

The Flow

PRODUCED & PUBLISHED BY:

Springfield Water &
Sewer Commission
Volume 3, Issue 6
June 2024



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SWSC has recently completed a project that installed Telemetry on all 10 of the Wastewater Pump Stations within the sewer system. This provides real time updates of any issues with the stations, such as pump faults, seal leaks, power outages, etc., as well as collecting and archiving data, including the number of individual pump starts per day and run times of each pump in each station. This information is transmitted to the Waste Water Treatment Plant and integrated into our current SCADA system that is monitored by, and available to, all plant operators.

Sewer Telemetry

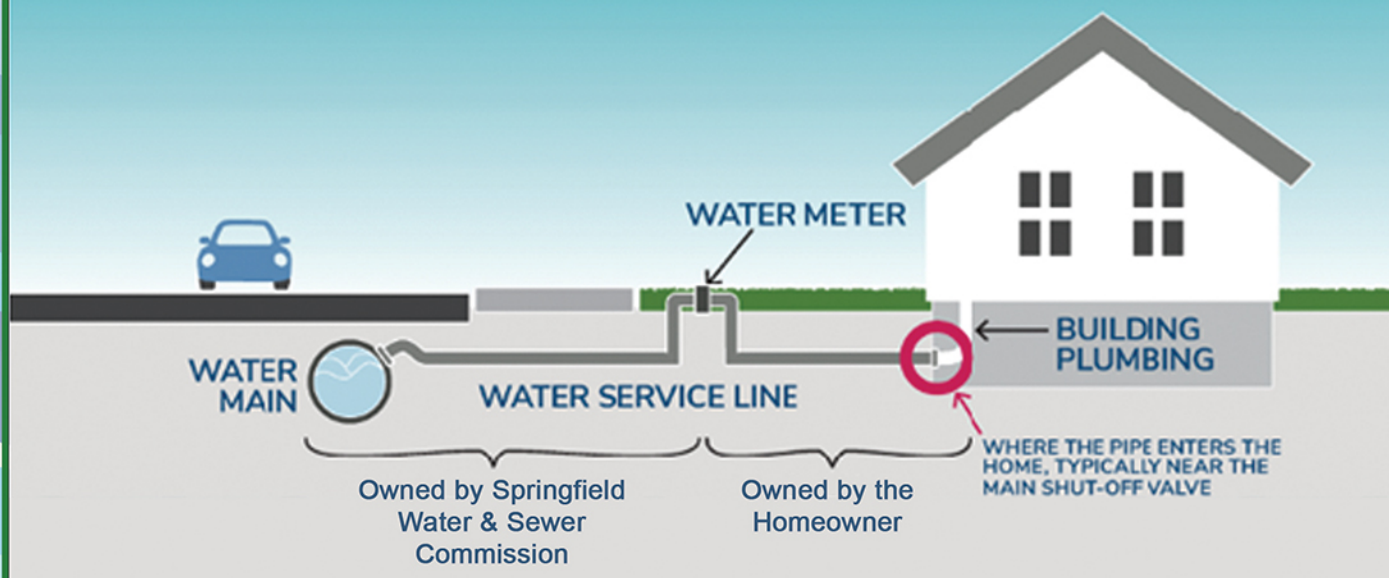
By using this technology, we can better determine the need for future system upgrades and current maintenance, as well as reduce the number of man hours needed to site visit each station daily.

In the context of sewer pump systems, telemetry can be used for various purposes:

- 1. Monitoring Performance:** Telemetry allows real-time monitoring of pump performance, including flow rates, pressure levels, pump status (on/off), and energy consumption. This data helps in assessing the efficiency of the system and detecting any abnormalities or malfunctions promptly.
- 2. Predictive Maintenance:** By continuously collecting data on pump operation, telemetry systems can identify patterns or trends indicative of potential equipment failures. This enables predictive maintenance strategies, where maintenance activities are scheduled based on the actual condition of the equipment rather than a fixed schedule, reducing downtime and repair costs.
- 3. Remote Control and Management:** Telemetry systems often include remote control capabilities, allowing operators to adjust pump settings or control operations remotely. This is particularly useful for optimizing pump performance in response to changing conditions or demand levels without the need for onsite intervention.
- 4. Alarm Notification:** Telemetry systems can be configured to generate alarms or alerts in case of abnormal conditions, such as pump failure, overflow events, or system leaks. These notifications can be sent to operators or maintenance personnel in real-time, enabling rapid response to critical situations and minimizing the risk of environmental damage or public health hazards.
- 5. Data Analysis and Reporting:** Collected telemetry data can be analyzed to identify trends, optimize system performance, and support decision-making processes. Reports and visualizations derived from telemetry data can provide valuable insights into long-term system behavior, enabling proactive management and planning for future infrastructure upgrades or expansions.

Overall, sewer pump telemetry plays a crucial role in ensuring the reliable and efficient operation of sewerage systems, improving maintenance practices, and reducing the risk of service disruptions or environmental incidents.

Who Owns & Maintains the Water Service Lines?



Many customers are not aware of exactly what portion of their water service is their responsibility. In the above diagram you see each section labeled with the responsible party. The customer's water line that connects to the meter is their responsibility to maintain. The actual meter and line from the water main to the meter are the utility's responsibility to maintain. When you see information regarding service lines, the public service line is the portion maintained by the utility and the private service line is the portion maintained by the customer.

Customers are advised to stay out of the meter bases. Each private service line should have a cut off valve installed somewhere between the connection to the meter and the residence. If a customer has a leak and needs the service turned off to make repairs, this cut off valve is where the customer should turn the service off.

Often customers may access the water meter crock and damage the utility's facilities. Some damage seen is damage to the utility's cut off valve located prior to the meter or damaging the radio read portion of the water meter. Repairing the utility's cut off valve can be quite extensive, requiring replacement of the complete setter. This expense is charged to the customer if damaged by the customer.

Most meters in our system are read via drive by methods with laptops. The signal is transmitted from the meter and collected by the laptop. This is possible due to an endpoint with a wire attached that is mounted in the meter lid. The wire extends to the dial on the meter. If this wire is pinched or broken, the signal is interrupted and the endpoint and dial must be replaced. This repair is quite costly and is charged to the customer when the customer has caused the damage.

If the customer is unable to make repairs unless the actual meter is turned off, they should contact the office for assistance. SWSC recommends all customers install their own cut off valve when making repairs for future problems.