MARTINSDALE WATER AND SEWER DISTRICT

Martinsdale is a small unincorporated farming and ranching community in Meagher County. The Martinsdale Water and Sewer District owns and operates a public water system with 88 service connections and serves a full-time population of 57 and a summertime population of 120 people. The water system includes two spring sources, two on-grade steel storage tanks, and a distribution system. The distribution system was constructed in 1967 and consists of 8,200 feet of asbestos cement (AC) pipe.

The AC distribution piping is failing, and we see over 70% water loss, which equates to an estimated 5.5 million gallons of water that is fed into the system annually and leaks into the ground. During high demand periods, we cannot keep the storage tanks full due to the leakage.

The failing asbestos cement pipe represents a long-term health risk to the residents of the District. The EPA states that asbestos fibers may be released through the wear or breakdown of asbestos containing materials, including the use of asbestos cement pipe in water supply systems. The failing pipe requires frequent repairs and with every repair comes an opportunity for contaminants to enter the system. Main breaks result in a loss of pressure, which increases the potential for backflow and contamination of the water system. Backflow is recognized by the EPA as one of the most significant public health and safety issues facing water systems today.

The distribution system piping is undersized which limits flows that could be critical in an emergency fire situation, creating a severe safety hazard for the residents of Martinsdale. Several dead-end mains exist in the system which also limits flows and can promote bacterial growth and stagnant water conditions.

Each water service in the system is metered, although roughly half of the meters are non-functional, which prevents us from accurately monitoring water usage. Approximately twenty of the service meters are located in homes and do not capture all usage on those services. The tank outlet line is not equipped with a flow meter so we cannot easily measure the water entering the distribution system.

Replacement of the entire distribution system and elimination of the dead-ends is planned over two phases, to keep the project affordable. The proposed first phase includes installation of 4,800 lineal feet of new 6-inch PVC pipe. Replacement is needed to increase fire flows and eliminate leaks. The proposed project also includes replacement of all service meters in the water system, relocation of twenty meters into new meter pits at the property line and installation of a flow meter on the tank outlet to accurately measure the water entering the distribution system.

Implementation of this project reduces water loss in the system, lessens a significant threat of backflow contamination from the leaking water mains, and improves fire flows in the system. The proposed project will allow us to utilize our water source more efficiently and helps conserve water and preserve natural resources.

With our small user base, these projects can have a significant financial impact on residents and therefore we urge your support of the MCEP and RRGL funding.