

Water Loss Performance Standards

Regulatory context

Water Code section 10608.34, subdivision (i), (Senate Bill 555, 2015) directs the Board to “adopt rules requiring urban retail water suppliers¹ to meet performance standards for the volume of water losses.” Pursuant to this law, urban retail water suppliers have been annually submitting water loss audits to the Department of Water Resources since October 2017. Additionally, urban retail water suppliers are required to calculate an [urban water use objective](#) that includes indoor, outdoor, commercial, industrial and institutional irrigation uses and allowed water loss by 2024 ([AB 1668 and SB 606, 2018](#)).

Proposed regulation

The proposed regulation consists of the following pieces:

Compliance

January 1, 2028

- Each urban retail water supplier will be required to comply, by 2028, with an individualized volumetric water loss standard *based on real loss*², using the economic model developed by the State Water Board and the supplier’s own unique data. Several alternative compliance pathways are included, such as for disadvantaged communities under certain circumstances.
- Post-2028 compliance with volumetric water loss standards will be assessed every three years based on the average of the supplier’s real loss from the preceding three years, with an allowed variation of 5 gallons per connection per day above the supplier’s water loss standard.
- Suppliers may comply with the standard by demonstrating a real loss value at or below the standard in either their 2026 or 2027 water loss audit.

January 1, 2023

Suppliers that have already achieved low levels *real loss* (under 16 gallons per connection per day or 1184 gallons per mile per day, depending on how the supplier

¹ Urban retail water suppliers directly supply potable municipal water to more than 3,000 connections or more than 3,000 acre-feet of potable water annually.

² Real loss is the physical loss of water from water distribution systems, as opposed to apparent losses, which are revenue losses due to meter inaccuracies, billing errors or unauthorized consumption.

reports real loss) based on high quality data (per criteria determined by the State Water Board) would not be required to submit responses to questionnaires on water loss-specific information or further reduce water loss. These suppliers will be required to maintain losses at or below 16 gallons per connection per day or 1184 gallons per mile per day, depending on how the supplier *reports* real loss.

January 1, 2023

Other than suppliers meeting the low water loss and high data quality standards prior to 2023, suppliers will be required to submit responses to questionnaires on water loss data quality.

July 1, 2024; and update in July 1, 2027

Other than suppliers meeting the low water loss and high data quality standards prior to 2023, suppliers will be required to submit responses to questionnaires on: Pressure management, and systematic asset management (in 2024 and 2027).

Audit data and adjustments to model inputs

Formal rulemaking process and March 1 to July 1, 2023

- A supplier may discard outliers or negative values and use three out of the four years of audit data (2017-2020 audits) to establish their *average* baseline water loss. A reported real loss value for a year that varies more than 10 gallons per connection per day or 740 gallons per mile per day, depending on how the supplier *reports* real loss, from the data reported in each of the remaining years used to calculate the baseline real loss would qualify as an outlier.
- Suppliers may, no later than July 1, 2023, provide the State Water Board new data from initial implementation to request an adjustment to their water loss standard.

Urban water use objective

January 1, 2024

Suppliers calculate their [urban water use objective](#) (pursuant to AB 1668 and SB 606, 2018), including a volume of water based on their water loss standard, which may be prorated until 2028 by the supplier.

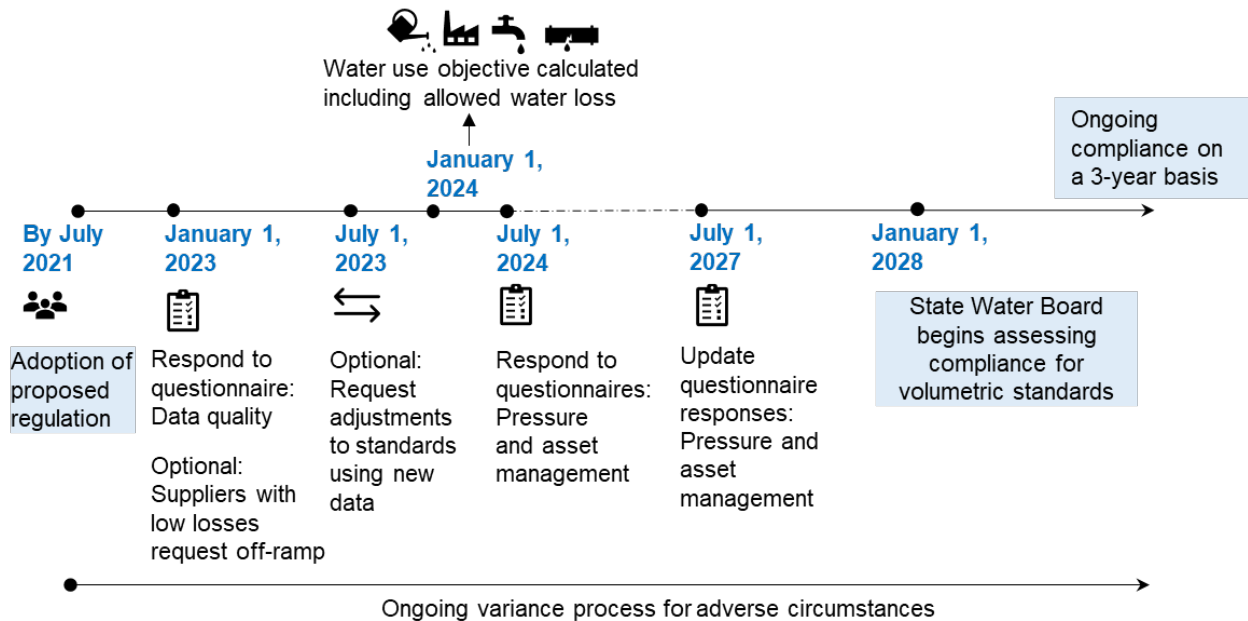
Variances

Adverse circumstances

Suppliers may use the variance process in response to certain unexpected adverse circumstances that impact compliance.

January 1, 2031

Suppliers serving disadvantaged communities with smaller benefit-to-cost ratios for their water loss standard, as identified through the economic model, will have until 2031 to achieve their standard.



Regulatory timeline

- A 45-day comment period begins when formal rulemaking is initiated.
 - Staff workshop prior to comment period to overview the current draft model and proposed regulatory framework, and answer questions. Staff will provide guidance on using the model and where supporting documentation may be needed as a matter of data quality for certain inputs.
 - Suppliers may enter data in the model and provide the model with entered data to State Water Board staff during the comment period with supporting justification.
 - Peer review concurrent with formal comment period
- Post 45-day comment period
 - Staff review public comments and peer review comments and, if needed, revise draft model and draft proposed framework
 - Subsequent 15-day comment periods if needed on any changes
- Tentative adoption between March and July 2021
- Regulation in effect by October 2021

Pre-rulemaking stakeholder process

Since early 2018, State Water Board staff have engaged with stakeholders during development of this regulatory proposal. The proposed regulation, including the economic model, have been informed by stakeholder feedback through seven pre-

rulemaking public workshops, two pre-rulemaking comment periods, focused stakeholder calls, and individual meetings. The formal rulemaking process will involve further public and stakeholder engagement and opportunity to comment before the regulation is considered by the Board for adoption and subsequently submitted to the Office of Administrative Law for approval.

Background

The proposed regulation would require the State's approximately 415 larger urban water suppliers, that together serve approximately 36 million people (over 90% of California's population), to meet individual volumetric water loss standards determined through a water system-specific economic model developed by the State Water Board. An average urban water supplier in California loses about 34 gallons per day from leakage from each service connection, equivalent to about 326,000 acre-feet or 106 billion gallons annually. The proposed water loss standards are anticipated to reduce water loss statewide by about 40%, reduce energy use for water treatment, improve infrastructure maintenance, and prevent breaks that cause property damage and water outages.

The State Water Board allocated \$3.2 million in 2016 for technical assistance for water loss auditing to improve data quality. Staff from nearly every urban water supplier participated in the technical assistance program. State Water Board staff have been using the data reported by suppliers to the Department of Water Resources to create the economic model and proposed regulation. This model will be peer reviewed by a third-party expert panel.

(This fact sheet was last updated on November 18, 2020)