



April 22, 2015

Via email to: [Jessica.bean@waterboards.ca.gov](mailto:Jessica.bean@waterboards.ca.gov)

Ms. Jessica Bean  
State Water Resources Control Board  
1001 I Street, 24th Floor  
Sacramento, CA 95814

Subject: **Input on Draft Emergency Regulations to Implement the Governor's Executive Order B-29-15**

Dear Ms. Bean:

We appreciate the opportunity to provide input to the State Water Resources Control Board (SWRCB) on the *Draft Regulations Implementing 25% Conservation Standard*. We support the Governor's leadership in calling for additional reductions in water use and understand the importance of achieving a 25% reduction in portable urban water use at this time. We are committed to helping the state obtain the necessary reductions.

We appreciate the modifications made to the April 18 proposed framework addressing some of the public comments and concerns received by the SWRCB. However, the April 18 proposed draft regulations still continue to apply a method to apportion urban water supplier reductions which results in several inequity and implementation concerns.

Measurement and analysis of reasonable and efficient water use is complex. Evaluation based on average monthly R-GPCD from three of the driest months of the year does not tell the whole story with regards to water use and whether an area's water use is efficient and reasonable. While we understand the attractiveness of a model based on a three-month R-GPCD average, by not taking into account additional factors, the draft regulations results in an inequitable apportionment of water use reductions for many agencies and cities.

Water agencies have taken many steps over multiple years to encourage water use efficiency and the wise use of water including the implementation of innovative conservation measures and recycled water development. Our past efforts have allowed us to achieve dramatic reductions in water usage; they have also resulted in significant demand hardening, which makes achieving substantial new reductions in water savings during the current drought more challenging. Despite this challenge, we are committed to continuing to seek greater water efficiency and conservation within our service areas during this drought and well into the future.

As a group, the undersigned agencies have worked collectively to identify a more robust method for apportioning water supplier reductions. We have developed an apportionment model, which achieves the 25% reduction in an equitable manner while encouraging long-term water conservation. Agencies may individually or collectively be submitting additional comments on the draft regulations, as the comments below pertain only to the apportionment method.

**We collectively request that the SWRCB consider using the proposed apportionment method, which is detailed on the attached apportionment model and formula calculation explanation.** The proposed method accomplishes the following objectives:

- 1) ***Meets the Governor's mandate:*** Achieves the required statewide 25% reduction from 2013 potable use.
- 2) ***Apportions water supplier reductions based on per capita use:*** Complies with the Governor's Executive Order mandating that reductions be allocated relative to per capita water usage. Those areas with higher average per capita usage are expected to achieve greater reductions than those with lower usage.
- 3) ***Limit Economic Impact of Required Potable Water Use Reductions:*** The Governor and his Executive Order have directed that the State should try to mitigate the impact of mandatory water restrictions on California's economy. California's urban centers comprise the majority of California's economy and the apportionment method should limit negative economic impacts within the urban Commercial, Industrial and Institutional (CII) sector.
- 4) ***Accounts for demand hardening and climate:*** Allocates the reductions to equitably balance prior conservation and current R-GPCD. Recognizes progress toward achieving 20 x2020 goals while achieving the 25% statewide reduction. This avoids penalizing agencies that invested aggressively and wisely in implementing conservation programs before 2013.
- 5) ***Encourages long-term conservation:*** Allocation-based rates provide long-term conservation. By integrating a performance efficiency standard for agencies with allocation-based rate structures, the model encourages adoption of these rate structures while requiring agencies that already have these structures to obtain even greater water savings.
- 6) ***Considers population growth:*** Adjusts for population growth by using average 2014 and 2015 population, production and R-GPCD. This avoids penalizing agencies that have experienced growth since 2013. The statewide target is still based on a reduction from 2013 potable production.
- 7) ***Sets minimum and maximum conservation requirements:*** Every agency must save at least 10% and no agency is required to cut more than 35%.

**Specifically, we ask the SWRCB to use the attached proposed apportionment method that:**

- 1) **Optimizes apportionment of water supplier reductions based on GPCD:** The proposed alternative sets targets based on average GPCD and customizes each agency's required reduction based on a GPCD target that accounts for past conservation savings and current R-GPCD. It incorporates climate, and appropriate indoor and outdoor water use. It does not skew or favor any hydrologic region by using solely a three-month short-term GPCD average.
- 2) **Uses long-term average GPCD to apportion reductions:** The proposed approach uses more than the July through September 2014 R-GPCD values. Focusing on peak water use months inequitably penalizes agencies in drier and hotter areas of the state. It also does not account for opportunities to improve indoor efficiencies, as it does not capture those inefficiencies which show up only in R-GPCD calculations for cooler months. Due to the high variability in month-over-month water demands across the state, the SWRCB should use a nine-month average of R-GPCD and State submitted GPCD data from 20x2020 reporting to the Department of Water Resources.
- 3) **Accounts for prior conservation:** Every community is allocated a portion of the 25 percent based on their average total GPCD from June of 2014 through February 2015. This is weighted based on the conservation each agency has obtained beyond their 2020 targets. This approach deals with the complexity inherent in California's water system, and requires those agencies who have not taken effective conservation actions to do more while still meeting the Governor's mandate of basing the required reductions on per capita water use.
- 4) **Adjusts for climate differences:** Outdoor water use should be efficient in both cooler and warmer climates. The apportionment method used should take differences in climate into account so that water efficient landscape, which have been or will be installed across the state as part of the Governor's effort to replace 50 million acre feet of turf, can be maintained in the state wide variety of climate zones. The proposed alternative factors in climate because it compares an agency's water usage to itself through the use of the 20x2020 GPCD.
- 5) **Continue to recognize the effectiveness and impact of Allocation-based tiered rate structures:** As previously communicated, allocation based tiered rates send a strong price signal encouraging customers to efficiently use water. To develop allocation based tiered rates a significant amount of data is collected to set individualized budgets. This data includes persons per household and information about irrigated landscape area that can be used to set efficiency targets. We encourage the SWRCB to use a performance-based efficiency standard, which is estimated at 15%, for calculating the targets for agencies with allocation-based rate structures or those that transition to them during the reporting period.

This has been incorporated into the proposed model. The performance efficiency standard is based on:

- a) ***Residential indoor residential use at 55 gallons per capita per day:*** A state standard was set in SB x7-7 of 55 GPCD for residential use. December of 2014 was a wet month across the state, the residential water use in that month should reflect mostly indoor demand. A review of the R-GPCD data submitted to the State Board shows that the average indoor use across the state is close to 72 GPCD. Meeting a 55 GPCD target is a 24 % reduction of average indoor use.

- b) *Outdoor landscape allocation based on drought tolerant plants and drip irrigation or other equivalent irrigation system:*** This represents a more efficient landscape standard than is currently in the State's Model Water Efficient Landscape Ordinance that strongly limits the use of turf (proposed ET Adjustment factor of 0.6). It will apply to residential, commercial, industrial and institutional landscape accounts. It also limits the impact on indoor commercial, industrial, and institutional water use that could adversely impact the economy.

We recognize and appreciate the SWRCB's challenge in developing an easy to understand apportionment of the 25 percent water use reduction allocating a proportionally higher reduction to those areas with higher per capita use. The draft regulations set out an outline for the implementation of a 25 percent reduction in potable urban water use. Unfortunately, the draft regulations are unlikely to result in an apportionment scheme that recognizes the prior adoption of water conservation practices and the resultant demand hardening, and the goal of ensuring efficient water use by Californians. The apportionment method we are submitting accomplishes these things while still obtaining the 25 percent mandatory reduction. The sponsors of this letter would like to acknowledge the work of the Advanced Research in Government Operations group and in particular, Patrick Atwater, for his hard work in putting this approach together.

We agree with the SWRCB that the management of any limited resource includes the practice of conservation, and understand the impacts the drought is having on the state. Thank you again for considering our comments and our proposed appropriation method. We look forward to discussing the proposed method in greater detail with you and are open to working with you to refine it to meet the SWRCB's needs. In the meantime, please do not hesitate to contact Fiona Sanchez with the Irvine Ranch Water District at (949) 453-5325 if we can be of assistance to you or your staff, or if you have any questions on the proposed apportionment model.

Sincerely,



Jonathan Daly, General Manager  
City of Corona



Paul D. Jones II, General Manager  
Eastern Municipal Water District



John D. Vega, General Manager  
Elsinore Valley Municipal Water District



Paul A. Cook, General Manager  
Irvine Ranch Water District



Brian Brady, General Manager  
Fallbrook Public Utility District



David W. Pedersen, General Manager  
La Virgenes Municipal Water District



Brett Sanders, General Manager  
Lakeside Water District



Joone Lopez, General Manager  
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Jeff Armstrong, Interim General Manager  
Rancho California Water District



Tom Kennedy, General Manager  
Rainbow Municipal Water District



Rich Atwater, Executive Director  
Southern California Water Committee



John Rossi, General Manager  
Western Municipal Water District



Wendy Chambers, General Manager  
Carlsbad Municipal Water District

Enclosures

cc: Caren Trgovcich, Chief Deputy Director  
Eric Oppenheimer, Director of the Office of Research, Planning and Performance  
Max Gomberg, Office of Research, Planning and Performance

## Proposed Alternative Framework Calculation

Both the recent short term monthly water usage numbers reported to the State Water Resources Control Board and the SB x7-7 20% by 2020 long term targets are important factors for setting appropriate and equitable conservation targets. Please see below for the formula used to calculate the conservation targets which balances both approaches in the Alternative Framework apportionment model.

### Proposed Formula

Target Annualized GPCD = MAX(MIN( [2020 target ]\*([conservation factor ]\*(1-([annualized 2014/15 R-GPCD] - [40 GPCD floor])/ [Max annual R-GPCD statewide])),[2013 annualized GPCD]\*( 90% )),40,(65%)\*[ 2013 annualized GPCD])

Breaking that formula down piece by piece:

- Every community must conserve a percentage beyond their 2020 targets to a degree weighted by their 2014/15 R-GPCD.
  - [2020 target ]\*[conservation factor ]\*(1-([annualized 2014/15 R-GPCD] - [40 GPCD floor])/ [Max annual R-GPCD statewide])
- No community must conserve more than 35%.
  - (65%)\*[ 2013 annualized GPCD]
- Every community must conserve a minimum of 10%.
  - (90%)\*[ 2013 annualized GPCD]
- There's a flat floor of 40 GPCD built into both how far communities have to go beyond their 2020 targets and as a general floor for targets.

The resulting targets along with comparisons to the four tier SWRCB initial proposal, SWRCB revised April 18 proposal, and an isolated SB x7-7 20% by 2020 framework are provided in the attached apportionment model spreadsheet.