are under a 48-hour boil order until we receive results from our test that we will pull in the morning.
- A main valve in the water plant needs to be replaced during the project.

These are the most recent issues with the water system. We will provide updates as other issues occur. The water system is aged and is expected to continue to deteriorate. More line breaks and valve failures will most like happen.

Planned water system improvements include

- Raw Water Supply
 - The screens, pumps / motors and piping are old, and need replaced. Wells #2 and #3 need cleaned and disinfected.
 - Each well needs a flow meter installed on the discharge line(s).
- The water distribution regularly experiences line breaks, particularly with the old cast iron lines that were installed as part of the original system.
 - Water loss in the Village is approximately 54.8%. The village only receives revenue for 45.2-gallons of every 100-gallons of water produced. Controlling water loss could potentially save the village considerable money.
 - A significant number of valves in the system are inoperable. To make a line repair, the village must shut down a large portion of the system or make the repair with lines actively flowing. All existing valves are to be replaced.
 - One inoperable fire hydrant is to be replaced. All fire hydrants must be connected to a 6-inch line or larger.
- The Village plans to replace all its water meters with radio read meters. Most of the meters are circa 1990s. Approximately 268 meters are included in the project. Changing out all the existing meters would increase revenue due to more accurate metering and

reduce labor due to fewer employees reading meters and faster gathering of the information.

- The village needs leak detection equipment to perform adequate operation and maintenance on the system.
- Water Storage Tanks:
 - Liberty Tank-Abandon existing underground tank and construct new above ground tank
 - Leesville Tank-This tank does not completely fill. It is anticipated that once the new Liberty Tank is installed, the higher elevation will correct the problem.
 - Install SCADA RTU
- Water Treatment Plant

Communication Plan

The village will provide regular updates at council meetings and on the village web site.

Project Status

- Planning is nearly 100% complete
- Design is underway
- The village is pursuing grant and low interest loan funds for the improvements.

Project Schedule:

The project schedule will be determined by the availability of affordable funding.

If you have any questions please contact our office at 740-269-1546.