

Water Distribution System Improvements

Intro to Mendota:

The City of Mendota is a suburban city with a population of 220 residents (90 households) within 193 acres (0.3 square miles) of Dakota County. The water system was constructed in the 1990s in an effort to provide fire protection. Water is supplied by St. Paul Regional Water System and owned by the City.

Water System Concerns:

- Dead-end System
 - o The entire system is one large dead end watermain.
 - Water only entering the City through one pipe which can easily provide whole city interruption.
 - Water quality concerns due to stagnant water and low residual chlorine.
 - Solution: Looping water system piping (Project Area #1).
- High Operating Pressure
 - O City pressures are 3 times higher than most municipal systems (150 psi) and represent the top 10 highest hydrant pressures in the entire City of St. Paul supplied water system.
 - Dangerous conditions for operators, added stress to the water system, requires residents to install a
 pressure reducing valve so not to compromise their homes plumbing.
 - Solution: Creating multiple pressure zones utilizing pressure reducing valve stations (Project Area #1, #2 & #3).
- Connection Availability
 - Only 35% of Mendota properties are served by municipal water.
 - 65% of residents rely on old wells for water with impacts recently from a higher water table.
 - O Solution: Provide watermains to each block of the City (Project Area #2 & #3).
- Fire Hydrant Availability
 - Most of the City does not have a hydrant located within distance to be effective to fight a fire.
 - This projects will double the number of fire hydrants in the City.

Project Areas:

- Area #1 (WM Looping) 3,100 LF of watermain, connection of 4 properties, 6 additional fire hydrants & interconnection to Mendota Heights.
- Area #2 (Property Connections) 2,900 LF of watermain, connection of 25 homes & 6 additional fire hydrants
- Area #3 (WM Looping & Property Connections) 1,500 LF of watermain, connection of 8 homes & additional 3 fire
 hydrants

Construction Concerns:

- Easements/ROW acquisition needed for segments of the project (Historic plat does not match topography).
- Historical/archeological monitoring of the project(s) is anticipated.
- Bedrock concerns due to topography

Significant Information:

- 55% of the households/residents within the project area are categorized as low or moderate income (2021).
- 2025 Water project 30% by city funds (\$300k) and 70% by 2020 MN Bond Bill (\$650k).
- Mn/DOT plans to resurface Highway 13/Sibley Memorial Highway in 2026 or 2027, which could lessen the City contribution by 10% (\$270k) if performed in tandem with Project Area #1.
- Project Areas #1 and #3 have been included in the Drinking Water Revolving Fund Project Priority List, but do not score highly. Each received 12 pts on the 2025 PPL list, ranked 217 and tied with 98 other applications.

Project Costs (2025 Dollars)

Area #1	Area #2	Area #3	Total
\$2.7 Mil	\$2.4 Mil	\$1.4 Mil	\$6.5 Mil





