



June 25, 2010

Sue McConnell, P.E.
Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

**RE: Draft Central Valley Drinking Water Policy Resolution
Received by CUWA on June 22, 2010**

Dear Ms. McConnell:

The California Urban Water Agencies (CUWA) appreciates the opportunity the Central Valley Regional Water Quality Control Board (Regional Board) has provided us to comment on the draft Central Valley Drinking Water Policy Resolution (Draft Resolution). CUWA appreciates the reaffirmation of the Regional Board's continued commitment to the development of the Central Valley Drinking Water Policy (Drinking Water Policy).

CUWA has reviewed the Draft Resolution and made several important comments and/or changes for Regional Board consideration that are attached to this letter. However, we believe it incumbent upon us to highlight the vital importance that CUWA places upon the expedient development and adoption of a meaningful Drinking Water Policy by the Regional Board.

To that end, CUWA would like to highlight two key expectations that we have noted to the Draft Resolution and that are summarized below:

- CUWA expects the Regional Board to direct its staff to 1) complete the technical work and develop a draft Drinking Water Policy within a year of adoption of the Draft Resolution; and 2) bring a final Drinking Water Policy to the Regional Board no later than three years after the adoption of this Draft Resolution; and,
- CUWA expects the Draft Resolution to note that the Drinking Water Policy should include numeric objectives for organic carbon and pathogens if supported by the technical studies.

CUWA understands the level of effort associated with the development of the Drinking Water Policy by the Regional Board. As you may be aware, CUWA has been a major supporter of the Regional Board's Water Policy and has already expended a great deal of its own resources in support of this policy over the last seven years. Nonetheless, assuming the Regional Board

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agrees to address CUWA's comments and/or changes to the Draft Resolution, CUWA would agree to:

1. Renew the Drinking Water Policy technical studies grant; and
2. Continue our support of the Regional Board staff working on this Draft Drinking Water Policy effort beyond June 30, 2010, in accordance with our current cost sharing agreement with the Sacramento Regional County Sanitation District. Potential CUWA funding for Regional Board staff beyond a year would depend upon progress made on Drinking Water Policy development by the Regional Board and its staff and the results of the technical studies.

Should you have any questions regarding our comments and/or changes, please feel free to contact me at (916) 552-2929.

Thank you again for the opportunity you have provided us to review and comment on the Draft Resolution and your consideration of our requests.

Sincerely,

A handwritten signature in black ink, appearing to read "Ernesto A. Avila". The signature is written in a cursive style and is positioned to the right of a large, hand-drawn circle that partially overlaps the beginning of the signature.

Ernesto A. Avila, P.E.
Executive Director

EAA/mmt

Enclosure

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

RESOLUTION NO. R5-2010-XXX

ESTABLISHMENT OF A
CENTRAL VALLEY DRINKING WATER POLICY
FOR THE
SACRAMENTO-SAN JOAQUIN DELTA AND UPSTREAM TRIBUTARIES

Whereas, the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) finds that:

1. The Sacramento-San Joaquin Delta (Delta) provides drinking water to more than 25 million people or about 60 percent of the population of California.
2. The Central Valley Water Board recognizes that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters, including the Delta.
3. The Central Valley Water Board recognizes that meeting the goal of clean, safe drinking water requires a multi-barrier approach consisting of protecting source water quality, appropriately treating raw water, and ensuring safe distribution of treated water to consumers' taps.
4. The degree of treatment for drinking water required by state and federal regulations depends on the quality of the source water for certain parameters.
5. The high quality of source water in some tributaries to the Delta allows municipal water purveyors to provide the minimum level of treatment specified in the drinking water regulations; however, there are concerns about maintaining the water quality to protect future drinking water beneficial use. The quality of drinking water supplies in the Delta requires that municipal water purveyors provide additional treatment; often requiring more advanced treatment processes such as enhanced coagulation, ozone disinfection, and measures to control tastes and odors. There is considerable concern that population growth in the Central Valley will further degrade Delta water quality.
6. The CALFED Bay-Delta Program was a cooperative effort of more than 20 state and federal agencies, including the Central Valley Water Board, the State Water Resources Control Board (State Water Board), the U.S. Environmental Protection Agency (USEPA), the California Department of Public Health (DPH), the California Resources Agencies, and the U.S. Department of the Interior. Its mission was to develop and implement a long-

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Comment [A1]: This language was included in the 2004 resolution and should be repeated in this resolution.

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Comment [A2]: All references to CALFED should be past tense.

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term comprehensive plan ~~to~~ restore ecological health and improve water management for beneficial uses of the Bay-Delta.

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7. The CALFED Bay-Delta Program identified the following drinking water quality concern:

Source water from the Bay-Delta poses treatment challenges and public health concerns for the 22 million Californians who drink the water. [CALFED Bay-Delta Program Water Quality Program Plan, July 2000, pgs. 3-4]

8. In August 2000, CALFED issued the Record of Decision (ROD) for the Programmatic Environmental Impact Statement/Environmental Impact Report requiring the California Bay-Delta Authority (CBDA), with the assistance of the DPH, to coordinate a comprehensive source water protection program. One element of this source water protection program is to “establish a comprehensive State drinking water policy for the Delta and upstream tributaries by the end of 2004.”

9. The Central Valley Water Board is a signatory to the Implementation Memorandum of Understanding for the CALFED Drinking Water Quality Program, executed on 22 May 2002, which states that:

CVRWQCB, in consultation with DHS [now DPH], SWRCB, and USEPA, will have primary responsibility for development of a State drinking water policy for the Delta and its tributaries.

10. The State Water Board sets water quality objectives for salinity that protects all beneficial uses including municipal and industrial beneficial uses in the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary.

11. The State Water Board’s Sources of Drinking Water Policy (Resolution No. 88-63), as incorporated into the Central Valley Water Board’s *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition*, revised September 2009 establishes that all waters within the San Joaquin River and Sacramento River basins are considered suitable or potentially suitable to support the MUN beneficial use, with certain exceptions.

12. The Central Valley Water Board has authority to formulate and adopt water quality control plans, establish water quality objectives, and develop implementation plans under California Water Code §13240, §13241, and §13242. Water quality objectives are defined under State law as “the limits or levels of water quality constituents or characteristics which are established for

the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.” (Water Code §13050(h)).

13. USEPA water quality standards regulations require each state to adopt an “antidegradation” policy and specify the minimum requirements for the policy (40 CFR 131.12).
14. The State Water Board’s Policy with Respect to Maintaining High Quality of Water in California (Resolution No. 68-16) incorporates the federal antidegradation policy and restricts reductions in water quality even if beneficial uses are protected. Changes in water quality are allowed only if they are consistent with maximum benefit to the people of the State, do not unreasonably affect beneficial uses, and do not result in water quality less than that prescribed in water quality control plans or policies. Administrative Procedures Update No 90-004 provides guidance for implementation of the State and federal antidegradation policies. This guidance requires an antidegradation analysis to be conducted for any new or expanded discharge with the potential to degrade water quality.
15. Water Code §13000 states that “activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those water and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.”
16. The *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* designates municipal and domestic supply (MUN) as a beneficial use of the Delta. The [Water Quality Control Plan for the Sacramento and San Joaquin Basins \(Basin Plan\)](#) has also designated the drinking water municipal and domestic supply beneficial use (MUN) for most waters in the Central Valley, including the Sacramento-San Joaquin Delta.
17. The Basin Plan includes narrative objectives for chemical constituents, taste and odor, sediment, suspended material, and toxicity, and numeric objectives for chemical constituents and salinity. The Basin Plan incorporates the primary and secondary maximum contaminant levels specified in Title 22 of the California Code of Regulations for waters designated MUN. The Bay-Delta Plan also includes numeric effluent limitations that apply within the Bay-Delta.
18. Although the Basin Plan addresses many constituents that threaten drinking water source waters, the 1998, 2002, and 2006 Triennial Reviews of the Basin Plan identified development of a policy for maintaining water quality for drinking water as high priority.

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Comment [A3]: Should stipulate that this is the Basin Plan for the Sacramento and San Joaquin Basins since it may appear that you are talking about the SF Bay/Delta Basin Plan.

19. After the CALFED ROD was issued, the Central Valley Drinking Water Policy Workgroup (Workgroup) was formed to develop a comprehensive drinking water policy. The Workgroup is comprised of federal and state agencies, drinking water purveyors, and wastewater, municipal, and agricultural dischargers.
20. In 2003, the Workgroup developed a Work Plan that [described the technical studies needed](#) to support the development of a drinking water policy. Technical [studies](#) included modeling, monitoring, and [evaluation of source control methods, effectiveness, and costs](#).
21. In 2003, California Urban Water Agencies (CUWA) and Sacramento Regional County Sanitation District entered into contract with the State Water Board to reimburse staff costs for one half of a staff person per year for work performed on the development of the drinking water policy. This contract has been amended several times to continue funding staff through June 2010.
22. In 2004, CUWA was awarded a Proposition 50 grant of \$970,000 to develop technical studies and perform watershed monitoring to support the development of the Central Valley Drinking Water Policy.
23. In July of 2004, Resolution No. R5-2004-0091 was adopted to continue support for development of a comprehensive drinking water policy after the CALFED ROD date of 2004.
24. The following drinking water constituents of concern have been identified by stakeholders as high priority for study and evaluation: salt (including bromide), nutrients, organic carbon, and pathogens such as *Cryptosporidium* and *Giardia*.
25. The Workgroup gathered existing water quality data by identifying groups performing monitoring, time period covered, monitoring locations, constituents, and frequency of monitoring [and developed a water quality database for the drinking water constituents of concern](#).
26. Between 2006 and 2007, conceptual models were developed for organic carbon, nutrients, pathogens and pathogen indicators, and salinity which produced preliminary loading analysis, identified data gaps, and provided recommendations for the next steps. The models identified the need for additional data for each of these constituents to refine current loading estimates from the different sources.
27. There is inadequate information to evaluate the potential for organic carbon, *Cryptosporidium*, and *Giardia* to impact the drinking water beneficial use. The organic carbon conceptual model recommended collecting additional source

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data, specifically from wastewater treatment plants and fish hatcheries. The pathogen conceptual model recommended collecting additional data for *Cryptosporidium* and *Giardia* in ambient surface water, [at Delta drinking water intakes](#), and [in](#) wastewater and urban storm water discharges.

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[28.](#) The conceptual models did not recommend additional data to be collected from irrigated lands, since the Irrigated Lands Regulatory Program requires monitoring for organic carbon, [salinity](#), and nutrients in representative receiving waters that receive discharge(s) from irrigated lands. [Monitoring is conducted for pathogen indicators but not for actual pathogens.](#) However, information is needed regarding practical management practices that can be implemented on irrigated lands, along with the efficacy of those practices at reducing constituents of concern and the cost estimates for implementing them.

[29.](#) [Add statement similar to number 28 about drinking water constituent monitoring that is required of storm water permittees, including which constituents are monitored and which are not. Include language about the need for information on management practices.](#)

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[30.](#) The Proposition 50 grant included funding for monitoring at wastewater treatment plants and fish hatcheries, source control analysis, drinking water treatment evaluations, and the development and refinement of analytical models to evaluate the sources of pollutants at the Delta drinking water intakes under present and projected future conditions.

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[31.](#) [Add a few sentences about the development of the analytical models for the San Joaquin and Sacramento watersheds.](#)

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[32.](#) In December 2008, the Governor issued a stop work order on all proposition funded projects. This halted the technical studies funded by the Proposition 50 grant to support the development of the Drinking Water Policy.

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[33.](#) In December 2009, the Department of Financial Assistance issued a conditional restart for the Proposition 50 grant. The conditional restart stipulated that the project be completed by 31 March 2010 for a dollar value not to exceed \$200,000.

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[34.](#) In February 2010, the State Water Board's Department of Financial Assistance offered the grantee the opportunity to apply for a grant extension for the Proposition 50 grant until 1 March 2011 and reinstated the entire amount of the grant. CUWA did not act on the grant extension.

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35. The Governor's stop work order and the subsequent restart of the grant more than a year later disrupted the stakeholder effort to move forward with various elements of the grant. The following work is unfinished:

- Water quality monitoring for selected constituents of concern in publicly owned treatment works and fish hatchery effluents in the Central Valley;
- Evaluation of potential control strategies;
- Refinement of drinking water treatment evaluations ; and
- Completion of analytical modeling.

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36. There are ongoing efforts to address salt and nutrients in surface waters, including the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) program and the State Water Board effort to develop nutrient numeric endpoints. The CV-SALTS effort is addressing salinity and nitrate problems in the Central Valley. The State Water Board, with the support of US EPA, is working to develop nutrient numeric endpoints to regulate nutrient levels in the State's waters, with the primary goal of maintaining nutrient levels that support the health of aquatic systems. The nutrient numeric endpoints are also to limit excessive growth of macrophytes or phytoplankton, potentially harmful algal blooms leading to oxygen declines, imbalance of aquatic species, public health threats, and a general decline in aquatic resources.

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37. The technical work that has been completed to date on salinity and nutrients, as well as the work yet to be completed (i.e., monitoring), can be used to inform the CV-SALTS and State Water Board Nutrient Numeric Endpoint Process.

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38. Work in the Delta by a multi-agency workgroup which is focused on determining the causes of the ongoing pelagic organism decline (POD) has recently been focused on the pelagic food web and the role of nutrients.

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39. The Workgroup has concluded that adequate information has not been collected to determine current and potential future drinking water quality conditions in the Delta with regard to organic carbon, *Cryptosporidium* and *Giardia*. In addition, the Workgroup has concluded there is inadequate information to develop a comprehensive drinking water policy. Many of the data needs have been identified by the Workgroup.

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40. The Workgroup has discussed whether development of water quality objectives should be a high priority for organic carbon and *Cryptosporidium* and *Giardia* at this time, taking into consideration the resource requirements for objective development and the lack of data to determine current trends in constituent concentrations or loads. At this time, subsequent data, information and analysis would be required to develop water quality objectives for organic carbon, *Cryptosporidium* and *Giardia* to protect the drinking water beneficial

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use. It would be necessary to have a better understanding of the ecosystem needs for organic carbon in the Delta, more data on background levels of these constituents in the Delta and tributaries to the Delta, and completion of the source control and analysis work. There is currently no funding to accomplish this work.

THEREFORE BE IT RESOLVED:

1. The Central Valley Water Board is committed to developing a comprehensive Drinking Water Policy for the Delta and tributaries, and the Board encourages the Workgroup to continue to work with us to develop a comprehensive policy.
2. The Central Valley Water Board believes that other efforts that are underway are the appropriate venues for working on salt and nutrients. These efforts include CV-SALTS, the State Water Board's development of nutrient numeric endpoints and work of the Pelagic Organism Decline (POD) workgroup directed toward addressing questions related to the Delta aquatic food web and nutrients.
3. The Central Valley Water Board recommends that continued efforts of this Workgroup focus on organic carbon, *Cryptosporidium* and *Giardia*.
4. The Central Valley Water Board recognizes that where supported by the technical studies, the Drinking Water Policy should include numeric objectives for organic carbon and pathogens.
5. The Central Valley Water Board recognizes that, while the Workgroup has not agreed upon the ultimate content and scope of the policy, collection of additional data and information on discharges and practices will enhance the effective use of existing models and those under development to predict changes in ambient conditions and loading from significant source categories. The information is essential for evaluating what elements should be included in a comprehensive policy and what resources will be required to develop the policy.
6. The Central Valley Water Board directs staff to take the following actions:
 - Coordinate with the Workgroup to seek grant funding.
 - Continue to ensure that the drinking water constituents of concern are considered when NPDES facilities conduct their anti-degradation analyses.
 - Evaluate whether monitoring should be required for organic carbon, *Cryptosporidium* and *Giardia*, nutrients and salinity from significant sources of these constituents.

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Comment [mmt4]: The Resolution must include a clause that states if the grant funding is reinstated, it must be expended on the studies required by the Resolution.

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Comment [mmt5]: We should have requirements for monitoring for salinity and nutrients as well as that information will be valuable for the CV-SALTS process and nutrient numeric endpoint process.

- Ensure that the priority constituents of concern for drinking water supplies are integrated into the Regional Monitoring Program for the Delta.
- Stay abreast of research on emerging contaminants and periodically assess the need to conduct monitoring of discharges and receiving waters.
- Proactively consult with the California Department of Public Health on reports and evaluation of monitoring data and request input on potential public health impacts at the levels detected.
- Evaluate the relationship between water quality parameters associated with the health of the ecosystem and water quality parameters needed to protect the drinking water beneficial use.

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7. The Central Valley Water Board recommends that the following actions be implemented by other entities:

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- Municipal Water Quality Investigations Program of the Department of Water Resources should monitor for *Cryptosporidium* and *Giardia* in the Delta waterways as well as the tributaries of the Delta in conjunction with the discharger monitoring of effluent quality if the Regional Board determines that discharger monitoring is needed.

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Comment [mmt6]: This item was moved as it should be in Item 6, with direction provided to the Regional Board staff that they proactively consult with DPH.

8. The Central Valley Water Board directs staff to work with the Workgroup to develop an outline for what should be contained in the comprehensive policy and develop a workplan and funding proposal for completion of information needed to support each of the policy elements. The Board directs staff to complete the technical work and develop a draft policy within a year of adoption of this Resolution, and bring a final drinking water policy to the Board no later than three years after adoption of this Resolution.

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I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Water Quality Control Board, Central Valley Region, on _____.

PAMELA C. CREEDON, Executive Officer