Revised Regulatory Proposal and Process: Water Loss Performance Standards

Kartiki Naik
State Water Resources Control Board

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Regulatory Context and Timeline

- **Senate Bill 555 (Urban Water Retailers)**: Oct. 2015
- **Technical assistance funded by the State Water Board ($3.2 million)**: Oct. 2017
- **Annual validated audit submissions to Department of Water Resources began**: Mar. 2018
- **Stakeholder workshops**
- **March – July 2021 Adoption**
- **Formal Rulemaking Process for adopting performance standards**
  - Life Cycle Cost Assessment
  - California Environmental Quality Act

**State Water Board program page**: https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/water_loss_control.html

**DWR’s program page**: https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Validated-Water-Loss-Reporting
Released Reference Documents

- **Rulemaking**
  - Proposed regulatory text
  - Initial Statement of Reasons with Economic Impact Analysis

- **Economic model**
  - Revised draft economic model
  - Draft guidance for model and adjustments
  - Summary of changes from previous version

- **Regulatory proposal**
  - Fact Sheet on proposed regulation
  - Proposed water loss standards
  - Questionnaires: Data quality, Asset management, Pressure management
  - Alternative compliance pathway (Offramp) - Criteria
Revised Regulatory Proposal - Overview

- Compliance with supplier-specific standards by 2028 water loss audit
  - 5 gallons per connection per day buffer above standard
  - Can comply using 2026 or 2027 water loss audits

- Questionnaires – 2023, 2024 and update in 2027
  - Data quality
  - Asset Management
  - Pressure Management
  - Adjustments to input values to economic model by July 2023
  - Variances for extenuating circumstances and disadvantaged communities
  - Alternative compliance pathway (Off-ramp) – Suppliers with low loss and high data quality – by January 2023
    - Maintain real loss at threshold
    - Questionnaires not required
Performance Standards

• Performance standards calculated using default input data
• Only suppliers with positive net benefit required to reduce real loss
• Scope for customizing for each supplier – Supplier-specific data is key
• Suppliers may opt to enter data in model and send to State Water Board during formal rulemaking
• Adoption- Each supplier gets a standard
  • Default or supplier-specific inputs
• New and revised data collected in 2021 and 2022
  • Justification for Adjustments to State Water Board - Guidance
Economic Model and Data Quality

- Economic model revised
- Peer review of economic model in progress
- Due dates extended:
  - Adjustments to input values for economic model due by July 1, 2023 (optional)
Baseline and Compliance

Discard one outlier real loss value Negative or varies by more than 10 gallons per connection day from rest of the data

• If 2028 audit exceeds standard, can assess compliance through 2026 or 2027 audits
• Ongoing compliance on a three-year average basis
Questionnaires

- Responses to questionnaires on
  - Data quality – January 1, 2023
  - Pressure Management – July 1, 2024, Update in 2027
  - Asset Management – July 1, 2024, Update in 2027
- Draft questionnaires modified for consistency and data quality
- Apparent loss
  - Resolution
  - Tracking
  - Red flags
Variances

Disadvantaged communities
- Compliance assessed in 2031 for suppliers with:
  - Service areas designated as disadvantaged
    - Designation based on 80% of Median Household Income
  - Over 25% required real loss reduction
  - Benefit-cost ratio over 2022 through 2028 of less than 2

Extenuating circumstances
- Variance process based on extenuating circumstances
  - Example: Fire, Financial crises
Alternative Compliance Pathway (Off-ramp)

• Suppliers with low real loss and high data quality
• Suppliers maintain real loss at or below threshold
  • Responses to questionnaires not mandatory
• 16 gallons per connection per day or 1184 gallons per mile per day
  • Previously 10 gallons per connection per day
  • Threshold changed to 20\textsuperscript{th} percentile of real loss
• Due date extended to align with water loss audit submission
  • Suppliers must meet criteria by January 1, 2023 to qualify
Alternative Compliance Pathway (Off-ramp)

• Baseline real loss (2017 through 2020) and underlying data quality criteria to qualify
• Suppliers may also qualify by meeting criteria and using 2021 and 2022 water loss data
  • Adjustment would create new three-year baseline of 2020 through 2022
• Allowed variation in real loss corrected to 740 gallons per mile per day from 200 gallons per mile per day
  • Based on the median of the reported data: 74 connections per mile
Added flexibility in proposed regulation

Compliance

- Can assess compliance in 2028 based on 2026 or 2027 audit
- 5 gallons per connection per day cap above standard

Baseline water loss

- One outlier year in baseline water loss
  - 2017 through 2020 audits

Adjustments

- Opportunity for new data from implementation
- Additional year to adjust standard
- Due by July 2023

Alternative compliance pathway

- Maintain current water loss
- No responses to questionnaires required
- Proposed loss threshold: 16 gallons per connection per day or 1184 gallons per mile

California Water Boards
Implementation Timeline

AB 1668 and SB 606

Water use objective calculated including allowed water loss

January 1, 2024

By July 2021
Adoption of proposed regulation

January 1, 2023
Respond to questionnaire: Data quality

July 1, 2023
Optional: Request adjustments to standards using new data

July 1, 2024
Respond to questionnaires: Pressure and asset management

July 1, 2027
Update questionnaire responses: Pressure and asset management

January 1, 2028
State Water Board begins assessing compliance for volumetric standards

Ongoing variance process for adverse circumstances

Ongoing compliance on a 3-year basis
Timeline and next steps

• Peer review publicly available: mid-January
• Initiation of formal rulemaking with 45-day comment period
  • Suppliers may send to State Water Board with supporting justification
    • System-specific values entered in the economic model
    • Accurate baseline excluding an outlier
• Subsequent revisions if needed: 15-day comment periods
• Adoption between May through August 2021
  • Each supplier gets a standard - Default or supplier-specific inputs
• Adjustments based on new and revised data from 2021 and 2022 with justification - Guidance