



August 29, 2025

Via Email (commentletters@waterboards.ca.gov)

State Water Resources Control Board
Attention: Courtney Tyler, Clerk to the Board
P.O. Box 100
Sacramento, CA 95812-0100

Comment Letter: 2025 Safe Drinking Water Plan

Dear Chair Esquivel and Members of the Board,

The Southern California Water Coalition appreciates the opportunity to comment on the State Water Resources Control Board's ("State Board") Draft 2025 Safe Drinking Water Plan ("Draft Plan"), released for public comment in July 2025. We note that a significant portion of the Draft Plan discusses drinking water system sustainability, drinking water costs and affordability, and financial assistance for public water systems, ultimately setting forth new and reiterating prior recommendations to address sustainability and affordability. Emerging contaminants, along with significantly increasing drinking water costs and unprecedented reductions in state financial resources, however, necessitate a new approach for preserving the sustainability of drinking water systems and the affordability of drinking water for California residents.

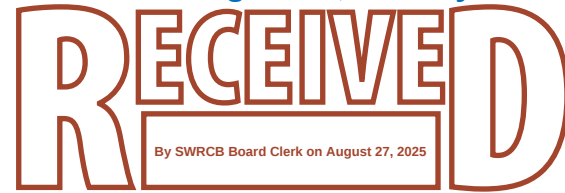
In our enclosed comments on the Draft Plan, we highlight the regulation of perchlorate in drinking water as symbolic of the sustainability and affordability challenges described in the Draft Plan. We note the Draft Plan omits any discussion of more recent advances in perchlorate science and risk assessment methodologies demonstrating that the levels of perchlorate detected in California's drinking water do not pose a threat to public health. The Biologically Based Dose Response (BBDR) model more recently developed by the United States Environmental Protection Agency represents a fundamental change in the historical approach to perchlorate risk assessment and is intended to replace default risk assessment methods and exposure assumptions like those used by the Office of Environmental Health Hazard Assessment (OEHHA) to establish the perchlorate public health goal. As we advanced in our 2023 petition to OEHHA to review the perchlorate PHG, and our 2024 follow-up request, the BBDR model now represents the best available science for evaluating the health risk of exposure to perchlorate in drinking water. Both OEHHA and the State Board have an obligation to ensure that best available science forms the basis for California's regulation of not only perchlorate in drinking water but the regulation of all contaminants in drinking water.

Accordingly, we recommend the State Board establish a framework to prioritize and develop drinking water standards based on objective, data-based criteria that can more effectively and tangibly address the sustainability and affordability



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Public Comment
2025 Safe Drinking Water Plan
Deadline: August 29, 2025 by noon





challenges detailed in the Draft Plan. The framework, described in more detail in our enclosed comments, would require the State Board, working with the OEHHA, to balance:

- The known public health risks of each contaminant of concern based on best available science and the most recent occurrence data,
- The legal requirements of the California Safe Drinking Water Act and the Human Right to Water,
- California drinking water policy priorities, including sustainability of drinking water systems and affordability for rate payers, and
- The economic feasibility of each proposed drinking water standard.

This approach would allow the State Board to target California's limited financial resources to address the contaminants that pose the greatest actual health risk and help curb the persistently increasing costs of drinking water that threaten to place the Human Right to Water further out of reach for an increasing number of California residents. It would also allow for more accurate communication of potential health risks from exposure to contaminants in drinking water, correcting the widespread misperception that occurrence alone is an indication of health risk, and improving public confidence in the overall safety of California's drinking water supplies.

We appreciate your consideration of the issues raised in our correspondence and look forward to the State Board engaging the broader water community on these issues.

Sincerely,

Charley Wilson

Charley Wilson, Executive Director
Southern California Water Coalition

Enclosure

cc: Yana Garcia, Secretary for Environmental Protection, CalEPA
Anna Naimark, Deputy Secretary and Special Counsel for Water Policy, CalEPA
Kristina Thayer, Ph.D., Director, OEHHA
David Edwards, Ph.D., Chief Deputy Director, OEHHA
Eric Oppenheimer, Executive Director, SWRCB
Darrin Polhemus, Deputy Director, Division of Drinking Water, SWRCB
Karen Mogus, Chief Deputy Director, SWRCB
Joaquin Esquivel, Chair, SWRCB
Dorene D'Adamo, Vice Chair, SWRCB
Sean Maguire, Board Member, SWRCB
Laurel Firestone, Board Member, SWRCB
Nichole Morgan, Board Member, SWRCB

SOUTHERN CALIFORNIA WATER COALITION COMMENTS ON DRAFT 2025 SAFE DRINKING WATER PLAN



1. Updated health effects science and risk assessment methodologies must be considered in establishing and re-evaluating existing MCLs.

Perchlorate is one of several contaminants that is very generally referenced throughout the Draft Plan. Section 3.3.2.1.5 goes into more detail and attempts to summarize purported perchlorate health effects, stating: “At high concentrations, perchlorate can interfere with the thyroid gland’s ability to take up iodine and to make thyroid hormones, which are required for normal growth and development and for normal metabolism. Inadequate thyroid hormones are a particular concern for developing fetuses and infants.” We are concerned that the abbreviated discussion of perchlorate health effects in the Draft Plan fails to:

1. Adequately highlight the atypical approaches employed in previous perchlorate risk assessments that result in an unprecedented margin of safety; or
2. Consider the advances in perchlorate science and risk assessment methodologies since the perchlorate MCL was adopted by the State Board in 2007 and the PHG was last updated by OEHHA in 2015.

Although we acknowledge that the mode of action (MOA) for perchlorate is well established, the Draft Plan’s reference to the “high concentrations” of perchlorate necessary to interfere with thyroid hormone production lack context. Studies like Geer et al. (2002)¹ and Braverman et al. (2006)² documented no changes or no significant changes in thyroid hormones attributable to perchlorate exposures at doses equivalent to drinking water concentrations up to 3,500 parts per billion (ppb). Decreases in thyroid hormone production have been documented, however, at pharmacological doses of perchlorate in excess of 215,000 ppb.³ These concentrations are several orders of magnitude higher than the vast majority of perchlorate concentrations detected in California’s drinking water.

In June 2019, the United States Environmental Protection Agency (USEPA) published its “state-of-the-science” Biologically Based Dose Response (BBDR) model that describes the effects of low-level perchlorate in humans and simulates a biologically-based pathway from perchlorate exposure through neurodevelopmental effects, including key events in the MOA for perchlorate.⁴ The USEPA BBDR model was developed in response to recommendations by USEPA’s Science Advisory Board (SAB) in 2013 and was independently reviewed and endorsed by two peer review panels in 2017 and

¹ Greer, M. A., Goodman, G., Pleus, R. C., & Greer, S. E. (2002). Health effects assessment for environmental perchlorate contamination: the dose response for inhibition of thyroidal radioiodine uptake in humans. *Environmental health perspectives*, 110(9), 927–937. <https://doi.org/10.1289/ehp.02110927>. Greer et al. administered perchlorate doses of perchlorate doses of 0.007, 0.02, 0.1, and 0.5 mg/kg-d to 37 male and female volunteers for 14 days. These are equivalent to drinking water concentrations of approximately 245 ug/L, 700 ug/L, 3,500 ug/L, and 17,500 ug/L, respectively, for adults. No changes in serum thyroxine, free thyroxine, or TSH were detected in any subject at any dose level, including 0.5 mg/kg-day, over the 14-day dosing period.

² Braverman, L. E., Pearce, E. N., He, X., Pino, S., Seeley, M., Beck, B., Magnani, B., Blount, B. C., & Firek, A. (2006). Effects of six months of daily low-dose perchlorate exposure on thyroid function in healthy volunteers. *The Journal of clinical endocrinology and metabolism*, 91(7), 2721–2724. <https://doi.org/10.1210/jc.2006-0184>. Braverman et al. administered perchlorate doses of approx. 0, 0.005, 0.03 mg/kg-d to 13 volunteers for six months. These are equivalent to drinking water concentrations of approximately 0, 179 ug/L, and 1,077 ug/L, respectively, for adults. There were no significant changes in serum T₃, free T₄ index, TSH, or Tg concentrations during the exposure period, compared to baseline or postexposure values.

³ Leung, A. M., Pearce, E. N., & Braverman, L. E. (2010). Perchlorate, iodine and the thyroid. *Best practice & research. Clinical endocrinology & metabolism*, 24(1), 133–141. <https://doi.org/10.1016/j.beem.2009.08.009>.

⁴ We recognize that the USEPA will be releasing a proposed federal maximum contaminant level goal (MCLG) and MCL pursuant to an order issued by the United States District Court for the District of Columbia in *NRDV v. EPA*, and look forward to evaluating the science and risk methodologies relied upon by USEPA in developing the proposed MCLG and MCL.



2018. The most recent peer review panel (January 2018) concluded that the revised model was “fit for purpose” to develop a federal Maximum Contaminant Level Goal for perchlorate.

The USEPA model represents a fundamental change in the historical approach to perchlorate risk assessment and is intended to replace default risk assessment methods and exposure assumptions. The SAB concluded that a different approach was necessary because the default method is based on inhibition of iodine uptake by the thyroid (“IUI”), which is uniformly agreed and understood to be a non-adverse, reversible biological effect that is well upstream of potential adverse effects. Here, it is important to note that perchlorate is the only contaminant in drinking water that is regulated by California based on such a non-adverse precursor effect.

In contrast, the USEPA BBDR model allows risk assessors to estimate perchlorate exposure-induced responses to adverse health effect endpoints (e.g., neurodevelopmental effects) for the most sensitive subpopulation, which USEPA determined to be the first trimester fetus of a pregnant woman.⁵ Accordingly, the USEPA model allows risk assessors to base health-protective reference values for perchlorate on a potential adverse health effect instead of the first known reversible and non-adverse biological effect.⁶ The BBDR model now represents the best available science for evaluating the health risk of exposure to perchlorate in drinking water.⁷ Moreover, a continued focus on IUI as the key health endpoint for perchlorate risk assessment perpetuates the false impression that perchlorate presents far greater risk to public health at low exposure levels than the best available science indicates.

These advances in perchlorate science and risk assessment methodologies are particularly relevant given the State Board’s potential review of the perchlorate MCL as early as 2027. As mentioned above, the perchlorate PHG was last reviewed and updated by OEHHA in 2015, and will be over a decade old before the State Board potentially reviews the perchlorate MCL. Because the California Safe Drinking Water Act requires the State Board to establish an MCL as close as

⁵ See *National primary drinking water regulation for perchlorate; proposed rule (pre-publication version)* [Proposed rule]. Docket No. EPA-HQ-OW-2018-0780. https://www.epa.gov/sites/default/files/2019-05/documents/prepub_final_version_npdwr_proposed_perchlorate_rule-508.pdf. USEPA, following recommendations from SAB, “created its own Biologically Based Dose Response (BBDR) models that included the additional sensitive life stages identified by the SAB, i.e., breast- and bottle-fed neonates and infants.” USEPA also concluded that, “The EPA’s original BBDR model demonstrated that perchlorate had minimal impact on the thyroid hormone levels for 30-, 60-, and 90-day formula-fed infants, even at doses as high as 20 µg/kg/day. Specifically, the model demonstrated that “the range of iodine levels in formula is sufficient to almost entirely offset the effects of perchlorate exposure at 30, 60 and 90 days.”

⁶ We question whether IQ, which was used by USEPA in the BBDR model, is an appropriate health endpoint. To date, clinical studies have not demonstrated a causal link between perchlorate exposure and child IQ. It is much clearer in the literature that maternal hypothyroidism is an adverse effect. Several epidemiological studies that evaluate the potential association between maternal T4/TSH levels during pregnancy and child IQ have been published since EPA’s last published literature search conducted in 2017, and we encourage OEHHA to review those studies in updating the perchlorate PHG. These include:

- Lain, S. J., Rifas-Shiman, S. L., Pearce, E. N., Nassar, N., & Oken, E. (2020). Neonatal Thyroxine, Maternal Thyroid Function, and Cognition in Mid-childhood in a U.S. Cohort. *Maternal and child health journal*, 24(4), 503–513. <https://doi.org/10.1007/s10995-019-02867-5>.
- Hall, M., Lanphear, B., Chevrier, J., Hornung, R., Green, R., Goodman, C., Ayotte, P., Martinez - Mier, E. A., Zoeller, R. T., & Till, C. (2023). Fluoride exposure and hypothyroidism in a Canadian pregnancy cohort. *The science of the total environment*, 869, 161149. <https://doi.org/10.1016/j.scitotenv.2022.161149>.
- Casey, B. M., Mele, L., Peaceman, A. M., Varner, M. W., Reddy, U. M., Wapner, R. J., Thorp, J. M., Jr, Saade, G. R., Tita, A. T. N., Rouse, D. J., Sibai, B. M., Costantine, M. M., Mercer, B. M., Caritis, S. N., & Eunice Kennedy Shriver National Institute of Child Health Human Development Maternal-Fetal Medicine Units Network, Bethesda, MD (2024). Association of Mild Iodine Insufficiency during Pregnancy with Child Neurodevelopment in Patients with Subclinical Hypothyroidism or Hypothyroxinemia. *American journal of perinatology*, 41(S 01), e3326–e3332. <https://doi.org/10.1055/s-0043-1778037>.

⁷ The utility and reliability of the BBDR model may be improved by using direct empirical evidence to resolve scientific uncertainties, including, but not limited to, the selection of an alternative health endpoint with a clear cause-and-effect linkage to perchlorate exposure.



technically and economically feasible to the PHG, it is imperative that OEHHA review and update the perchlorate PHG based on new perchlorate science and risk assessment methodologies before the State Board reviews the MCL to ensure the perchlorate MCL is grounded in the most recent and best available science.

2. Conflating the presence of contaminants in drinking water with actual public health risks erodes consumer confidence and public trust in California’s drinking water.

We also encourage the State Board to exercise caution when discussing the presence of, or potential exposure, to contaminants, including perchlorate, in drinking water. The mere presence of contaminants in drinking water does not necessarily equate to an adverse public health threat that should be addressed by a new or revised statewide MCL. The way the State Board frames conversations about contaminants in drinking water has tremendous impacts on consumer confidence and public trust in California’s drinking water.

Board Member Sean Maguire most recently reflected on the issue of public trust during the State Board’s February 19, 2025 meeting to discuss its 2025 drinking water priorities: “And we talked a lot last year about this and we talked about also public trust and how we continue to message and build public confidence in the water system we have because I agree with the Chair in California we have a more protective system and set of regulations than many other states in the country and we should be proud of that.” Darrin Polhemus, Deputy Director for the State Board’s Division of Drinking Water (DDW), acknowledged the State Board’s focus on “minor problems” associated with the state’s drinking water system and its failure to “fully reflect how actually safe it is. We’re finding the last one percent of risk or some small number like that associated with our drinking water. And I think we scare the public a lot of times with really fancy chemical names that sound very scary” Deputy Director Polhemus committed to trying to “balance the communication,” stating, “it’s not lost on me that we often lose our public and our conversation and down in the weeds here on the chemical names and the like.” Deputy Director Polhemus noted the importance of ensuring that “people can have real confidence in what they’re paying for when they’re paying their water bill and how they’re using it for their families”

The Draft Plan’s discussion about the presence of perchlorate in drinking water is emblematic of the issue raised by Board Member Maguire. The Draft Plan acknowledges that perchlorate is a “natural element,”⁸ stating that it “may also be naturally present in low concentrations in groundwater,”⁹ but then refers multiple times to the mere presence of perchlorate in a manner that implies that the levels detected pose public health risks. For example, the Draft Plan refers to perchlorate as one of the “most prevalent drinking water contaminants” during the 2019 to 2023 reporting period;¹⁰ perchlorate being “discovered to be more widespread in groundwater than previously thought”;¹¹ the “widespread contamination of perchlorate in groundwater”;¹² and, as a result, perchlorate “continues to be the focus of regulatory activity.”¹³ And, as discussed above, the Draft Plan implies that “high concentrations” of perchlorate persist in the state’s drinking water sufficient to cause adverse health effects but fails to cite perchlorate occurrence data or studies to support

⁸ *Id.* at p. 76.

⁹ *Id.* at 112. We note that perchlorate can also form atmospherically and accumulate in arid regions. See

¹⁰ *Id.* at p. 76.

¹¹ *Id.* at p. 81.

¹² *Id.* at p. 81.

¹³ *Id.* at p. 76



this contention.¹⁴ There is also no discussion regarding the regulation of perchlorate in drinking water based on a non-adverse, reversible biological effect (IUI) that is well upstream of any potential adverse health effect and that resulted in an MCL that is 40 times lower than the lowest no-effect level observed in human clinical studies.

Despite these statements, the Draft Plan then goes on to describe the presence of perchlorate in drinking water as much narrower in geographic scope and one that could be addressed in a more targeted fashion. The Draft Plan states that most exceedances of the 2 and 1 ppb detection limits for reporting purposes (DLR) and 6 ppb MCL “were found primarily in the counties of Los Angeles, Riverside, and San Bernardino.”¹⁵ The Draft Plan also emphasizes the agricultural¹⁶ and industrial origins of perchlorate contamination,¹⁷ attributing groundwater and surface water contamination of the Colorado River to a perchlorate manufacturing facility in Nevada, which came to the surface water via the Las Vegas Wash to the Colorado River.¹⁸ Moreover, the Draft Plan notes that “[p]erchlorate MCL violations are relatively uncommon; for example, violations occurred in only 11 PWS from 2019 to 2023 (1 PWS with more than 10,000 connections, 4 PWS with fewer than 500 service connections, and 6 non-transient non-community PWS).”¹⁹ The relatively few MCL violations indicates that drinking water systems are already implementing health-protective measures to address perchlorate in drinking water and that the levels of perchlorate detected in drinking water do not pose a public health threat.

Mixed messages about whether the presence of a contaminant in drinking water poses actual public health risks is precisely the type of messaging that erodes consumer confidence and public trust in the state’s drinking water. We recommend the State Board do more to inform and educate the public about the actual public health risks associated with contaminants in drinking water, including by making perchlorate occurrence data and analysis more routinely available.

It is our understanding that DDW has collected and will continue to collect perchlorate occurrence data through December 2026 for a review of the perchlorate MCL by the State Board as early as the first or second quarter of 2027.²⁰ Information about DDW’s review and analysis of perchlorate occurrence data is sporadic. DDW last updated the State Board’s Perchlorate in Drinking Water website with monitoring results in August 2024, and provides brief and very high-level updates during the State Board’s annual meeting pursuant to Health & Safety Code 116365 to discuss and adopt its drinking water priorities.

Making perchlorate occurrence data **and analyses** routinely available allows for a more fully informed public, which will increase consumer confidence and public trust in California’s drinking water. Beneficial analyses could include, but are not limited to, geographical trends in perchlorate occurrence data, historical trends in levels of perchlorate detected in

¹⁴ As noted above, exposure to perchlorate has not been shown to cause extreme changes in thyroid hormone levels, even in controlled studies at far higher doses than environmental exposures.

¹⁵ *Id.* at p. 81.

¹⁶ The Draft Plan does not discuss in detail the historical, pervasive use in California of Chilean fertilizer containing perchlorate, which contributed to groundwater and surface water contamination.

¹⁷ The Draft Plan omits other industrial sources of perchlorate that could be addressed through a more targeted approach, such as contamination in the Rialto-Colton and Chino Subbasins and from military facilities.

¹⁸ Draft Plan, p. 82107, 112

¹⁹ *Id.* at p. 112. The Draft Plan notes 123 sources with perchlorate detections greater than the 6 ppb MCL between 2019 and 2023.

²⁰ Included in the Draft Plan is a recommendation that state small water systems and transient non-community water systems monitor for perchlorate, among other inorganic chemicals and contaminants. We note that drinking water systems in California do monitor for perchlorate and perchlorate occurrence data is being collected and analyzed by DDW. See Draft Plan, p. 101.



groundwater, an analysis of perchlorate detections exceeding the 1 ppb and 2 ppb DLRs and the MCL and the number and types of systems impacted, and known industrial and agricultural sources of perchlorate in drinking water, and whether and how perchlorate contamination is being, or could be, addressed by the State Board in a more targeted manner. Although these analyses are sometimes conducted by DDW as part of a proposed rulemaking to adopt an MCL, this timing is too late to allow for consideration of this information as part of an effort by the State Board to prioritize drinking water standards based on actual public health risks, as proposed below.

3. Drinking water affordability continues to challenge the State Board and burden California residents.

Drinking water affordability continues to challenge the State Board and frustrate California's ability to achieve the Human Right to Water, leaving California residents bearing the burden of continually increasing drinking water rates. These challenges are well documented in the Draft Plan, as well as in the 2024 Drinking Water Needs Assessment referenced in the plan and the more recent 2025 Drinking Water Needs Assessment.²¹

The Draft Plan reiterates the conclusions of the 2024 Drinking Water Needs Assessment, which projected \$8.2 billion in five-year State Board funding eligible estimated needs, with only \$2 billion in grants and \$1.5 billion in loans available. This leaves an estimated five-year funding gap of \$5.5 billion for grant eligible needs. The 2024 Drinking Water Needs Assessment also estimated the total cost of achieving the Human Right to Water as \$15.9 billion.²² With State Board grant funding only able to meet \$2 billion of this cost, local communities would be called upon to fund the remaining \$13.9 billion through fees, rates, taxes, and income. Incredibly, this is \$11.4 billion higher than what was estimated in 2021.²³ "Water systems may need to increase their charges to cover the needs not met by grant funds."²⁴

The figures set forth in the Draft Plan are staggering, making the impacts to drinking water systems and rate payers difficult to conceptualize. These impacts, however, come into greater focus when recent increases in costs of drinking water are analyzed and future cost increases are estimated. The Draft Plan notes a steady increase in drinking water customer charges between 2020 and 2022 for all system sizes.²⁵ Small community water system drinking water costs have been increasing at an average rate of \$2.08 per year. Medium community water system drinking water costs increased by \$5.32 between 2021 and 2022. Large system drinking water costs increased by \$4.09 between 2020 and 2021, and then slightly increased in 2022. "Statewide average drinking water customer charges have been steadily increasing at an average rate of \$2.39 per year since 2020."²⁶ Notably, although the annual increase for small drinking water systems is lower than for medium and large systems, small drinking water systems charge significantly more for water than medium and large systems. "Small drinking water systems charge an average of \$32 more a month for the same volume of water compared to larger systems."²⁷ "On average, customers of smaller water systems pay approximately 77 percent more for water than customers served by larger water systems," despite these systems often being less compliant with existing

²¹ Because the Draft Plan is retrospective in nature, it does not include information from the more recent 2025 Drinking Water Needs Assessment, which was published in June 2025 and confirms the bleak picture painted in Draft Plan and 2024 Drinking Water Needs Assessment.

²² Draft Plan, p. 310.

²³ *Id.* at p. 307.

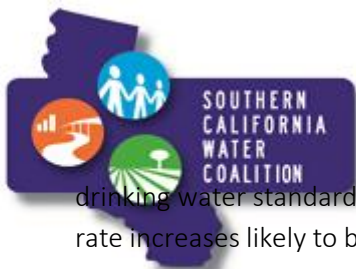
²⁴ State Board, 2024 Drinking Water Needs Assessment (June 2024), p. 139, 143, available at

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/needs/2024/2024-needs-assessment.pdf

²⁵ Draft Plan, p. 265.

²⁶ *Ibid.*

²⁷ *Id.* at p. 191.



drinking water standards due to insufficient financial resources.²⁸ This data also fails to address the much larger periodic rate increases likely to be passed along to customers of small water systems facing additional capital and operations and maintenance costs to comply with new or revised MCLs seeking to address the “last one percent” of risk attributable to the subject contaminants.

The outlook is grim; drinking water costs are expected to continue to increase. “Based on factors such as more stringent regulations, increased costs of treatment, climate change, water conservation, location of water sources, and deteriorating infrastructure, the future cost of providing drinking water can be expected to increase beyond the general inflation rate.”²⁹ The Draft Plan recognizes the significant impact this will have on California residents: “High water rates are unaffordable to certain segments of California’s population and disproportionately affect disadvantaged communities or low-income households regardless of overall community status. To meet the costs of basic needs such as water, consumers face difficult decisions that compromise their quality of life.”³⁰ The call to action is clear—California must rethink its drinking water standards development framework to protect the Human Right to Water.

4. The State Board must prioritize California’s drinking water standards to direct the state’s limited resources toward the greatest actual public health risks.

The State Board’s responsibilities with respect to ensuring safe drinking water in California are vast, and the State Board has taken significant measures over the years to protect California residents from drinking water contaminants. But the increasing number of “emerging” contaminants, significantly increasing drinking water costs, and unprecedented reductions in state financial resources necessitate a new approach for prioritizing and developing state drinking water standards.

Board Member Maguire raised this issue during the State Board’s February 2025 meeting, reiterating his prior requests for a workshop focusing on how the State Board establishes its drinking water priorities, including how the State Board looks at risk, makes decisions regarding human health protective levels and feasibility, and how to handle contaminants of emerging concern. Board Member Maguire concluded: “But I think being transparent about that and having a way to solicit public input and a dialogue in terms of how those priorities are set and what that process looks like, I think in the long run will be helpful for all of us. So I just wanted to bring that up again and elevate that and say that I’m still interested in that discussion.”

Board Member Maguire raised the issue again during an August 6, 2025 State Board Meeting to discuss PFAS notification and response levels: “So one area that I’ve been interested in for quite some time now is better understanding is what our strategy is on contaminants of emerging concern.” “How do we approach this world that we’re starting to unpack in terms of a strategy or measures to understand what are those contaminants that we’re facing against the resources we have to address them?” Board Member Maguire recognized an opportunity to engage the broader water community for recommendations on what the State Board can do with limited resources to try to be more proactive, rather than reactive, in identifying drinking water priorities, stating: “I think we can put something together that can help better

²⁸ *Id.* at p. 283.

²⁹ *Id.* at p. 271.

³⁰ *Id.* at p. 255.



address and provide certainty and maybe a little bit of peace of mind in terms of the strategies that we might use to address this big challenge.”

We agree with Board Member Maguire regarding the need for the State Board to revisit and make more public the way it identifies contaminants of concern and establishes drinking water priorities. Each year, the State Board issues its list of annual drinking water priorities, as required by the California Safe Drinking Water Act. No public input is sought in formulating the list, and only informal comments are received during the same meeting in which the State Board votes to adopt the list of drinking water priorities. Contaminants can remain on the list for years, new contaminants can be added to the list each year, and the priority of identified contaminants can change from year to year, all with little to no explanation or justification from the State Board. And nowhere in this process is there a discussion of whether the State Board has the funding to support drinking water systems that could be impacted by one or more of the proposed priority drinking water standards.

We encourage the State Board to work with the broader water community to develop a strategy for the State Board to address contaminants of emerging concern, better understand the limitations of the financial resources available to address them, and, given those limited financial resources, prioritize drinking water standards to address those contaminants that pose the greatest actual public health risks. To spur further dialogue among the water community and action by the State Board on this issue, we offer the following recommendations:

1. The State Board and OEHHA should jointly develop a drinking water standard prioritization framework that includes criteria that balance:
 - a. The known public health risks of each contaminant of concern based on best available science and the most recent occurrence data,
 - b. The legal requirements of the California Safe Drinking Water Act and the Human Right to Water,
 - c. California drinking water policy priorities, including sustainability of drinking water systems and affordability for rate payers, and
 - d. The economic feasibility of each proposed drinking water standard.
2. As part of this process, the State Board and OEHHA should work together to ensure that public health goals are updated by OEHHA within five years before the State Board’s review of an MCL. This will ensure that MCLs are based on the best and most recent science, as required by the California Safe Drinking Water Act. If there is no new scientific data or applicable methodology available for a given contaminant, then there is no need to update the PHG.
3. The State Board and OEHHA should hold an annual public workshop to discuss emerging contaminants and establish annual drinking water priorities, and develop a more robust public process to review, comment on, and inform a joint list of annual drinking water priorities.

With respect to the “economic feasibility” of proposed drinking water standards, we posit that the current definition of the term adopted and applied by the State Board—“capable of being done”³¹—is misplaced in the drinking water context and insufficient to allow for informed decision making by the State Board and meaningful public participation in the adoption of

³¹ See *Cal. Manufacturers & Tech. et al. v. State Water Resources Control Bd.* (2021) 64 Cal. App. 5th 266, 272.



drinking water standards. This definition could be used to justify any MCL, regardless of the ramifications of achieving it. Instead, “economic feasibility” should be defined in a manner that requires the State Board to consider (1) state drinking water funds already expended and encumbered for all current and already proposed drinking water standards and (2) state drinking water funds actually available for each drinking water standard proposed to be developed in the future.³² The State Board can then determine whether further rate increases will be required for drinking water systems to comply with the proposed drinking water standard, the amount of such rate increases, and whether these outcomes are warranted in light of the risk reduction a proposed MCL may offer as compared to other existing and proposed MCLs. This will allow the State Board to more thoughtfully conduct the cost effectiveness analysis required by the California Administrative Procedure Act for “major regulations.”³³ More importantly, however, this would allow the State Board to target California’s limited financial resources to address the contaminants that pose the greatest actual health risk and help curb the continually increasing costs of drinking water that threaten to keep the Human Right to Water out of reach for California and its residents by ensuring that state financial assistance is actually available to support impacted drinking water systems and populations.

³² If the State Board is unable to update the definition of “economic feasibility” in a manner that reflects present-day demands, then we call upon the Legislature to amend the California Safe Drinking Water Act to include a more effective and informative definition of “economic feasibility.”

³³ We note that the State Board’s recently adopted MCL for hexavalent chromium was a “major regulation,” with costs estimated to be in the \$180 million range. We also note that several of the State Board’s 2025 priority drinking water standards, like PFOA, PFOS, and arsenic, are predicted to be “major regulations” with costs likely to exceed \$50 million each.