June 12, 2020 Submitted via email: commentletters@waterboards.ca.gov

Ms. Jeanine Townsend
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Subject: Comment Letter – Water Loss Regulation Webinar

Dear Ms. Townsend,

The coalition of organizations listed below appreciate the opportunity to provide feedback on the latest iteration of the draft water loss performance standards (Standards) and the updated draft economic model, which the State Water Resources Control Board (State Water Board) released in April of this year.

Since 2018, the State Water Board has developed multiple proposals to implement water loss performance standards in California. We believe that the new Standards are an improvement from the December proposals, and address several of the concerns raised by water suppliers, such as the inclusion of off-ramps for suppliers with low water loss, potential alternatives to compliance through a variance process, and changes to the economic model. We also would like to recognize the significant time staff and Board Members have spent in workshops and meetings with suppliers to discuss these proposals.

As stated by the author of Senate Bill (SB) 555, the purpose of the legislation is "that all California communities use existing water supplies as efficiently as possible".[1] By requiring water suppliers to document and control water losses in their system, SB 555 would "increase water use efficiency".[2] We urge the State Water Board to ensure that the final adopted Standards are water use efficiency standards for water loss and reasonably measure a supplier's efficient use of water in an economically feasible way, within the confines of SB 555 and the broader "Making Water Conservation a California Way of Life" legislation, as that legislation requires the setting of individual and overall efficiency water use objective for suppliers.[3]

In summary the coalition requests:

- Changes to the implementation timeline to ensure higher data quality is used when setting standards.
- Offramps that are achievable for suppliers with low water loss.

[1] Senate Floor Analysis, 2015
[2] Assembly Floor Analysis, 2015
[3] State Water Board Water Efficiency Legislation Fact Sheet

- An independent peer review of the economic model by subject matter experts in the areas of economics and water loss.
- Inputs and assumptions in the model accurately reflect the true benefits and costs associated with leak detection and intervention.
- A variance process that recognizes existing efforts by suppliers in controlling water loss and their unique system characteristics.
- Removal of voluntary and mandatory questionnaires, which will expand the scope of the water loss proceeding beyond the Board's authority granted in SB 555.

The coalition submits the following input with the goal of improving the draft Standards and economic model. In addition to this letter, we request the State Water Board carefully consider the comments submitted by individual suppliers and the potential impacts to their finances and operations, in terms of increased capital expenditures, increased staffing needs, rate increases, and the rippling impacts of the COVID-19 crisis.

California is leading the discussion on water loss

With the passage of SB 555, California set the standard for water loss data collection in the United States. Since 2016, the Department of Water Resources (DWR) has collected annual water loss data from water suppliers who have 3,000 or more connections or produce 3,000 or more acre-feet a year through validated water loss audits. These audits contain information on real and apparent losses and identify opportunities for water suppliers to save water and recover revenue.

The coalition shares the State Water Board's desire to utilize high quality data as the backbone of sound policy decisions for implementing water loss interventions in California. As the coalition has noted in previous comment letters and during workshops, early audit data was inconsistent as suppliers struggled to implement new data collection and reporting processes. This is coupled with the fact that water loss is an inexact science and results can vary year to year due to many factors, both in and out of a supplier's control. To account for this variability, the final Standards must provide flexibility for suppliers to meet their individual water loss standard, as well as their overall water use efficiency objective.

To ensure that data requests are streamlined and consistent across the state's suppliers, we strongly urge the State Water Board and DWR to continue to collaborate on the collection and analysis of water loss data from suppliers.

The implementation timeline should recognize improved data over time

As currently proposed, suppliers may request changes to their 2028 standards and off-ramps from the Standards by July 1, 2022. While we appreciate the State Water Board providing an adjustment period and an off-ramp opportunity, this timeframe would not allow enough time for the revised Standards to be based on higher quality data. As noted earlier, the first audits that were submitted in 2016 were of varying quality. Since those initial submissions, suppliers have vastly improved their understanding of their systems as it relates to water loss.

To ensure higher quality data is used when considering adjusting standards, we recommend the State Water Board re-calculate the 2028 standards in 2023. This would allow for the use of 2020-2022 audit data, which we anticipate will be of significantly higher quality than early audit reports. Revisiting the standards in 2023 would also align with the other parts of the "Making Conservation a Way of Life" legislation, which requires suppliers to calculate their water use objective, including water loss, by January 1, 2024. If the timeframe is left as currently proposed, the State Water Board and suppliers will only have six years of audit data to base adjusted standards upon. If we look at

2016 and 2017 as trial years, that only leaves four years of data to develop standards that will have a significant impact on suppliers from the date of adoption to beyond 2028.

Off-ramps should be feasible and incentivize suppliers to achieve low levels of loss

The proposed off-ramp of 10 gallons per connection per day (gpcd), coupled with the required data criteria, is not a feasible off-ramp. We are not aware of any suppliers in the state that can currently demonstrate less than 10 gpcd water loss on a continuous basis and meet the data criteria set forth in the proposal. An infeasible threshold fails to incentivize suppliers to achieve low levels of water loss and does not recognize the efforts of suppliers with water loss below 20 gpcd.

The coalition is concerned that 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.

As such, the coalition recommends the State Water Board increase the off-ramp to 20 gpcd. Currently, many suppliers with water loss between 10 gpcd and 20 gpcd have limited opportunities to cost effectively further reduce water loss in their systems. Intervention measures for these suppliers are prohibitively expensive and funding would be better spent encouraging efficient water use in the other areas of suppliers' water use objectives. Additionally, the coalition recommends continued discussion between the State Water Board and water suppliers to ensure off-ramp criteria is based on data readily available to suppliers and easily verifiable by the State Water Board.

As drafted, the Standards only allow for a one-time off-ramp for suppliers in 2022, regardless if suppliers achieve that low loss threshold thereafter. We strongly recommend the State Water Board allow suppliers the opportunity to be eligible for the off-ramp at any time based on three years of audit data. An ongoing ability to qualify for the offramp would be an appropriate incentive to suppliers to reach and maintain that low-level of loss in the future.

An independent peer review of the economic model will lead to better standards

Throughout this process, water suppliers have consistently called for a peer review of this new economic model. We believe an independent peer review by subject matter experts in the areas of economics and water loss is fundamental to ensuring the precedential standards set by the model are appropriate, that there are not any underlying issues with the model's formulas and assumptions, and selected default data are appropriate. An independent peer review could find additional areas in the model that inappropriately weigh the costs versus benefits and vice-versa, while providing confidence for suppliers in knowing that the model is balanced. Additionally, the independent review should be completed prior to the final adoption of the Standards.

The coalition appreciates staff's explanation for changes in the current economic model from the previous version. We ask the State Water Board staff to communicate the process for additional changes to the economic model moving forward and what the purpose is of those changes.

The economic model should appropriately consider and balance benefits and costs

SB 555 directs the State Water Board to develop standards that "employ full life cycle cost accounting to evaluate the costs of meeting the performance standards".[4] Pursuant to SB 555, it is our understanding that the goal of the model should be to create a framework that equally balances the costs and benefits of water loss to which a supplier can enter their specific system data to produce the breakeven point of water loss intervention.

[4] SB 555, Urban retail water suppliers: water loss management

Despite having limited engagement with the latest version of the model, several suppliers have noted the cost/benefit aspect of the model more heavily weighs benefits over costs. For example, the model assumes a lifecycle benefit-cost analysis over a 30-year timeframe. This means for suppliers to achieve their 2028 standards; they will have to absorb the costs of meeting their standards, upfront, in a 6-year timeframe while recovering those costs over 30 years. We believe a payback period of 10 to 15 years would be more appropriate and would accurately reflect the length of benefit suppliers would receive from intervention. Currently many suppliers who have annual active leak detection and repair programs assume payback periods of 5, 10 and 15 years. For suppliers that will need to begin water loss activities, they will be balancing these new requirements with other system and capital needs that have already been appropriated and planned for. Additionally, the model seems to overly value inputs related to leaks, such as unreported leakage, rate of rise of leakage, average leak detection frequency, average time between reporting of and repair of reported bursts and the Infrastructure Condition Factor.

Additionally, the economic model does not currently weigh the rise in benefits and costs equally. For example, the model sets the rise in the cost of water at 5.6% based on historical data from Metropolitan Water District (MWD). While 5.6% may be appropriate for suppliers that are predominately reliant on purchased and imported water from MWD, this figure is not appropriate for all suppliers, particularly those that rely on local groundwater or surface water supplies. For demonstrative purposes only, we will assume a supplier's acquisition cost of water will increase 5.6% annually, which would mean a supplier's annual benefit from water loss intervention measures will also increase 5.6% annually. The model, however, does not increase the costs to implement annual leak detection and intervention in an equitable way. Thus, what results is the model assuming suppliers see the increased benefits of water loss over time without recognizing the increase in costs that occur with detection and intervention measures over the same timeframe.

Finally, we request the regulation and economic model establish and utilize consistent language and terminology to aid suppliers in understanding and implementing these regulations. For example, suppliers have indicated concerns regarding how bursts and breaks are referenced and defined. This could be done through a narrative document like what was developed in the previous iteration of the model.

2028 standards must be built on solid data and include a variance process that reflects on-the-ground realities and competing demands for suppliers

Noting data quality concerns discussed earlier in this letter, we request a timeline in which the State Water Board revises standards in 2023 and a supplier variance option for 2027. This would allow performance standards to reflect data improvements over time and ensure that suppliers can successfully meet these standards, while reducing water loss in their systems. Setting performance standards later in the process also allows for suppliers to better assess data through leakage component analyses and additional programmatic and systematic improvements.

As currently calculated with the economic model, the 2028 performance standards will not be achievable for many water suppliers. Of the 405 suppliers required to comply with these proposed 2028 standards, 139 have no reduction requirement proposed for 2028. Of the 266 that do have proposed loss reduction requirements, the average reduction requirement is 49.6%, and the median reduction requirement is 49.5%. Some suppliers would need to reduce their water loss up to 98% in six years prior to being given a variance. Unachievable and economically infeasible standards will not benefit suppliers nor the State Water Board. As such, we believe that, with appropriate changes to the economic model and better data, many suppliers standards will be more feasible, economically efficient and produce tangible water savings.

Currently, the Standards use an average of 3 years of audit data to establish the 2028 standards. As mentioned earlier, water loss related data can be highly variable from year to year. The coalition recommends the State Water Board allow suppliers to include a fourth-year option for consideration to be included in the average. For example, suppliers would have the option to choose three years out of a four-year window to be used to develop their standard. Ultimately State Water Board staff would determine if the three years selected are appropriate, as to not artificially bias the standard one way or another. The purpose of this request is to eliminate an outlier year that would artificially sway a supplier's standard.

The coalition appreciates and supports the inclusion of variances in the proposed Standards. Variances are essential to ensuring an equitable water loss regime and the coalition strongly recommends the variance process be utilized to recognize the efforts of suppliers who are planning or engaging in water loss detection and intervention activities. While these suppliers may not be able to meet their 2028 performance standards as currently proposed or revised, we believe they should not be punished if they can demonstrate that they have already undertaken leak detection and intervention measures or if the standards are economically unachievable. Variances should also be made available on a continual basis if and when suppliers are able to provide data to the State Water Board supporting the need for a variance.

We appreciate staff recommending variances to be utilized when suppliers are impacted by unforeseen events that drastically change the water lost in their system such as a natural disaster.

The proposed questionnaires expand the scope of the water loss proceeding beyond the intent of SB 555 and inappropriately leverage the Board's regulatory authority over suppliers

While the coalition appreciates the State Water Board's shift from proposing mandatory asset and pressure management plan requirements for suppliers, we believe the proposed related mandatory questionnaires still go beyond the scope of SB 555 and should be removed from the regulation. Additionally, the inclusion of the mandatory apparent loss questionnaire is inappropriate as it appears the Board is exerting authority regarding the collection of meter testing data as it relates to apparent loss, which has not been granted by SB 555 nor any prior legislation. The coalition also recommends removal of this questionnaire.

The pressure management and asset management questionnaires state: "But the data submission request would provide the State Water Board information to evaluate any potential for incorporating leakage reduction from pressure management/asset management in future standards." We believe mandatory reporting by suppliers to develop future regulatory requirements for suppliers is inappropriate. Instead, we offer that the State Water Board consider making these questionnaires voluntary and use the information gathered from them as best management practices to help suppliers struggling to meet their standards.

Additionally, the proposed voluntary questionnaire, which is not directly a part of the proposed Standards but could inform State Water Board regulation of suppliers, appears to be duplicative and redundant with existing reporting requirements in the electronic annual report and the validated water loss audits themselves. We will work with State Water Board staff to remove these redundancies and hope that, should any form of these questionnaires move forward, they do not significantly increase the reporting burden on suppliers.

In conclusion, suppliers are committed to reducing real water loss as part of an overall plan to address the current and future challenges facing water suppliers and Californians. We are concerned that the current draft Standards and economic model view water loss in a vacuum, to the point of diminishing returns, that will come at the detriment of other important investments like maintaining affordability, supply augmentation, ongoing infrastructure maintenance, and water quality testing.

Additionally, the "Making Water Conservation a California Way of Life" legislation and the design of the urban water use objective was intended to provide flexibility to urban retail water suppliers implementing water conservation measures, including water loss, in their own service area.[5] During the process of establishing individual performance standards for the volume of water losses, it is important to keep in mind the State's broader framework to achieving water use efficiency.

Should you have any questions regarding the content of this letter, please contact any of the undersigned parties or Jonathan Young, Senior Regulatory Advocate at the California Municipal Utilities Association at (916) 326-5806.

Thank you for your consideration of these comments.

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[5] Making Water Conservation a California Way of Life: Primer of 2018 Legislation on Water Conservation and Drought Planning Senate Bill SB 606 (Hertzberg) and Assembly Bill 1668 (Friedman)