



City Administrator's Report

September 28, 2023

Water Line Break

On Wednesday, September 27 at approximately 3 a.m., staff was notified by the Supervisory Control and Data Acquisition (SCADA) system that the northwest tower was losing water elevation. The plant supervisor reported to the plant and noted that the level in the tower had dropped from approximately 21 feet to 1.7 feet in less than an hour. The north tower was also losing elevation. Distribution staff were called in to begin looking for a leak. A large leak was found on North Main Street between 180th Street and 188th Street. The section of water main was isolated (shut down) around 5 a.m.

The break was fixed and water service was restored around 11 a.m. Water usage in the mornings is generally very high. With lowered capacity and high use, most of the northern end of town experienced low to extremely low water pressure.

Out of abundance of caution, the City issued a PRECAUTIONARY Boil Order for residents north of 180th Street. Some residents South of 180th Street may have experienced lower pressures, but the area of concern was north of 180th Street.

A Precautionary Boil Order is issued if there is any chance that foreign materials may have entered into the water system. A water system typically pushes water out: turn a faucet on and water flows into the sink. With the elevation loss in the towers happening so quickly there could have been a back siphonage into the system. While we never lost all pressure, staff felt we should err on the side of caution and issue the Precautionary Boil Order.

Staff did send water samples from the area to a testing firm and the results indicate that the water was not compromised and safe to consume. The water in system was never unsafe to drink.

DNR was notified and City staff followed all Safe Drinking Water Act procedures.

Mayra Toothman – Emerging Leader!

Last week we were notified that Mayra Toothman, Assistant to the Public Works Director, was accepted to the American Public Works Association (APWA) Emerging

Leaders Academy. The Emerging Leaders Academy provides intensive leadership and management training within the context of public works. It encourages professional growth through a strong network of peers and offers an in-depth introduction to APWA at the national, chapter and branch levels.

The Emerging Leaders Program is a National Program designed to provide individuals with the tools and skills to be successful in their professional careers. The application process is very competitive and only 32 candidates from across the United States were selected to participate. The class is a yearlong and begins with a two-day retreat followed by monthly meetings and completion of a class project. Graduation from the class will occur at the APWA Annual Public Works Conference.

Water Treatment Plant Equipment – SCADA

As noted earlier, the water treatment facility uses real-time radio technology, Supervisory Control and Data Acquisition (SCADA), to monitor distribution system assets and to remotely control distribution system pumps and isolation valves. This allows operators to turn pumps on and off and fill towers from the water treatment facility without having to do so manually in the distribution system.

With the addition of the new raw water pump station, the SCADA network is now a mixed system of cellular technology and the original radio technology. Under normal circumstances, this would not be an issue, but the outdated public logic control (PLC) equipment that was installed in 2006 cannot handle the additional information load placed on it. This has resulted in the failure of the SCADA system with communication errors and the inability to run the raw water pump or the chemical feed system at the raw water pump station and will require replacement. Additionally, the system alarms are not responding, and staff is having to manually go to the raw water pump station to regulate chemicals and control pumps. This system controls the pumps that feed the water towers and provides water levels of the towers.

The upcoming water treatment facility improvements that are currently being engineered would call for an upgrade and expansion of the SCADA/PLC putting further demands on the system. The new system will take into account this additional load, so we are prepared for the expansion.

Staff is recommending and I have authorized initiation of an emergency purchase of an estimated \$20,000 to replace the current SCADA/PLC system to meet current and future needs for control and communication. This emergency purchase allows us to expedite ordering the equipment. Funds are included in the maintenance and repair budget for the plant. Approval of the purchase will be on a future agenda.

Board Meeting Schedule

Because November 7 is election day, that meeting will be moved to Monday, November 6.