

WATER LOSS PREVENTION AND LEAK DETECTION PROGRAM

Union County Water District was organized in 1964 and serves the residents of Union County not within the city limits of Morganfield, Uniontown and Sturgis. The system serves a population of approximately 5,383 through 2281 service connections. Water is distributed to the customers' through approximately 300 miles of water main. Union County Water District is committed to keeping water loss to a minimum through constant monitoring of our system

The Following plan outlines procedures for Union County Water District to identify and reduce its overall water loss.

1. Constant monitoring of tank levels and pump pressure through SCADA System
2. Master meters are read on a daily basis at approximately the same time each day. Readings are entered into a log book and compared with historic data to determine unusual fluctuations in usage.
3. Computer billing software is utilized to detect unusual water fluctuations in customer accounts. Any high usage is reported to the supervisor and is immediately relayed to field personal for further investigation.
4. Monthly water loss reports are used to help monitor months of unusual water usage. Union County Water District strives to maintain a monthly water loss below industry standards of 15%.
5. Meters are tested and/or changed out using PSC regulations.

5/8" to 1" meters	Every 10 years
1 ¼ to 2" meters	Every 4 years
3" meters	Every 2 years
4" meters	Yearly
6. Office personal shall immediately report any customer reported leaks, tank overflows, pressure problems or other issues to the supervisor. The supervisor shall then communicate with field personal to determine proper action to remedie any problems.

7. Field personnel shall immediately report to the supervisor any identified water leaks, tank overflows, telemetry, pump problems or other concerns that are presently or could result in water leaks or loss. The supervisor will confer with field personal as to appropriate measures and urgency of the problem.
8. Field personnel frequently exercise valves to keep valves operational. They listen while operating valves for potential leaks. They are to report any concerns to the superintendent immediately.
9. All tanks, pump stations and pressure reducing stations will be inspected on a weekly basis unless conditions arise for the need for more frequent inspections. All information will be recorded in logbooks kept in each station for review.
10. A development and improvement account has been set up for future replacement, extensions or improvements as needed to maintain a strong working system.

Water Loss Reduction / Action Taken

On February 14, 2022, Gary Sheffer, Union County Water District (UCWD) Superintendent, along with other UCWD personnel, met with Cody Kirby from the Kentucky Rural Water Association (KRWA) for assistance in leak detection. Mr. Kirby was successful in finding one leak on a service line in an area where UCWD had suspected and been searching for a leak.

Mr. Kirby stated that aside from his equipment being able to check "service lines", his leak detection equipment was not compatible with the AC or PVC lines that make up our main water lines running throughout our county and his services would not be deemed useful.

Water Loss Reduction / Action Taken

On March 1, 2022, Gary Sheffer, Union County Water District (UCWD) Superintendent, along with other UCWD personnel, met with Jason Myers from Tracer Electronics LLC. UCWD had requested Mr. Myers to demonstrate some leak detection equipment and see if it would be compatible with our AC and PVC main lines. Once Mr. Myers started the demonstration, he said his equipment would not work well with our lines and that he felt his services could not be helpful to us.