COACHELLA VALLEY WATER DISTRICT
Established in 1918 as a public agency

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June 12, 2020

Ms. Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

via email: commentletters@waterboards.ca.gov

Subject: Comment Letter - Proposed Water Loss Standards and Economic Model

Dear Chair Esquivel:

Coachella Valley Water District (CVWD) thanks you for the opportunity to comment on the proposed water loss performance standards (Standards), along with the updated economic model, released on April 24, 2020 and as presented by State Water Resources Control Board (Water Board) staff at the May 13, 2020 public webinar. CVWD appreciates the effort Water Board staff has made over the past two years in developing the Standards and economic model, and would like to acknowledge the numerous improvements from the September 2019 to the April 2020 versions that address concerns of the larger water supplier community. These improvements include a shift from using retail unit cost to variable production cost to value water loss volumes, an increased discount rate from 1% to 3.5%, the inclusion of off-ramps for qualifying suppliers, and the overall simplification of the model itself.

However, CVWD notes ongoing concerns and additional areas of improvement that must be addressed to uphold the intent within SB 555 (2015) of producing performance standards "for the volume of water losses" that "shall employ full life cycle cost accounting to evaluate the costs of meeting the performance standards." These concerns includes both policy and technical considerations.

In developing performance standards for the volume of water loss, CVWD asks the Water Board consider water loss in the context of the goals of SB 555 (2015) and the broader Making Water Conservation a Way of Life legislation (AB 1668 (2018) and SB 606 (2018)), as well as water suppliers' various priorities.

1. **Performance standards should keep in mind the goals of SB 555 and the broader Making Water Conservation a Way of Life legislation:** CVWD understands the key objective of SB 555 is to achieve real water loss reductions, evaluated by full lifecycle cost accounting relative to specific suppliers' characteristics. Furthermore, the water loss performance standards produced from this regulation must be incorporated into a supplier's broader urban water use objective, as required by SB 606 and AB 1668, collectively referred to the Making Water Conservation a Way of Life legislation. The water use objective recognizes water loss as one of the critical components to improving water use efficiency, and "shall be composed of the sum of the

following: aggregate estimated efficient indoor residential water use, aggregate estimated efficient outdoor residential water use, aggregate estimated efficient outdoor irrigation of landscape areas with dedicated irrigation meters or equivalent technology in connection with CII water use and aggregate estimated efficient water losses." (emphasis added.)

2. **CVWD is committed to cost-effective water loss control actions.** Reducing water loss to a cost-effective amount is an industry best practice and part of CVWD's ongoing water management plan.

3. **Water loss is one priority area among many for CVWD.** CVWD engages in holistic water resource planning, which evaluates multiple benefits to prioritize projects. Meeting onerous water loss requirements may require redirecting funding from other priority areas and multi-benefit projects with water quality, health, environment and reliability benefits. In meeting the requirements of SB 555, the Standards should enable suppliers to apply the appropriate level of funding and actions to reach the most cost effective and beneficial results, without obstructing investments in other critical projects.

4. **Water loss requirements should not compromise customer rates and affordability.** There has not been a comprehensive analysis tying water loss reduction actions to an actual reduction in real water losses as reflected in the mandatory annual water loss audit. Taking costly actions for uncertain results could increase the cost of water (via rate increases) for CVWD, which is especially concerning for disadvantaged customers. Furthermore, CVWD is expected to meet the new water use objective, while at the same time expected to keep rates affordable for all customers. In light of the COVID-19 pandemic and the real revenue losses CVWD is experiencing, the Board of Directors has voted for a budget in FY2020-21 with dramatic cuts and no rate increases. In order to achieve water loss objectives, water rates will need to be raised, to fund extensive infrastructure improvements, which is nearly impossible in an economic climate like today.

With these guiding legislative requirements and policy considerations in mind, CVWD submits the following feedback to ensure that the proposed Standards and economic model reasonably measure a supplier's economically feasible level of water loss.

Economic Model/Supplier Performance Standards

- **The economic model needs improvement in several areas.**
  - The 2028 standard is not feasible for CVWD to achieve. CVWD has a baseline of 43 gallons per connection per day and is expected to reduce water loss to 23 gallons per connection per day by 2028. This represents a 46% reduction to be achieved in 6 years. This is not cost effective due to the amount of infrastructure and resources needed to accomplish this task in the time that has been provided.
  - Terminology clarifications are needed to further define water loss technical terms used in the model to ensure agencies are populating it with as accurate and consistent information as possible across the state.
    - The term "bursts" is used to represent leaks in the model. Is this supposed to include both service line and main line leaks? The large majority of leaks at

CVWD (80%) are service line leaks in any given year. The model should provide a clear distinction between the two.

  - The model asks for average leak repair cost per mile. Most leaks are on service lines, which makes it difficult to track leak per mile. Furthermore, many agencies, including CVWD, do not track repair costs per mile but rather average cost per leak as the preferred method to be consistent with the Water Research Foundation's Component Analysis process.

- **The economic model does not sufficiently evaluate cost effectiveness or "full life cycle cost accounting to evaluate the costs of meeting the performance standards," as required.**
  - In CVWD's evaluation of the model, CVWD found that the key inputs that drastically change the resulting 2028 water loss standard are primarily related to leaks, not costs to suppliers. When CVWD changed the economic related inputs in the economic model, such as surveying costs per mile and average repair costs, the resulting 2028 water loss standard does not change.
  - The model focuses on the reduction of leaks without clearly accounting for the investments required to reduce water losses.
- **The economic model does not weight the costs and benefits equally.**
  - The model's annual increase in water rate (5.6%) is carried out over the 30-year time horizon. However, cost of leak detection and repair functions in the model do not account for equitable inflation over the same time. The 5.6% is not sustainable and for accuracy, the data point in the model should be agency specific. A normal inflator such as the Construction Cost Index (CCI) would be more representative. The economic model assumes costs to repair leaks now is relatively the same as the cost to repair in 30 years. Furthermore, even though the benefits are being projected over a 30-year period, agencies are expected to incur the costs of those benefits by 2028, which is a six-year time period.
- **The default values in the model are neither representative nor appropriately applied to accurately represent CVWD.**
  - The model uses 5.6% for annual water rate increase, based on Metropolitan Water District's wholesale cost of water. This percent cannot be customized by local agencies like other inputs in the model. Agencies' water rate increases will vary throughout the state. For example, CVWD's annual average water rate has consistently increased by less than two percent over the previous 11 years. Water rates are a local decision and this input should be customizable. Assuming a larger increase in water rate will overinflate the net benefits of reducing water loss.
  - The default estimated average flow rate for reported leaks is 50 gallons a minute per leak. This type of flow usually indicates a main break, not a service line leak, which is where the majority of water loss comes from. Main breaks are relatively rare for most agencies and should not be aggregated with service line leaks. For CVWD, 80% of our annual leaks are service line leaks. Default values in the model should be set to calculate the most common leak type.

- **CVWD strongly recommends a third-party review of the economic model by subject matter experts in modeling, economics, and water loss.**
    - Ideally, the third-party review would be completed prior to the final adoption of the Standards.

Off-Ramps/Adjustments

- **CVWD appreciate staff's inclusion of an off-ramp provision in the proposed Standards. However, the off-ramp provision as currently proposed will not provide agencies with low real loss and high data validity scores with a viable option for compliance.**
    - CVWD loses an average 43 gallons per connection per day. CVWD's data validity score is 82. This means that according to the AWWA Audit Software method, CVWD is confident in its data. CVWD believes the effort in funding programs to reduce loss is incompatible with the modeled benefit, and there is no guarantee the action taken will result in an overall water savings. CVWD suggests the volumetric criteria for the off-ramp be increased to 20 gallons per service connection per day, which, for CVWD, equates to approximately 2.5% of supplied water. This is more reasonable to maintain over time considering water loss estimates can vary greatly year to year as well as system and data collection improvements and changes.
    - CVWD is concerned the proposed data requirements and volumetric 10 gallons per connection per day metric to qualify for the off-ramp is unattainable. If agencies cannot qualify for the off-ramp, then it is not serving its purpose. By not having a viable off ramp option, water suppliers that have been proactive with previous water loss practices may be forced to implement additional water loss interventions that are not cost effective.
- **CVWD needs additional time and frequency for adjustments.**
    - The current proposal only allows for adjustments to the model and 2028 water loss standards by July 2022. This does not allow agencies sufficient time to comprehensively asses their data and leak analyses for any warranted adjustments. CVWD recommends the Water Board allow suppliers until 2023 to improve existing data, which will invariably lead to improvement in water loss management.
    - There should also be opportunities to provide Water Board staff with additional information to update the economic model and 2028 water loss standards throughout the life of the regulation. A one-time opportunity for adjustments is not sufficient. For example, another adjustment period in 2023 would allow the Water Board staff to update the 2028 water loss standards based on improved data and still allow the water loss standard to sync with the rest of the Making Water Conservation a Way of Life legislation.
    - The current COVID-19 emergency could skew this year's data in terms of water use and delay/defer infrastructure and maintenance/testing projects now and in the future due to budgeting impacts and concerns. Additional time for adjustments is warranted considering this unique circumstance that could skew audit data used to establish the baseline for these standards. For example in an effort to limit customer contact CVWD stopped meter testing and the proactive meter replacement projects during the pandemic, and are only now getting back on track after being on hold for 10 weeks.

- **CVWD requests a flexible 3 years average timeframe for the regulation's baseline ranging from 2016-2019.**
    - The current proposal uses an average of three audit year's (2016-2018) gallons per connection per day metric to establish the baseline for the 2028 water loss standard. However, 2016 was the first year for validated audits for the majority and could result in major anomalies, and should be discounted. Furthermore, any one year might be an outlier for a variety of reasons. That being said, CVWD's reported data will be changing next year due to adding 3,000 service connections through the consolidation of two water systems. This will also increase frequency of repairs and the amount of water lost due to leaks and miles of pipe in the reported system as well as overall well production. CVWD's East Coachella Valley Water Supply Plan outlines approximately 45 projects for future consolidation of state small systems. As these projects are completed, the issues with well production and added miles of pipe to the CVWD system will be amplified.
    - If the Water Board does choose to adjust the standards later, data could be used from the three preceding years prior to the adjustment.

Supplemental Questionnaires (apparent loss, asset management, and pressure management)

- **CVWD is concerned that the proposed questionnaires will be used to evaluate potential future regulation in each respective area.**
    - SB 555 (2015) mandates the Water Board to develop a performance standard for suppliers. CVWD is concerned with how the questions will affect the ability to reduce water loss.
    - Some of the data the Water Board is asking for may not exist for some agencies and there is concern about how the Water Board will handle data shortcomings.

Conclusion

The model has to provide an opportunity for each agency to present accurate information. CVWD is concerned the current draft standards and economic model view water loss too generally, to the point of diminishing returns that will come at the detriment of other important investments like supply augmentation, ongoing infrastructure maintenance, testing, and maintaining affordability.

Thank you for considering these comments, which strongly align with and follow comments submitted in a coalition letter from American Water Works Association, Association of California Water Agencies, California Municipal Utilities Association, and California Water Association for the continued improvement to the draft Standards and economic model. CVWD looks forward to continuing to work with the Water Board towards practical and balanced water loss regulations.

If you have questions regarding CVWD's comments, please contact Ms. Kristen Johnson, Government Affairs Specialist, at (760) 398-2661 ext. 3564.

Sincerely,

Dan Charlton
Assistant General Manager, Operations and Maintenance