



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES – WATER COMMITTEE

DATE: JULY 14, 2021

SUBJECT: WATER LOSS AUDIT DISCUSSION

ISSUE:

Review and Discuss Riverside Public Utilities' water loss auditing practices.

RECOMMENDATION:

That the Board of Public Utilities Water Committee review and discuss Riverside Public Utilities' water loss auditing practices.

LEGISLATIVE HISTORY:

On October 9, 2015, the Governor signed Senate Bill 555 – Water Loss Management, into law. SB 555 requires all urban water suppliers in California to conduct validated annual water loss audits.

BACKGROUND:

The first validated water loss audit was due to the Department of Water Resources (DWR) on October 1, 2017 and annually every October 1, thereafter.

Riverside Public Utilities (RPU) was an early adopter of water loss auditing and has now conducted five water audits following industry standards detailed in the American Water Works Association's M36 Water Audits and Loss Control Programs Manual. Below is a summary of RPU's past water audit results. Fiscal year 2014's audit was not validated as it was not required at that time.

REPORT PERIOD	VOLUME OF REAL LOSS	VOLUME OF APPARENT LOSS
07 2014	1,850	905
01 2016	2,362	1,728
01 2017	6,296	1,767
01 2018	4,324	2,267
01 2019	4,810	787

DISCUSSION:

The water audit involves a review of records and data that trace the flow of water from its source and treatment, through the water distribution system, and into customer properties. The data informing the water audit is compiled in the American Water Works Association's (AWWA) Audit Software, detailing supply sources, consumption, and loss components in a water system. The goal is to identify and quantify real losses (i.e. leaks, main breaks) and apparent losses (i.e. meter inaccuracies, billing errors) to improve and inform a utility's water loss control practices.

Complying with SB 555 requires urban water suppliers to not only compile the data that informs the water audit, but also to have the data undergo a Level 1 Validation by a certified third-party validator. A Level 1 Validation is a process of reviewing a water supplier's AWWA Water Audit Software inputs. The objectives of the water audit include confirming the accurate application of AWWA M36 Manual methodology, identifying evident macroscopic inaccuracies and correcting them, and verifying the consistent selection of correct data validity grades.

RPU will begin its annual water audit compilation process in mid-June 2021 and will have their audit validated by early September and submitted to DWR by the deadline of October 1, 2021.

FISCAL IMPACT:

There is no fiscal impact associated with this report.

Prepared by: Michael Plinski, Water Engineering Manager

Approved by: Todd M. Corbin, Utilities General Manager

Approved by: Al Zelinka, FAICP, City Manager

Approved as to form: Kristi J. Smith, Interim City Attorney

Certifies availability
of funds: Edward Enriquez, Chief Financial Officer/City Treasurer

Attachments:

1. 2018 Validation Certificate
2. 2019 Validation Certificate
3. Presentation