

**2025 ANNUAL PROGRESS REPORT OF GARRISON QUINCY-KY-O-HEIGHTS WATER DISTRICT'S WATER
LOSS DETECTION AND REPAIR PROGRAM**

On November 24, 2021, the Public Service Commission in Case No. 2021-00094 authorized Garrison Quincy-KY-O Heights (Garrison Water) to collect a monthly surcharge of \$1.73 per metered customer on and after January 1, 2022 and continuing for 48 months or until the total amount of the surcharge assessed equaled \$88,468.00, whichever occurred first, subject to certain conditions. These conditions included the submission of a yearly report containing a schedule of the estimated and actual progress of Garrison Water's water loss detection and repair program and the estimated and actual expenditures made with surcharge proceeds. The Public Service Commission indicated that this yearly report will be used to evaluate the need for prospective adjustment to the water loss detection and repair program and the authorized surcharge.

This report addresses Garrison Water's water loss and detection program for the period from January 1, 2025 to November 1, 2025. It compares the results of the program's year to the schedule of the estimated and actual progress of the water loss detection and repair program, and estimated and actual expenditures made with surcharge proceeds, for the purpose of evaluating whether adjustments to the program or to the surcharge amount are required.

During this report year, Garrison Water District has had a decrease in water loss. At this time, we have decreased over the past year from 31% to 26%. This matched the anticipated 5% loss for 2025. The drought caused many problems with various sections of pipe. We had to look extensively for leaks and it took up very much time locating and fixing the amount of leaks that we had. The past purchases from the water loss surcharge program helped us greatly to locate many of these leaks throughout the year. The newly placed bypass meters and our new large zone/bypass meter was a great help also.

Program Implementation

In its Order of November 24, 2021, the Commission directed Garrison Water to submit an infrastructure improvement plan, including a comprehensive unaccounted-for water loss reduction plan that established priorities and a time schedule for eliminating each source of unaccounted-for water loss and provides a detailed spending plan for the proceeds of a surcharge. With assistance from Kentucky Rural Water Association (KRWA), Garrison Water completed and submitted that plan on March 23, 2022.

As advised by Public Service Commission Staff, Garrison Water has created a revised plan, including some new items and excluding some other original submitted plans. As stated, some expenditures has been made and some improvement has been made. The plan is as follows:

Leak Detection Equipment

Garrison Water District added an additional listening device in 2023 from water loss surcharge funds. This extra device has helped to assist in locating water leaks by listening to valves, meter, and hydrants or above the location of the water line. The addition of this listening device has given us the opportunity to use 2 operators at the same time to make leak detection more time efficient.

A portable flow meter to measure gallons flowing through the water main was purchased in 2023. The application of a portable flow meter is needed to assist in narrowing down the search area for listening device. The portable flow meter had a warranty issue that has been resolved and has since proven its worth. Once our staff was properly trained, the flow meter was put into use. It has become an important part of our equipment to assist in leak detection.

One zone/bypass meter was installed in 2025 below our tank site. This meter will register the usage for 30% of the customers on this section of our system. This zone meter will allow the field staff to read the meter daily and monitor increases in water usage. Upon an increase in usage, the District will focus its leak detection efforts in that zone. Currently, Garrison Water District has been using that meter to monitor the flow to that section of our system and has been useful to determine the sections to look for leaks. The District is in the process to adding this zone meter to the telemetry system so that we can read the meter in real time back at the plant. It will read gallons per minute and include a totalization of the meter for each day.

Distribution System

This year Garrison Water District has installed the Bypass/Zone Meter that was in our Infrastructure Improvement Plan. It was the equipment listed in the Disbursement Request #3. We have used this meter to monitor trends in our usage for about 30% of our system. It has proven to be useful to quickly narrow down the areas that we see an increase of usage in to find leaks. The District has found this meter very useful and has been able to use it multiple times since we have installed it to quickly identify problem areas.

The District has several valves in the system that need replaced. The valve exercising that we had done with KRWA helped bring some back to being useful but others are in need of replacement. We do not currently have a cost on the amount of valves or the money needed to replace the malfunctioning valves.

There are some sections of the 3 inch water line that was listed in the Infrastructure Improvement Plan that need replaced. There is about 1.5 miles of line that is the most repetitive problem areas. There is not a specific plan or cost for the replacement at this time.

Bypass Meters

Garrison Water acquired grant money from Round 1 Cleaner Water Program. Within the budgeted amount allowed, Garrison Water has purchased enough supplies to install ten (10) bypass meters on some of our smaller sections of line to be used for leak detection. Garrison Water has installed 5 additional new bypass meter sets in 2025. This item is not part of the water loss surcharge but was advised by Public Service Commission Staff to include into our water loss report.

Customer Meters

In the allotted money from the Round 1 Cleaner Water Grant, Garrison Water Districts used a portion of that for meter replacement within our system. Garrison Water received 200 - 5/8" X 3/4" residential meters. 26 of these new meters have been installed into the system this year. The change out process was cut short of more installations due to the amount of problems we encountered this year with the severe drought. This money did not come from the water loss surcharge funds but was also advised by Public Service Commission Staff to include into our report.

Service Line

With funds from Cleaner Water Round 1 we were able to replace a troubled service line. This 300 foot long 1 inch line had been a repetitive problem due to the terrain it was in. We were able to get it replaced and installed into a casing pipe to ensure its longevity. Replacing this line has eliminated water loss for it for the entire year of 2025.

Summary of plan

Garrison Water District's water loss on average is above 15%. The overage is approximately 30-40 gallons per minute. In a distribution system of over 100 miles of water main with 3 distribution employees, consistently lowering the water loss below 15% is not a small task and will require time. The existing funds along with the items we have already been able to purchase will assist Garrison Water District in lowering its water loss. These purchased tools along with the permanent fixtures will be a valuable investment in the infrastructure by Garrison Water District to assist in water loss detection.

Surcharge Revenue

During the period of January 1, 2025 to November 1, 2025, Garrison Water collected \$16,868.45 in surcharge revenues. With the fluctuation of customers the billing and collection amount varied throughout the year. As shown in Table 1 below.

TABLE 1

Month Collected	Customers Billed	Customers Paid	Actual Collected
January 2025	1045	937	\$1,622.02
February 2025	1045	998	\$1,727.16
March 2025	1030	1000	\$1,730.71
April 2025	1028	966	\$1,671.32
May 2025	1035	945	\$1,635.81
June 2025	1029	962	\$1,665.09
July 2025	1043	923	\$1,597.87
August 2025	1039	980	\$1,695.81
September 2025	1044	1020	\$1,765.05
October 2025	1046	1016	\$1,757.61
November 2025	NOT INCLUDED	IN THIS	REPORT
December 2025	NOT INCLUDED	IN THIS	REPORT

Expenditures

The only expenditure that was approved and purchased in 2025 was for the installation of the Bypass/Zone Meter. It was Disbursement #3. The materials and labor was paid for in the amount of \$32,070.80.

Conclusion

With the remaining surcharge collections of 2025 and the first few months of 2026, along with the current balance of \$30,967.62, Garrison Quincy-KY-O-Heights Water District would like to use the available revenue to fix the troubled 3 inch water lines and replace some of the unusable gate valves. Upon the Public Service Commission's approval, we would like to initiate the replacement of the 3 inch water line that is prone to leaks. Also, the necessary valves that need replaced to be able to isolate sections of the system and allow the District to install bypass meters on these sections. The water loss surcharge revenue along with the items already purchased with these funds will be equally important in controlling our water loss. The total amount received for 2025 as of the time of this report was \$16,868.45. Over the past 12 months Garrison Water has decreased by 5%. It is estimated that 5% more will be reduced by the end of 2026.