



December 15, 2014

Chair Felicia Marcus and Board Members
c/o Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Sent via electronic mail to: commentletters@waterboards.ca.gov



RE: Comment Letter – Safe Drinking Water Plan

Dear Chair Marcus and Board Members:

On behalf of California Coastkeeper Alliance (“CCKA”), a network of twelve Waterkeeper organizations spanning the California coast, we appreciate the opportunity to provide comments on the State Water Board’s Safe Drinking Water Plan. CCKA was a strong supporter of Assembly Bill 145 (Perea), and supported the Governor’s plan to transfer the Drinking Water Program from the Department of Public Health to the State Water Board. The State Board’s authority of the Drinking Water Program allows California to better manage water as a whole, and provides an opportunity for the State Water Board to break-down traditional “agency silos” to analyze water quality in both an environment and public health perspective simultaneously.

The State Board now has the authority to enforce federal and state safe drinking-water acts, and is responsible for the regulatory oversight of about 8,000 public water systems throughout the state. The Safe Drinking Water Plan for California includes the State Water Board’s assessment of the overall quality of the state’s drinking water, the identification of specific water quality problems, an analysis of the known and potential health risks that may be associated with drinking water contamination in California, and specific recommendations to improve drinking water quality.

Given the importance of our drinking water systems on public health, and the growing pressure California’s drinking water needs put on our aquatic and marine environment, it is critical that the State Board take a leadership role in making California’s Drinking Water Program more effective and efficient. For those reasons, we suggest that the State Board:

- (1) Emphasize the need for additional research on monitoring chemicals of emerging concern;
- (2) Recommend water meters be installed on all public water systems;
- (3) Collaborate with grassroots NGOs to educate consumers on Prop 218;
- (4) Provide recommendations on cross-cutting issues between the drinking water program and other State Board regulatory programs; and
- (5) Recommend more funding for the Water Quality Monitoring Council to provide additional drinking water information to the public.

1. The State Board should emphasize the need for additional research on monitoring chemicals of emerging concern. (Recommendation 6-1)

Recommendation 6-1 provides that the State Board will “coordinate research needs, including methods for testing microbes using emerging technologies. Special attention should be drawn to emerging pathogens that survive in coliform free waters.” We support this recommendation, but believe more attention needs to be on chemicals of emerging concern (CECs). CECs are a growing concern due to the expanding number of chemicals present in wastewater and, therefore, reach our waterways. These chemicals include pharmaceuticals, personal care products, household products, and hormones among others, as well as their breakdown products. Many CECs are considered to be endocrine disrupting chemicals, in that they may mimic the action of hormones, particularly female and male sex hormones.

In 2013 the State Board amended its Recycled Water Policy to incorporate CEC monitoring requirements – but only as it relates to groundwater replenishment. CECs considered important enough to warrant monitoring were determined by an Advisory Panel based on consideration of their presence in recycled water, the concentrations found therein, and the potential for adverse health effects in people should that water be ingested as drinking water. However, the Expert Panel acknowledged that there was not enough information to accurately assess the range of CECs to be monitored, and admitted that monitoring technology lacks the capacity to detect all CECs in our waterways.

CECs are a growing concern as recycled water projects continue to expand – particularly in light of the drought. Replenishment or recharge of groundwater basins with recycled water continues to involve more basins and will increase, in terms of percent of the contribution of wastewater, in existing projects. As the State Board acknowledges in its draft Water Plan, “contamination of a groundwater basin by chemical contaminants (NDMA, 1,4-dioxane) in wastewater has already occurred (in the late 1990s in an Orange County water recycling project),” which prompted new attention to wastewater treatment and industrial source control. Monitoring is necessary to determine if similar incidents will occur in newly recharged basins or in existing basins using more recycled water. It is critical that the State Board stay ahead of the growing demand of recycled water by ensuring the monitoring of CECs continues to improve. Given the growing concern of CECs, the State Board should make a concerted effort to fill research-gaps to improve the detection and monitoring of CECs in both California’s surface and ground water.

The State Board should recommend that the Drinking Water program work with the Water Quality program to ensure CECs are monitored in surface water. The Recycled Water Policy’s does not provide recommendations for monitoring receiving water other than groundwater, which is a major short-coming. Monitoring should be required for all designated constituents both in the effluent and in the receiving waters. Including such requirements would build the database that the CEC Advisory Panel recognized is needed to “predict likely environmental concentrations of CECs based on production, use and environmental fate, as a means for prioritizing chemicals on which to focus method development and toxicological investigation.” In neglecting to address surface water in the Recycled Water Policy, Staff did not acknowledge the fact that discharge of effluent to receiving waters occurs on a daily basis. Many streams in southern California are effluent-dominated streams with 80-95% of dry weather flows coming from recycled water discharges.

The State Board admits that CECs from wastewater are also present in surface water sources into which wastewater is discharged. 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. Therefore, we recommend that receiving water monitoring should be conducted at least annually, with a trigger of increased frequency to quarterly if any CECs are detected in either surface or ground water.

2. The State Board should recommend to the Legislature that water meters be installed on all public water systems. (Recommendation 8-1)

We support the State Board’s Recommendation 8-1 that legislation is needed to require “all PWS customers to be metered, and that each customer be charged based on the amount of water used, be extended to all community water systems.” Current law requires public water systems (greater than 3,000 customers) to meter all customers by 2020 and establish rates based on the amount of water used, smaller water systems have no such requirements. This gap in existing legislation has led to a situation where a large number of systems do not meter the water use of their customers. Consequently, the systems lack the capacity to identify illegal connections and locate leaks, fail to collect needed revenue, and have no ability to monitor conservation efforts or establish rate structures that will encourage conservation. .

The State Board should also recommend that the installation of urban water meters be expedited. State law has long recognized the importance of water meter installation and volumetric billing as essential tools to make efficient use of water and avoid waste. Water metering and volumetric pricing are among the most efficient conservation tools, providing information on how much water is being used and pricing to encourage conservation. All state financial assistance should stipulate this metering completion date as an enforceable condition. We recommend the State Board urge the Legislature to expedite urban water metering, and call for legislation requiring urban water meters to be installed within five years.

The State Water Board should also recommend sub-metering in new multi-family buildings. State legislation should require the installation of multi-unit sub-metering in new construction as a practical and important step for improving water efficiency in the multi-family sector. Sub-metering ensures water users receive an appropriate signal regarding the volume and cost of their water use, and thus incentivizes residents to use water responsibly. Given the expected growth in new multi-family units, these savings could lead to substantial reductions in water use, as well as associated energy and carbon savings. Moreover, even when accounting for the cost of installing the meters, sub-metering can lead to economic savings through reduced water and energy costs to individual families and building owners and through avoided capital costs for water utilities. We urge the State Board to include a recommendation to the Legislature to require sub-metering for new multi-family buildings.

3. The State Water Board should collaborate with grassroots NGOs to help educate consumers on Prop 218. (Recommendation 8-2)

We support the State Board’s recommendation 8-2 to collaborate with the water utility industry, public interest groups and other organizations to develop strategies to educate consumers on the factors that affect the cost of operating a water system. Proposition 218 has made it difficult for water systems of all sizes to increase their rates to address critical infrastructure issues. Consumers may not understand the costs associated with new treatment systems and otherwise supplying safe drinking water. The State Board has offered to develop fact sheets to communicate these issues to the public, but local organizations are better suited for ensuring the public receives the message. We suggest that the State Board emphasize the opportunity for local organizations to help with education and outreach – including funding opportunities for NGOs to work collaboratively with the State Board on Prop 218 education.

Prop 218 has also been a significant obstacle to water agency investments. Fortunately, Assembly Bill 2403, which was recently signed by Governor Brown, clarifies that certain water related fees with a water supply nexus are eligible to utilize the simpler “protest process” established by Prop. 218. The State Board should direct the Drinking Water Program to work directly with water districts and municipalities to ensure they take advantage of the AB 2403 opportunity to ensure reliable funding for water supply and drought preparation investments, including stormwater, groundwater clean-up, recycling and water use efficiency. This also serves as a cross-cutting issue with the State Board’s Water Quality program as it will help municipalities fund projects and programs to comply with stormwater permit requirements.

4. The State Water Board should provide recommendations on cross-cutting issues between the drinking water program and other regulatory programs.

- a. *The Drinking Water program should be involved in the Desalination Amendment regarding the impact of harmful algae blooms on public health.*

The Drinking Water Program should collaborate with the Ocean Unit on harmful algae blooms (HABs) as they relate to desalination. The State Board is focusing more attention into surface waters that are used for drinking water supplies because they are affected by algal toxins, which affect the quality of drinking water supplies and can also pose health risks. The public health concern about algal toxins is generally related to recreational exposures (swimming), although some cyanotoxin exposures have caused fish kills and deaths of pets and livestock. Recent concerns about cyanobacteria (blue-green algae) blooms have resulted in renewed focus on these organisms and their toxins. Poor circulation and mixing, high temperatures, and nutrients from runoff can contribute to algal growth.

While there is certainly a public health concern about HABs in our drinking water from inland surface waters, the State Board needs to address the growing public health threat of HABs in coastal waters as desalination projects become more prevalent. The State Board acknowledges that in “coastal environments marine algal toxins can affect the suitability of shellfish for harvest and consumption.” HABs are also a concern for desalination plants due to the high biomass of microalgae present in ocean waters and a variety of substances that some of these algae produce. These compounds range from noxious substances to powerful neurotoxins that constitute significant public health risks if they are not effectively and completely removed by the RO membranes. Algal blooms can cause significant operational issues that result in increased chemical consumption, increased membrane fouling rates, and in extreme cases, a plant to be taken off-line. Early algal bloom detection by desalination facilities is essential so that operational adjustments can be made to ensure the public is not at risk from product water containing neurotoxins.

Given the growing concern threat of HAB neurotoxins being present in desalinated water, the Drinking Water Program should re-evaluate how drinking water permits are approved for desalination projects.

- b. *The Drinking Water Program should collaborate with the Water Quality Program on water recycling permits.*

The State Board’s authority over the Drinking Water Program presents an opportunity for regulatory efficiencies for potable recycled water projects. It is likely that recycled water will become a more significant source of drinking water. New projects are planned in the Inland Empire (San Bernardino/Riverside area) and in Monterey County. Indirect potable water recycling projects operate under permits issued by the Regional Water Boards, which consult with the Drinking Water Program to establish conditions necessary to protect drinking water supplies. In addition, the State Water Board now has authority to issue indirect potable recycled water permits. The State Board should outline regulatory efficiencies to be captured under the new Drinking Water Program.

Surface water augmentation and direct potable reuse are the frontier for recycled water in California, and regulations are expected to be adopted more efficiently now that the State Board has authority of the Drinking Water Program. The State Water Board is in the process of developing regulations for surface water-related projects. Recycled water is also being considered as a direct source of drinking water, which would be introduced directly into a public water system’s distribution system for customer use (direct potable reuse). Under SB 918 and SB 322 (Chapter 637, Statutes of 2013), The State Water Board is required to investigate and report on the feasibility of developing uniform water recycling criteria for direct potable reuse by December 31, 2016.

The State Board should recommend the Legislature provide additional funding to ensure surface water regulations are adopted by 2016, and to research informational gaps raised by the Direct Potable Reuse Expert Panel.

- c. *The Drinking Water program should collaborate with the Water Quality Unit to ensure the maximum amount of potable water is put to a beneficial use.*

The State Board recently adopted a Drinking Water Permit that provides statewide regulations on how drinking water purveyors flush drinking water pipes. Prior to the adoption of this General Permit, water purveyors were allowed to dump drinkable water into the storm drains, turning an expensive and limited resource into runoff pollution. CCKA worked closely with the Board to develop a Permit that incentivizes water purveyors to redirect drinkable water to beneficial uses as part of an integrated water management strategy, rather than dumping it into storm drains. The State Board should recommendation that the Drinking Water program encourage water purveyors to enroll in the new Drinking Water Permit and put their unused drinking water to a beneficial use.

5. The State Board should recommend more funding go to the Water Quality Monitoring Council to provide drinking water information to the public.

In 2012, California became the first state to enact a Human Right to Water law, AB 685 (Chapter 524, Statutes of 2012). With the enactment of AB 685, California began to focus on the right of every human being to have safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitation. We find it laudable that the State Board is “committed to actively pursuing initiatives to address the Human Right to Water, beginning with the state’s residents who are served by PWS but who do not receive safe drinking water.” However, it is critical that the public – particularly disadvantaged communities – have access to information regarding whether their water is safe to drink.

The Water Quality Monitoring Council was created by Senate Bill 1070 in 2007. The legislation proposed a concept that agencies and departments work together to more efficiently develop and analyze water quality data. The concept has been a success. Since its inception in 2007, the Council has made substantial progress improving the efficiency of water quality and associated ecosystem monitoring. The Council has created six My Water Quality internet portals (www.MyWaterQuality.ca.gov) to bring data and information to the public. The Council is currently working on a Drinking Water portal that will answer “is my water safe to drink?” Much of the Council’s work to-date has been done on a voluntary basis, but without a dedicated source of funding, the Drinking Water portal will be delayed. To better address the Human Right to Water, the State Board should recommend that the Legislature provide a dedicated source of funding to the Water Monitoring Council to ensure information is provided to the public regarding whether drinking water is safe to drink.

CCKA supports the Drinking Water Plan, and believes the State Board could provide additional recommendations to make the Program more effective and efficient. We look forward to working with the State Board to improve this Plan and help implement the recommendations.

Sincerely,



Sean Bothwell
Staff Attorney
California Coastkeeper Alliance