

Utilities Report

Activities During September 2019

Water Department

The month of September began with meter reads, an undertaking that is increasingly more demanding due to maturing meter transmitters that are failing. District staff is preparing for replacement of all residential meters. The last meter replacement program occurred in 2005-2006.

The beginning of September was also difficult for the Department due to limited staffing as a result of illness or injury. Staff was limited to two members for the first half of the month. We are currently back to full staffing—and good health!

During the first week of September, a leak on Ardath became visible but turned out to be challenging to locate. The source of the leak was eventually discovered and was caused by a root growing around the service line. There was no interruption in service for the area during the repair, but some traffic delays did occur. I appreciate the patience of those who live nearby and whose commutes were disturbed.

Leaks are typically addressed as soon as they are discovered, but some factors may contribute to a delay in repair. These include the severity of the leak (gallons per minute lost), the location, and available staffing. During weekends or days with limited staffing, a small leak might be marked but not immediately repaired until a larger crew could be assembled. A small leak would typically fall within the 2-5 gpm range, and the cost to the District to lose that amount of water is nominal when compared to the cost of staffing at overtime rates. Medium leaks, typically between 10-20 gpm, and large leaks, 25-100 gpm, would warrant a call to the Water System Supervisor and mobilization of a repair team. These leaks often require service interruption, which cannot be done safely with limited staffing due to the need to notify customers (often by knocking on doors) and traffic control requirements which protect workers in the street where water valves are located. While the District strives to reduce water loss and recognizes the negative optics of a prolonged leak, management and staff have to consider several factors when scheduling repairs—with employee safety being paramount.

September 13th brought about a planned power shut-off by PG&E at 10:00pm. While the shut-off lasted only minutes, the resulting chaos lasted through the night. The temporary generator our Department acquired while we await a permanent replacement worked as intended and no disruption to our production wells occurred. However, an uninterruptible power supply at the Rodeo Grounds Booster station failed, resulting in manual operation of the pump station through the night until the battery could be replaced and the unit returned to service.

On September 25th inspections and cleaning were performed at the Stuart Street tanks. Prior repairs are holding strong and everything went according to plan.



Figure 1 Hillcrest line replacement

On September 26th, a line replacement occurred on the 800 block of Hillcrest. This line had seen many previous repairs and was finally replaced in full. This was a difficult replacement due to proximity to other utility lines and the sanitary sewer.

During September, the 2018 Water Loss Audit was compiled, validated, and submitted to the State. The validation report is available on our website. Our total water losses for calendar year 2018 were 47.54-acre feet or 11.9% by volume of water supplied. In 2017, our water losses totaled 119.98-acre feet or 23.4% (much of which could be attributed to the “Bluebird leak” which was undiscoverable for two months due to its location under Santa Rosa Creek). Some water loss is unavoidable due to the nature of water conveyance and certain applications of non-

revenue water such as fire suppression, training, and equipment maintenance or repair. The District is improving efforts to reduce loss through leak detection and the upcoming replacement of aging customer water meters.

Permit Counter Totals for 2019

14 Assignments, 5 Transfers, 6 Voluntary Lot Mergers, 4 ITS Extension Applications

45 Verification of Water Availability Letters (Additions/Remodels/Reconstruction/New Construction)

Other Water Department Activities for September 2019

Manual Meter Reads/Locates for Billing Purposes	362
Customer assists for high water usage on customer side of meter	25
Locking/Unlocking Water Meters	8
Meter Shut-Off/Turn-On at Owner’s Request	3
Repairs of distribution system leaks	5
After-Hours System Alarm Responses	3
USA Locations	35
Water Service Line Information Requests	2
Service angle stop/ Valves Replaced	3
Leaks and repairs	11
Retrofit Inspections	16

Wastewater Department

Wastewater Treatment Plant



Effluent pump #2 failed. We had Miller Drilling come out, pull the pump, and repair it. It had taken in some debris which caused the seals to move. This made the pump out of balance and spun the retainers out from the base of the bowels.

We hope to have effluent pump #1 pulled in October for a rebuild. Effluent pump #1 puts out about 2/3 of what pump #2 does. This will give us two pumps to handle the rainy season with.

We are currently operating the Return Activated Sludge (RAS) pump #2 in manual due to a communication problem that occurred during one of our power outages.

Collection Systems & Lift Stations

We had Garcia and Sons Construction repair the manhole at the intersection of Main and Windsor. It took us a long time to get this done due to Cal-Trans permitting. We also had difficulty finding a contractor that would travel to Cambria for such a small job.

Another manhole was repaired due to displacement from tree roots. We had no idea the severity until it was excavated. The repair took much longer than anticipated.



Figure 2 Manhole repair at Main/Windsor

Amended 10/24/2019



Figure 3 Manhole repair due to root intrusion



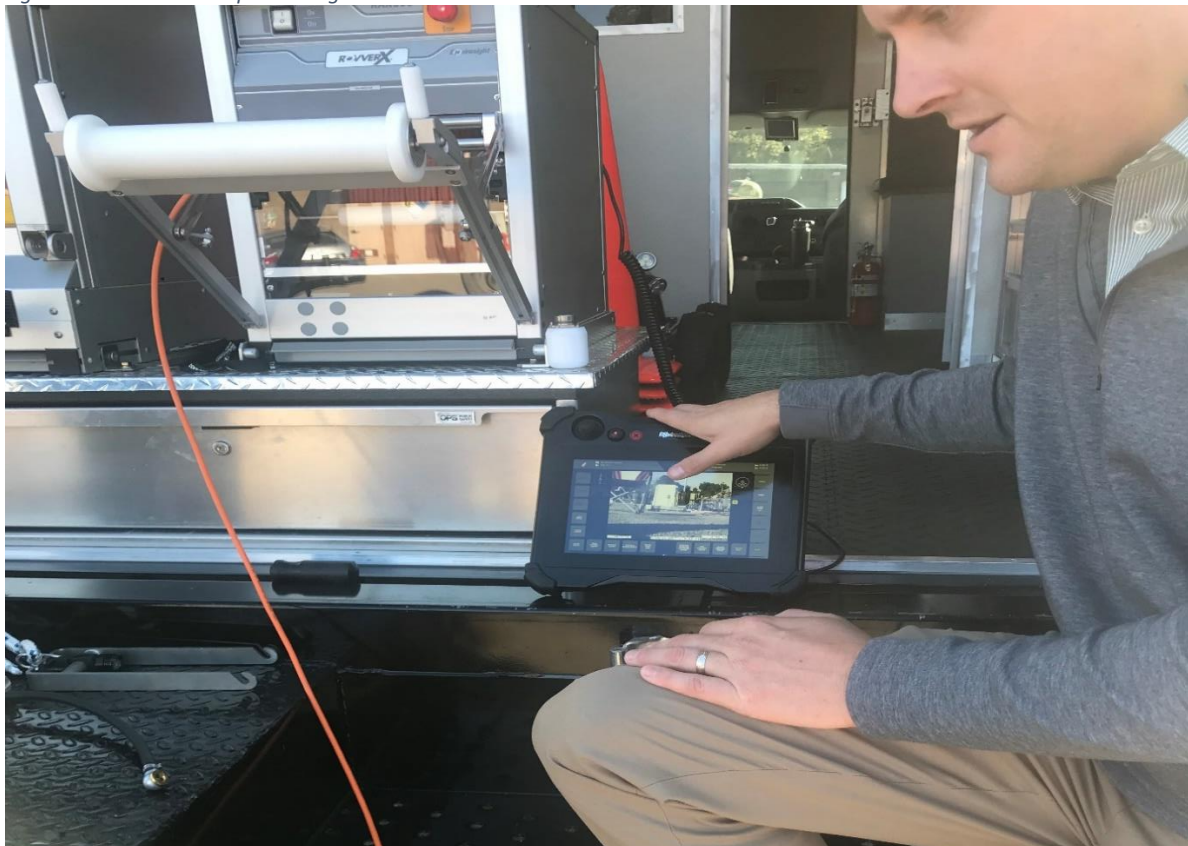
Figure 4 Removed segment of tree during repair

Amended 10/24/2019

Haaker Co. representatives came to the WWTP to demonstrate the Rover X. This is a camera we can use in the collection system to find breaks in the lines or root intrusions. This is also needed to comply with our Sanitary Sewer Management Plan.



Figures 5 & 6 Haaker rep demoing Rover X camera



Amended 10/24/2019

Attachment: Water Department After-Hours Leak Response



Water Department After-Hours Leak Response

OCTOBER 24, 2019



Leak Notification

1. On-call operator receives notification of suspected leak.

- Via Website
- Via Phone Call
- Visual detection while on rounds

2. On-call operator verifies leak

- Customer side: notify owner; shut-off water; report to supervisor.
- Utility side: Estimate flow rate; mark location; notify supervisor.



Leak Repair

Initial response depends on multiple factors:

- Flow rate
- Available staffing
- Location
- Service shut-offs





Leak Intensity

Small leaks: 1-5 gpm

- Cost to delay repair is nominal when compared to OT rates

Medium leaks: 10-20 gpm

- Requires immediate response and at least one other operator

Large leaks: >25 gpm

- Requires immediate response and full crew

