

Revised Draft Proposal:
Inclusion of Asset Management in Water Loss Control Regulation

Asset Management as a Water Loss Control Approach

Systematic, priority-based pipe replacement and other forms of asset management provide leakage reduction. Asset management is one of the four industry-established approaches for water loss control.

In the September 2019 workshop, staff sought stakeholder input and public comment on incorporating asset management in the draft economic model to calculate volumetric standards to estimate the benefits in the form of water loss reduction. Several public comments highlighted that multiple factors affect the prioritization of pipes replaced, where water loss control is typically not the only motivation behind asset management. Though capital investment for asset management is planned based on several potential benefits and factors, several suppliers rely on asset management for their system to reduce water loss, and asset management remains a recommended and established approach for water loss control. In response to comments received in September 2019, staff developed an initial draft of this proposal labeled as an ‘asset management plan’ with the objective to obtain data to evaluate benefits through prioritized asset management. Water Board staff conducted a series of focused stakeholder calls to receive feedback on the initial draft in December 2019. Pursuant to comments received on the initial draft proposal, the revised draft proposal aims to reduce reporting burdens, while obtaining additional data on potential water loss reduction as a result of prioritized asset management.

Due to the system-specific nature of planning asset management, Water Board staff propose to obtain additional data on the assessing the potential of prioritizing the replacement, rehabilitation or corrosion protection of distribution infrastructure that is more susceptible to failure, as determined by historical break rates, environmental factors, or a combination of both.

Staff proposes that urban retail water suppliers would complete Water Board’s data submission request by 2024 and provide updated responses to the data submission by 2027. The current staff proposal does not include additional standards for 2036, in addition to standards for 2028. But the data submission request would provide the State Water Board information to evaluate any potential for incorporating leakage reduction from asset management in future standards.

Proposed regulatory requirements

Urban retail water suppliers would provide responses to the following data submission request by 2024 and provide updated responses in 2027:

1. Does your agency maintain records of breaks on different sections of pipe and other distribution infrastructure?

- Agency maintains break history records
 - Agency plans to begin maintaining break history records by year _____.
 - Agency does not plan to maintain break history records. (skip question 2)
2. Which data fields pertaining to the distribution infrastructure components (for example, pipe sections, valves, meters, etc.) does your agency include in the break history record?
- Geographical location
 - Material or type as applicable
 - Size
 - Age
 - Average operational pressure
 - Soil conditions
 - Installation conditions
 - Type of break (for example, longitudinal, circular, etc.)
 - Time passed between reporting of break and repair
3. Does your agency have an approach to identify and prioritize the replacement, rehabilitation, or protection of water distribution infrastructure components that break or leak frequently based on break history or consequence of failure?
- Agency uses a prioritization approach for asset management.
 - Agency plans to have a prioritization approach for asset management by year _____. (only for 2023)
 - Agency does not plan to have a prioritization approach for asset management. (Skip question 4)
4. On which system and environmental factors is your agency's approach based?
- Break/failure/leak history of distribution infrastructure component
 - Distribution infrastructure component material
 - Distribution infrastructure component age
 - Maximum operating pressure
 - Occurrence of pressure transients
 - Local soil conditions
 - Other factors: _____

For 2027 only:

5. Provide the total projected length of water distribution pipe in miles replaced in each year between 2027 and 2035 year using your agency's asset management approach.
6. Provide an estimated number of distribution infrastructure appurtenances that will be replaced, rehabilitated, or provided enhanced protection using your agency's asset management approach projected to 2035.

7. Provide the total estimated feasible water loss reduction (acre-feet per year) due to your agency's asset management approach, projected to 2035.