




STAFF REPORT

Meeting Type: Board of Directors
Title: Water Loss Control Program Update
From: Paul Sellier, Water Resources Director
Through: Ben Horenstein, General Manager
Meeting Date: February 27, 2024



TYPE OF ACTION: Action X Information Review and Refer

RECOMMENDATION: Receive staff update on the District’s water loss control program

SUMMARY: Marin Water has had an ongoing water loss reduction program for decades addressing both leaks that surface which are often reported to the District by our customers and leaks that are discovered through our proactive leak detection program. Recently the State has established regulations and annual reporting requirements to address water loss as part of *Making Conservation a California Way of Life*. Staff will provide a presentation on the recent review of the District’s Water Loss program.

DISCUSSION: While water loss was identified as an area for improvement in the Strategic Water Supply Assessment Roadmap, drivers for the review of our Water Loss program included both the need and desire to save water by improving a long standing program as well as recent State regulations around water loss as part of *Making Conservation a California Way of Life*.

Water Loss Regulations

All water utilities are required to submit validated water audits to the Department of Water Resources annually. Starting in 2028, the water audits will be used to establish compliance with State Water Resource Control Board volumetric water loss performance standards. Ensuring our water loss control efforts are consistent with driving water loss to the most economically viable limit is not only best practice, but it will also aid in the effort towards ensuring the District is on the path to meet or exceed state regulated water loss targets. Staff will provide an update on the 2022 validated water loss submittal and trends over the last few years of reporting.

Current Leak Reduction Program

Most leaks are reported by the public (~90%) with the remainder found through our internal proactive leak detection efforts. When a leak is reported or found staff works to prioritize responses based on the

impact to providing reliable service. Each leak is classified into a three-class system and prioritized/scheduled by a field supervisor:

- Class I - access to drinking water is impacted (a mainline must be shut off), these leaks are prioritized and responded to immediately.
- Class II - service is not impacted because of the leak, the leak will be managed based on available resources.
- Class III - the leak is very minor and water loss is estimated to be low, the leak will generally be repaired within 2-3 weeks depending on other priorities.

Staff documents each leak and leak repair including the type of leak (crack, hit, hole, split, etc), type of pipe material, type of facility (service line, main, fireline, etc), and estimate of volume of water lost, and other site attributes. All repairs are managed with in-house personnel and once the repair is completed the crew lead completes a sketch of the repair remedy documenting the necessary steps and materials used in the repair. These repair notes are later transferred back into GIS.

Work Underway to Reduce Water Loss

A gap assessment is underway with the aim to better understand water loss in the distribution system by improving the accuracy of inputs in the State required water audit, understanding the current extent of water loss control activities and practices within the various departments, and to highlight areas for additional water loss recovery efforts.

There is interest to understand how new leakage recovery techniques can be used to supplement our current water loss control program activities. A list of primary leakage management technologies for the District to consider has been developed. These strategies are being evaluated and considered for piloting.

Staff will provide an update on the regulatory reporting, the current water loss practices and the work underway to evaluate and pilot new technologies/practices to further reduce water loss.

ENVIRONMENTAL REVIEW: Not Applicable.

FISCAL IMPACT: None.

ATTACHMENT(S): None.