



# Manny Rosas

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December 1, 2015

Chair Felicia Marcus and Board Members  
State Water Resources Control Board  
1001 I Street, 24th Floor  
Sacramento, CA 95814



RE: Comment Letter - Urban Water Conservation Workshop

Dear Chair Marcus and Board Members:

Thank you for the opportunity to provide personal comments to the State Water Resources Control Board (State Board) regarding the potential extension and modification of the existing Emergency Drought Regulations.

I worked for East Bay Municipal Utility District for 14 years and learned the hard lessons of California's 1987-1992 drought. In addition, I spent the last 12 years of my career heading the City of Redwood City's Water Department, where we successfully reduced the city's water footprint by 30% by the implementation of an aggressive indoor conservation program, combined with the adoption of "Water Budget Rates" for landscape irrigation and developing a water reuse program. I believe my comments are worthy of your consideration.

## **Current Emergency Regulations Are Unfair And Inequitable**

The most important lesson water agencies learned during the 1987-1992 drought was, that the implementation of mandatory percent water reduction cutbacks compared to a previous year, were unfair and inequitable to water users and caused two negative effects:

1. It punished water-conserving households that, prior to the drought had applied water use efficiency practices, and as a result of the mandated percent water use cutbacks their hardship for compliance was painful and severe.
2. It rewarded water-wasting households who previous to the drought had been using high amounts of water, and they evidently had no difficulty complying with the water use cutbacks by simply reducing their abusive water waste.

The solution to the unfair policy of mandating percent water use cutbacks based on previous usage was first established by the Irvine Ranch Water District in 1991, when they developed and implemented individualized water budgets for their customers that took into consideration the



number of residents to estimate their indoor water budget, and the size, type of landscape and local evapotranspiration (ETO) rates to estimate their outdoor budget, while providing consideration for additional water for special needs.

The individualized “Water Budgets” model has now been adopted by many other water agencies and has been recognized as a fair and equitable water use efficiency standard to use during droughts and non-drought periods, which significantly promotes and rewards water conservation and underlines and penalizes water waste.

Although it is plausible and commendable that the State leadership is implementing state-wide drought emergency regulations in response to a historic multi-year drought, my recommendation is that the State Board learn from, and work with water agencies to develop effective water use efficiency standards based on the Irvine Ranch’s model of “Water Budgets”.

By implementing a “Water Budgets” framework, the Board would not only adopt and put in place a fair and equitable way to provide for emergency drought regulations but also for long-term water use efficiency standards.

**Long-Term Water Reliability And Adaptability To Climate Change**

My second piece of advise to the State Board is in regards to climate change and the State’s responsibility to provide and support water supply reliability and improve drought resilience.

Studies and analysis of the global warming effects on water resources have identified two critical changes that are negatively impacting water supply levels:

- A reduction of snow pack due to the rise in the snowline and a thinner snowpack in elevation zones.
- A drastic shift in snowmelt runoff to earlier in the year and increased amounts of precipitation falling as rain instead of snow.

The combination of a reduction in snowpack and early snowmelt runoff have the negative impact of reducing water supplies and stress the need to develop new strategies to achieve water supply sustainability.

The State’s responsibility to provide and support a reliable water supply must now adapt to a new global warming reality, by rapidly expanding and developing new State and local water storage facilities. Ignoring the global warming effects on the water supply levels will only debilitate the State’s and the water agency’s resilience to future droughts, which are predicted to occur more frequently.



Careful water resource assessments and cooperative participation of water agencies and stakeholders to increase water storage capacity should prove to be a constructive way forward in adaptive water management for the State of California.

### **Summary**

In summary, I would like to reaffirm the need for the State Board to replace the outdated policy of implementing percent water reduction cutbacks compared to a previous year, with effective water use efficiency standards based on the Irvine Ranch's model of "Water Budgets"; and to urgently increase State and local water storage capacity to adapt to a new global warming reality and achieve water supply reliability and drought resiliency.

I thank you for your consideration of my recommendations and look forward to an effective and successful water management for the State of California.

Sincerely,

Manny Rosas

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Retired Redwood City Water Superintendent

### **REFERENCES**

Ekstrom, Julia A., and Susanne C. Moser. 2012. *Climate Change Impacts, Vulnerabilities, and Adaptation in the San Francisco Bay Area: A Synthesis of PIER Program Reports and Other Relevant Research*. California Energy Commission. Publication number: CEC-500-2012-071.

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