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April 13, 2015

VIA EMAIL to: Jessica.Bean@waterboards.ca.gov

State Water Resources Control Board

Re: Comments on the Proposed Regulatory Framework for Emergency Regulations Development to Achieve 25 percent Conservation in Potable Urban Water Use

Dear Board Members:

The Placer County Water Agency (PCWA) appreciates the opportunity to comment on the State Water Resources Control Board's (SWRCB) Proposed Regulatory Framework for Emergency Regulations Development to Achieve 25 percent Conservation in Potable Urban Water Use (Proposed Regulatory Framework). PCWA supports the Governor's Executive Order and is committed to working with the SWRCB on achieving the statewide reduction and offers the following comments to the proposed framework and accompanying questions.

Every water purveyor must, by necessity, live within its water means during this historic drought. PCWA and many of the purveyors within the Sacramento Region have invested in the reliability and sustainability of our water supplies, by building in redundancies that can protect our culture, our economy, our environment and our customers' investments.

Our customers understand that this historic drought is a crisis for the environment and many less fortunate regions of the state, and that our additional sacrifice, above the necessity of our own water supply circumstance, may be necessary for the greater good. To make those additional sacrifices however, our customers must believe that what is asked is fair and that the sacrifice will provide meaningful benefit elsewhere.

General Comments

While the overriding need for a conservation strategy must be that it achieves the 25 percent statewide reduction in potable water use, it is also essential that the regulations be perceived as fair and equitable across the state. PCWA believes there are fairer ways to implement the 25 percent statewide reduction in potable urban water use that takes into account individual and regional factors.

The current proposal uses R-GPCD exclusively to determine conservation levels. The use of R-GPCD without consideration of other relevant variables (e.g., temperature, population density, water prices) does not provide an equitable approach to determining each community's fair share of achieving the conservation mandate. The State Board's own website states: "It is not appropriate to use R-GPCD water use data for comparisons across water suppliers unless all relevant factors are accounted for. Factors that can affect per capita water usage include: rainfall, temperature, and

evaporation rates ... population growth ... population density... socio-economic measures such as lot size and income ... water prices."

As proposed, the framework will produce disparities in the water conservation requirements imposed upon people and residences that are identical in all respects, except for the particular water agency that happens to serve them. Such disparity will undermine, rather than foster, state-wide unity to reach the 25 percent conservation mandate.

PCWA's irrigation customers achieved an overall conservation level of 28 percent last year. Unfortunately, the Proposed Regulatory Framework will not allow PCWA to get credit for the impressive conservation efforts due to the arbitrary exclusion of non-treated water from the conservation calculations. PCWA's Board of Directors made a well-reasoned decision that the best way to achieve water conservation was to limit the impacts to its treated water customers by asking more of its untreated water customers, but under the Proposed Regulatory Framework no credit would be given to the PCWA or its customers for those efforts, despite the real 28 percent water savings that resulted. By ignoring non-treated water conservation, SWRCB is under-reporting conservation efforts.

The SWRCB did not ask how it could help agencies achieve their desired conservation goals but outreach and expedited funding from the SWRCB and other state agencies will be critical to achieving its goal. PCWA encourages significant outreach by the Administration, the SWRCB, and the news media to communicate the new rules and universal goals. Additionally, we urge the State to expedite the appropriation and award of grants from the \$100 million authorized for water conservation provided in Proposition 1 and prioritize the funding to those water suppliers that are assigned to the upper compliance tiers to support their greater contribution to the statewide target.

Response to SWRCB Questions

1. Are there other approaches to achieve a 25 percent statewide reduction in potable urban water use that would also impose a greater responsibility on water suppliers with higher per capita water use than those that use less?

Thank you for including your spreadsheet of percent water use reductions on the SWRCB's. The Agency's staff used this spreadsheet to evaluate alternatives that may be more favorable in terms of public support, more realistic in terms of implementation, and yet still achieve the Governor's goal of 25 percent. After many iterations, the following proposal was found to be favorable:

- Tier 1, Sept 2014 residential demand up to 65 GPCD, conservation target of 10%, 27 suppliers in range
- Tier 2, Sept 2014 residential demand up to 120 GPCD, conservation target of 20%, 141 suppliers in range
- Tier 3, Sept 2014 residential demand up to 180 GPCD, conservation target of 25%, 130 suppliers in range
- Tier 4, Sept 2014 residential demand up to 265 GPCD, conservation target of 30%, 78 suppliers in range
- Tier 5, Sept 2014 residential demand greater than 265 GPCD, conservation target of 35%, 35 suppliers in range

The effects of this proposal are to broaden the applicability of the 10 percent tier and to shift some water purveyors from 35 percent to 30 percent by adding a fifth tier. Broadening the applicability of 10 percent conservation is proposed because it is recognized that demands become quite hardened at lower values that are primarily indoor and a threshold of 65 GPCD is probably more realistic. Adding a fifth tier to shift water users in the range up to 265 GPCD from 35 percent to 30 percent conservation is proposed recognizing that hotter weather and lot size are driving factors for these residences and that allowing them to stay within a level of conservation will permit outside irrigation up to two days per week. This approach seems more equitable and consistent with uses by residents in cooler climates.

More than 70 percent by volume of the urban water use statewide occurs in Tiers 2 and 3 detailed above; therefore, the changes identified herein can occur with very little consequence to the overall conservation expected statewide.

A. **Standardize Conservation Measures at the State Level-** A more principled approach for the SWRCB to take would be to prescribe conservation measures, consistent with the Governor's Executive Order, and let the unique climate and density characteristics of each agency dictate the amount of conservation achieved. For example, the prescribed measures are heavily weighted to achieve substantial conservation from landscape irrigation, which means that the Sacramento Region, which has more landscape water use will save more, and San Francisco, which has less landscape water use will save less. It is not necessary for the SWRCB to prescribe conservation measures and then try to anticipate the amount of conservation those measures must achieve.

B. **Take Climate into Account** - The 25 percent statewide reduction in potable urban water use must take regional climate factors into effect to be fair to all water users. Drier, hotter climates result in higher R-GPCD levels (i.e. inland regions) compared with cooler, higher humidity regions (i.e. coastal areas). PCWA recommends incorporating a climate factor into the spreadsheet model to determine conservation categories. Fortunately, the state has already quantified the climate differences among regions statewide. Such data can be drawn from the California Energy Commission's climate zone maps which can be found at http://www.energy.ca.gov/maps/renewable/building_climate_zones.html

This information summarizes and quantifies measurable differences in climate data in 16 different climate zones in the State and is used by the Energy Commission, utilities and builders for building standards in compliance with California's Title 22 requirements for energy efficiency. A map of the Climate Zones is attached for your consideration. Additional information specific measurable information from the Pacific Energy Center regarding climates within those zones can be found on PG&E's website at <http://www.pge.com/myhome/edusafety/workshopstraining/pec/toolbox/arch/climate/index.shtml> The description of each zone contains information quantifying the days above 80°F for the zone as "Cooling Degree Days" (CDD). The number of CDD (warmer weather) can be used as a proxy to directly correlate outside irrigation water demand usage across the state, and to "normalize" the percent water reduction that can fairly be expected of each region.

Fairness demands that this or similar objective data be used in developing the emergency conservation regulations. Otherwise, residents in hotter regions will be unfairly burdened with meeting the conservation requirements. In a very real example, someone in Northern California may be forced to let all landscaping die because of a 35 percent conservation requirement, while

someone in Coastal California with a 10 percent conservation factor will be free to water landscaping because of lower conservation requirements.

C. **Consider Population Density**.- Like climate, population density should be a factor used by the SWRCB to determine conservation levels. Lower-density populations typically have larger, older homes and larger parcels. For those reasons, holding them to the same R-GPCD standards as newer, more efficient and more densely constructed homes is not equitable. Using data, such as population per square mile of service area, or something similar, the SWRCB could formulate a more complete tier rating by assigning values to agencies into low-, medium-, and high-density subcategories, and then apply a factor to adjust the conservation level (downward for low-density agencies, and upward for high-density agencies).

2. How should the regulation differentiate between tiers of high, medium and low per capita water users?

A. Additional Conservation Levels are Needed – The Proposed Regulatory Framework provides only four conservation levels. The differences between the various levels can represent dramatic impacts to those that are subject to them. At least one more conservation level is needed. Five levels would allow uniform 5 percent increments from 20 percent to 35 percent. The breaking points between tiers can be adjusted by the model to achieve the statewide 25 percent conservation rate.

SWRCB staff has publicly explained that the first tier breakpoint of 55 R-GPCD was derived from the 20 percent by 2020 legislation, which allocates 55 R-GPCD to indoor use. However, the remaining breakpoints have no apparent rationale other than the arbitrary fact that they are multiples of 55. The result is that Tier 4 ranges from 165.5 R-GPCD all the way to 584.3 R-GPCD. Clearly there is the need to split tier 4 into multiple levels.

3. Should water suppliers disclose their list of actions to achieve the required water reductions?

Achieving the desired conservation mandate will be different for each agency. What works for one agency may not work for another agency, even a few miles away. A better approach is for the SWRCB to recognize those agencies that are meeting their reductions. Good press coverage for one agency often puts pressure on the nonperformers to step up. Additionally, the SWRCB could work with an existing agency to establish a voluntary clearinghouse to document the various actions implemented throughout the state. We believe that there is tremendous value in documenting “what works” in conservation for those of us responsible for running programs on the ground.

5. Should additional information be required in the monthly conservation reports for urban water suppliers to demonstrate progress towards achieving the required water reductions?

Reporting should be done using a sliding scale. Agencies meeting their targets should report data that is currently being reported, agencies not meeting their targets should report on expanded data requests.

6. How and when should compliance with the required water reductions be assessed?

Monthly compliance is useful; however many agencies are on a bi-monthly billing cycle. Compliance should be assessed only provisionally on a monthly basis. At minimum, a two month period is necessary to determine whether or not compliance is being achieved. This factor should be taken

into account during enforcement. If monthly compliance is used, PCWA recommends that monthly compliance be assessed using a 12-month rolling average water usage rather than a one-month snapshot. Monthly usage can fluctuate significantly with temperature and precipitation levels. This was seen this past December 2014 when water savings statewide equated to a 22 percent reduction due to that month having significantly more rainfall than the previous December in 2013. However, in January and February 2015, the water savings dropped down to 8 percent and 2.8 percent statewide due to lack of rain and hotter than normal temperatures. Viewing a 12-month rolling average water usage for the month provides a method of correcting for these wide fluctuations.

7. What enforcement response should be considered if water suppliers fail to achieve their required water use reductions?

Enforcement should focus on improving the agency's mandated conservation actions, because compliance cannot be achieved without customer cooperation. Fines or other punitive actions against the agency will not create water, nor will they incentivize customers to improve their conservation.

Sincerely,

PLACER COUNTY WATER AGENCY

A handwritten signature in black ink, appearing to read 'E. Maisch', written in a cursive style.

Einar Maisch, P.E.
General Manager

EM/LY/cs
Attachment

c: PCWA Board
PCWA Legal Counsel

Building Climate Zones California, 2015

-  Building Climate Zone
-  County Boundary

Source: California Energy Commission

