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

Sent via email: Commentletters@waterboards.ca.gov

August 28, 2025

RECEIVED
By SWRCB Board Clerk on August 28, 2025

Chairman E. Joaquin Esquivel
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

RE: Comment Letter: 2025 Safe Drinking Water Plan

Dear Chairman Esquivel:

On behalf of WateReuse California (WRCA), we appreciate the opportunity to submit comments on the 2025 Safe Drinking Water Plan (Plan). WRCA represents more than 200 public agencies, consulting firms, and companies committed to expanding the safe and sustainable use of recycled water in California. CASA represents more than 130 public agencies and municipalities that engage in wastewater collection, treatment, recycling, and resource recovery. Our organizations are committed to advancing policies, funding, public acceptance, and regulations that support water reuse in all forms.

Support of Water Reuse

We appreciate the State Water Resources Control Board's (State Board) ongoing support of recycled municipal water and potable reuse as a critical water supply for California, especially as identified in the Governor's *Water Supply Strategy*. Additionally, WRCA is committed to reuse, including potable reuse as a proven process where water treated at reclamation facilities is further purified to meet California's stringent standards before being reused as a drinking water source.

Direct Potable Reuse

WRCA supports the following recommendation below and urges the State Board to allocate resources for the Division of Drinking Water (DDW) to continue this work in support of the implementation of DPR in California.

Under the conclusions and recommendations section 6.8.2, Page 173:
6-3 Support DDW's review of online monitoring methods and other field-testing methods to ensure that the methods are robust, reliable, and capable of generating data to meet regulatory requirements for PWSs and direct potable reuse projects.

Contaminants of Emerging Concern (CECs)

WRCA appreciates DDW's concerns about CECs that may occur in drinking water. However, rather than focusing solely on wastewater as a CEC source, we recommend modifying the Plan, as shown in Attachment 1, to acknowledge a range of sources of various CECs, whether from stormwater, other nonpoint source runoff (e.g. agricultural sources), or atmospheric deposition. Additionally, in the context of the use of wastewater as a source water via potable reuse as well as in permits for discharge, DDW, DWQ and Regional Boards have processes in place to assess and address CECs, and the Plan should avoid implying that CECs in wastewater are unregulated. Lastly, the draft Plan does not identify programs at other state agencies such as CalRecycle and the Department of Toxic Substances Control (DTSC) that can contribute to protection of sources of drinking water. The SWRCB should augment its efforts to collaborate with CalRecycle, DTSC and other state agencies (e.g. Department of Pesticide Regulation, Department of Food and Agriculture) to integrate their programs so as to maximize protection of California's sources of drinking water from CEC contamination.

Detailed Comments:

Additionally, we offer some further comments to address key areas of the Plan, particularly as they relate to water reuse and recycled water as a source of drinking water. Attachment 1 provides detailed recommendations regarding CECs and interagency coordination.

Closing Comments

We share your commitment to public health and to developing diverse climate-resilient water sources and we look forward to continuing to collaborate with the State Board on the development of the 2025 Safe Drinking Water Plan.

WRCA and CASA appreciate the opportunity to provide these comments. For any questions, please contact Rosario (RCortes@watereuse.org) and Jared (jvoskuhl@casaweb.org).

Sincerely,

Rosario Cortés
Manager of Regulatory Affairs
WateReuse California
RCortes@watereuse.org

Jared Voskuhl
Director of Regulatory Affairs
California Association of Sanitation Agencies
JVoskuhl@casaweb.org

cc: Board Members, State Water Resources Control Board
Eric Oppenheimer, Executive Director, State Water Resources Control Board
Darrin Polhemus, Deputy Director, Division of Drinking Water
Lawrence Sanchez, Senior Water Resource Control Engineer, Division of Drinking Water

WRCA Attachment to State Water Resources Control Board – DRAFT 2025 Safe Drinking Water Plan

Section 3.3.3 - N-Nitrosodimethylamine (NDMA) - Page 83

Current Language: In 2000 NDMA was discovered in monitoring wells associated with a groundwater recharge project in Orange County.

Suggested Revision: It should be noted that Orange County Water District addressed NDMA through additional treatment (UV/AOP) and source control.

The 2014 Groundwater Recharge Regulations require projects to implement treatment that reduces NDMA (such as UV/AOP or soil-aquifer treatment) and require projects to implement corrective actions if DDW notification levels are exceeded in recharge water after surface application.

Section 3.3.4 - CECs - Page 85

Current Language: As the state's population grows, the volume of treated wastewater from municipal sewage treatment plants can be expected to increase. Since no increase is anticipated in the volume of natural water supply from rainfall, the percentage of treated wastewater in the receiving water bodies (discharge-receiving water bodies) will likely increase. **A point may be reached when the percentage of wastewater is high enough that the approval of the recipient stream as a source of drinking water will be questioned, especially if CECs are detected at higher concentrations.** DDW, the Regional Water Boards and DWQ will continue to coordinate efforts to ensure that no losses of drinking water supplies occur as a result.

Concerns: As it is currently written, this could be construed that after a certain threshold of discharges to a drinking water source (for example, injections of advanced purified recycled water to an aquifer used for potable water supply) there would be merit to call that source's safety into question. WRCA suggests revision to emphasize the rigorous, scientifically based regulation of discharges into sources of drinking water by DDW and the RWB. In addition, acknowledgement of discharger monitoring, reporting, outreach, and source control/pretreatment programs should be included.

Moreover, we are not sure if it is accurate or likely that wastewater volumes will increased due to increased population, as there has been a sustained decline in wastewater volumes in recent years. Additionally, in some areas, the volume of wastewater being discharged is also decreasing as new water recycling projects come online.

Suggested Revision: For consistency, instead of "municipal sewage treatment plants" in the first sentence, it should say "municipal wastewater treatment plants"

The Regional Water Boards are responsible for issuing permits for discharge that protect applicable beneficial uses, including the MUN use, and that are consistent with the Sources of Drinking Water Policy (SWRCB Resolution No. 88-63). DDW, the Regional Water Boards and DWQ will continue to coordinate efforts to ensure that no losses of drinking water supplies occur as a result [of] changes in receiving waters and will address CECs in accordance with DWQ's CEC Program.

Section 3.3.4 - Microplastics, Microbeads and Microfibers - Page 86

Current Language: As a means of source water protection, it is appropriate to consider microplastics in the environment, particularly regarding their potential impact on water reuse projects, which will likely lead to increased attention **to industrial source control activities**. Since microplastics also result from domestic sources, **a public education program focused on waste reduction would be appropriate** to encourage the minimization of these materials into the domestic waste stream.

Concerns: As with PFAS, a major source of microplastics is consumer goods which cannot reasonably be regulated by local authorities like publicly owned treatment works (see comments on Section 3.3.6.3). While industrial loading may be addressed through pretreatment programs, leadership from state and federal regulators to address use of microplastics such as microbeads in consumer goods at the source is necessary.

Thus, it is unlikely that wastewater agencies can achieve meaningful reductions of microplastics from industrial sources, or even from the public via public education. Microplastics most frequently are present as a breakdown product or byproduct of weathering of larger plastic inputs, such as microfibers that come from polyester and other synthetic fabrics. Only action by legislation or regulation to reduce the use of plastics is likely to substantially reduce the amount of microplastics in wastewater. Moreover, in source waters, particularly surface waters, other sources of microplastics must be considered and accounted for, such as automotive tires, agricultural plastics and atmospheric deposition, all of which have been documented to contribute microplastics to the ambient environment.

Suggested Revision: …which will likely lead to increased attention to industrial source control activities. State and federal regulatory efforts are necessary to address root causes of microplastic contamination in water supplies, including use in (and breakdown of) consumer goods and other upstream sources. Since microplastics also result…

Section 3.3.5.1 - Wastewater and Reuse Projects - Page 86

Current Language: A) Most wastewater treatment plants discharge treated wastewater into surface water bodies, such as rivers, or into groundwater. Wastewater treatment technologies and regulatory requirements have been developed to address health concerns regarding the use of drinking water supplies that receive such discharges and adequately protect public health.

B) The Regional Water Boards limit such discharges for the protection of public health and the environment, through permits on wastewater treatment plants and through industrial source control limits on chemicals that are released into sewers for subsequent wastewater treatment.

C) Commensurate with population growth are increases in the volume of waste discharges from industries and municipal sewage. In the past, those discharges have been minor contributors to the drinking water supply (generally less than five percent in most supplies); however, the increase in population has increased the percentage of treated wastewater in drinking water supplies.

D) When water supplies are not affected by wastewater or other human activities, the possibility for contamination is diminished.

Concerns: Comments:

A) Wastewater treatment plants are essential for the protection of public health and the environment. Wastewater treatment plants prevent many contaminants from entering receiving waters or groundwater, and many of them provide recycled water to support a resilient water supply. It is critical to acknowledge these key functions and benefits as opposed to citing treatment plants as a source of contaminants. Additionally, we have concerns about the lack of control of/limits on unregulated, unmonitored discharges to small community and septic systems. Reuse of wastewater that is regulated is overburdened when compared to small communities/septic - costs and risk reduction is placed unfairly on urban residents and businesses encouraging urban sprawl.

B) Emphasized language above makes it seem like there is some threshold that the RWBs are toeing when it comes to permitting IPR/reuse projects (see comments on Section 3.3.4, above). Suggest changing wording from "limit" to "regulate" with possible added language re-emphasizing the extensive, scientifically based requirements that are placed on such projects.

C) This language could be construed to mean that industrial waste discharges are being added to the drinking water supply which is misleading.

D) Strike "wastewater;' this is a human activity, and its inclusion again alludes to recycled water being somehow unsafe when it more stringently regulated than some drinking water supplies.

Suggested Language:

A) Suggest that introductory language be added to the beginning of this subsection: *Wastewater treatment plants are essential for protection of human health and the environment, preventing many contaminants from entering receiving waters or groundwater. Additionally, many wastewater treatment plants provide recycled water to support a resilient water supply. Both wastewater treatment and recycled water production are highly regulated.*

B) The Regional Water Boards *regulate* such discharges for the protection of public health

C) In the past*, treated municipal wastewater has been a minor contributor* to the drinking water supply

D) When water supplies are not affected by ~~wastewater or other~~ human activities, the possibility for contamination is diminished.

Section 3.3.6.3 - Limits on Household Chemical Releases into Drinking Water Supplies - Page 91

Current Language: Regional Water Boards cannot feasibly require or enforce source control or household discharges. However, some progress has been made in limiting the presence of pharmaceuticals released from households into wastewater and subsequently into water used for drinking. Several communities have instituted public education programs or other programs to collect unused drugs and keep them from being flushed down the toilet. For example, Alameda County passed an ordinance in July 2012 requiring drug manufacturers and producers that sell, offer for sale, or distribute certain prescription drugs in the county to participate in a program that includes a process for the collection and disposal of unwanted products from residential prescription drug consumers. Similar public education initiatives will be required to improve user awareness and practice.

We agree that this is an important topic.

Concerns: Language indicates that the Waterboards cannot control these inputs. Local wastewater and water agencies also have little or no authority to require changes to products used by households or to "regulate" discharges from households. Furthermore, the Alameda County example is rather outdated, and we recommend that the Plan instead recognize that there is a robust statewide pharmaceutical and sharps stewardship program that was enacted in SB 212 (Jackson, Chapter 1004, Statutes of 2018), which can be a model for addressing CECs. Calrecycle's website states that "California's Pharmaceutical and Sharps Waste Stewardship Programs provide safe and convenient disposal options for pharmaceutical and home-generated sharps waste at no cost to the consumer. CalRecycle oversees the programs, which are run by MED-Project and The Drug Takeback Solutions Foundation, the nonprofit stewardship organizations created by pharmaceutical and sharps manufacturers and other entities within the distribution chain." (Source: https://calrecycle.ca.gov/epr/pharmasharps/#Contact)

Additionally, DTSC's Safer Consumer Product Program also addresses chemicals that may pose concerns for the water environment and drinking water supplies. We recommend that the Plan be revised to acknowledge these efforts and that the SWRCB seek opportunities to collaborate with other state and local agencies in instances where these programs can assist the State Water Board in protecting source water quality.

Suggested Revisions: Regional Water Boards and local wastewater entities cannot feasibly require or enforce source control or household discharges. However, some progress has been made in limiting the presence of pharmaceuticals released from households into wastewater and subsequently into water used for drinking. Several communities have instituted public education programs or other programs to collect unused drugs and keep them from being flushed down the toilet. ~~For example, Alameda County passed an ordinance in July 2012 requiring drug manufacturers and producers that sell, offer for sale, or distribute certain prescription drugs in the county to participate in a program that includes a process for the collection and disposal of unwanted products from residential prescription drug consumers. Similar public education initiatives will be required to improve user awareness and practice.~~

Additionally, CalRecycle and the Department of Toxic Substances Control (DTSC) have several programs, such as the Pharmaceutical and Sharps Waste Stewardship Programs at CalRecycle and the Safer Consumer Products Program at DTSC, that aim to reduce the use of chemicals in products as well as ensure proper management at the end-of-life of the products. These programs help augment the Water Board's efforts to protect sources of drinking water.

Section 3.4.1 - Conclusions - Page 100

Current Language: California depends on a combination of surface water and groundwater to meet its drinking water needs. **Pollution threats such as wastewater discharges and agricultural practices can impact the quality of these sources.**

Concerns: This statement (and the Plan in general) excludes the influence of non-point source pollution (stormwater, riverine discharges). Suggest more emphasis be placed on these currently unregulated and uncontrolled discharges.

Suggested Revisions: Pollution threats such as wastewater discharges, agricultural practices, and non-point source contamination (i.e. stormwater, riverine discharges) can impact the quality of these sources.

Section 4.4.2 - Chemicals - Page 107

Current Language: In addition, constituents of emerging concern (CEC), such as microplastics, pharmaceuticals and personal health care products, are being detected at low levels in surface waters that receive wastewater discharges.

Concerns: This statement should be modified to recognize that stormwater can also be a source of some CECs, for example microplastics and PFAS.

Suggested Revisions: In addition, constituents of emerging concern (CEC), such as microplastics, pharmaceuticals and personal health care products, are being detected at low levels in surface waters that receive wastewater discharges, and inputs from stormwater, which may be impacted by runoff from tires and other sources and by atmospheric deposition.

Section 6.5.5 - Microbial Analysis - Page 161

Current Language: Because raw wastewater will serve as the source of drinking water in direct potable reuse projects, such research on pathogen monitoring will contribute to the protection of public health.

Concerns: Unneeded word.

Suggested Revisions: Strike "raw" and instead read as follows:

Because ~~raw~~ wastewater will serve as the source of drinking water in direct potable reuse projects, such research on pathogen monitoring will contribute to the protection of public health.

Section 6.5.8 - Analytical Method Development - Page 169

Current Language: To address other concerns related to monitoring recycled water used for drinking water, the State Water Board, in collaboration with the Water Research Foundation, completed a research study in 2021 to address monitoring methods and capabilities for pathogen monitoring in raw wastewater.

Concerns: In the context of this section, it seemed incomplete to mention pathogen monitoring in raw wastewater without also mentioning pathogen monitoring in treated wastewater.

Suggested Revisions: We recommend noting:

The 2021 Water Research Foundation study was done specifically to address data gaps identified by the Direct Potable Reuse Feasibility Expert Panel for the purposes of developing pathogen log removal value requirements for DPR; pathogen monitoring methods in treated wastewater have been addressed through other studies but were not identified as a data gap specifically for the development of the DPR regulations.

Section 6.6 - Monitoring in Real-Time - Page 171

Current Language: For treatment plants that treat wastewater for potable reuse, the treatment processes must be continuously monitored using indicators or surrogates that have been demonstrated to track the performance of the treatment process to reduce pathogens (viruses, Giardia and Cryptosporidium) and unknown chemicals in the wastewater. For these projects, advanced monitoring techniques **include the use of online total organic carbon (TOC) analyzers and instruments measuring specific ultraviolet absorbance, which have been proposed as indicators of the concentration of certain organic material.** Although these instruments are becoming more cost-effective over time, they continue to require attendant telemetry systems to view and store the data and they must be maintained and periodically calibrated to ensure the data generated are accurate. DDW continues to review **novel methods proposed for use** by potable reuse projects, to ensure that the methods are robust, reliable, and capable of generating data to meet regulatory requirements for the method…

Concerns: Language implies that certain monitoring and compliance methodology is not approved for use by projects, when it is currently in use by Pure Water Monterey and other indirect potable reuse projects. For example, M1W utilizes online TOC monitoring as part of its RO system log reduction values for pathogen compliance as approved by DDW. The language makes it sound like it is not an approved method.

Section 6.8.1 - Conclusions - Page 172

Current Language: Unregulated chemicals or CECs, as described in Chapters 3, 4 and section 6.5… are highly water soluble and are generally found at low levels (parts per trillion) in drinking water sources that may directly or indirectly be impacted by wastewater discharges.

Concerns: CECs could originate from a number of sources (e.g. rivers, stormwater, illicit discharges).

Suggested Revisions: …that may be directly or indirectly impacted by a number of sources, including stormwater and other non-point source discharges, and wastewater discharges.

Unregulated chemicals or CECs, as described in Chapters 3, 4 and section 6.5… are highly water soluble and when present are generally found at low levels (parts per trillion) in drinking water sources.