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20x2020 Team on Water Conservation  
California Department of Water Resources  
P.O. Box 942836  
Sacramento, CA 94236-0001

**Re: Draft 20x2020 Water Conservation Plan**

To Whom It May Concern:

Carmichael Water District (District) has reviewed the Draft 20x2020 Water Conservation Plan (the Plan) and offers the following comments:

**1. Proper Use of the Plan's Findings**

The analysis conducted for the Plan is admittedly broad and based on many assumptions due to lack of data, ease of analysis, and other issues. The best use of the Plan therefore is as a general description of water use throughout the state. Even though the Plan acknowledges these data shortcomings and over-generalization of regional water uses, it still uses its findings to recommend base and goal gpcd values. It provides some caveats that actual implementation should be flexible, but it leaves it up to future efforts to develop the process. The concern is that the Plan and its goals will be used to create the legislation mandating conservation, before the details and reality of individual agency needs are ever analyzed.

**2. Regional Approach**

The Plan indicates that water demands are based on DWR Regions for ease of analysis. It then develops and recommends gpcd goals for each region. This over-simplification may be appropriate for general State-wide water use characteristics, but is completely inappropriate for assigning gpcd goals. The Plan describes the coastal regions as low water users and assigns them much lower percentage reductions in goal setting than the inland regions. However, even a cursory review of specific agency water demands in these coastal areas indicates some coastal agencies have water demands equal to or greater than some inland agencies. In addition compared to many communities in the southern regions of California, Carmichael's lot sizes are

consistently larger. The difference in lot sizes were not considered as part of the gpcd equation leading to a skewed gpcd goal. By assigning a lower regional reduction goal, these high water using agencies are not treated equally and will not have to reduce the demands nearly as much as inland agencies with similar demands. Another issue with the regional approach is the lack of ETo influence. For example, the Sacramento River region covers areas from the Pacific Crest, through the Sacramento Valley into the coastal mountain range. Each of these areas exhibit unique weather and precipitation characteristics, yet the Plan assigns one gpcd goal for the entire area. Again, the Plan relies on implementation to resolve this issue, but the concern is that legislation will be based on the Plan's goals prior to the development of any detailed agency evaluation process. See Water Budgets below for an alternative and more equality-based approach to goal setting.

### **3. Return Flows**

The Plan makes no mention of the connection between water demands and flows returned to the State's river systems. This impact to water supplies is particularly pronounced in the Sacramento River region. The Plan calls out the region as one of the highest gpcd demand water users; however, a large portion of that demand is returned to the river systems through wastewater treatment and effluent discharge. Although the demands may be higher in this area, the impacts to State-wide water supplies could actually be less than a similar demand in the coastal regions. Depending on the specific wastewater agency, an average of 300 gallons per day (at least 100 gpcd) per equivalent single-family residence is returned to the river system. When considering limited State and local agency resources, the resources could be better applied elsewhere with a larger impact on improving supply volume and reliability.

### **4. CII**

The Plan groups commercial, industrial, and institutional (CII) into the gpcd calculation. The extent and demands of CII accounts varies greatly between each water agency depending on how much CII is in the service area. Those agencies with high water using industrial, colleges and universities, or large office or retail customers will exhibit gpcd demands much higher than those agencies with mostly residential demands. This creates an arbitrary demands goal that is not reflective of the agency's actual conservation programs or needs. The CII demands should be removed from the gpcd goal and treated separately through a water budget process.

## **5. ETo, Demographics, Economy**

The Plan states that ETo, demographics, and economy are important factors in the gpcd calculation, but it did not include them stating lack of information, insufficient time, and ease of analysis as factors. Without these factors included in the goals, the agency-level validity of the goals is diluted and many could view them as unreasonable. The Plan states they should be factored into the implementation process, but still sets the regional goals without including them. It would be difficult to include them in regional goals because by definition they are more locally defined. They could be included if goals were set by the water budget process, instead of the regional gpcd method. See below for additional discussion of water budgets.

## **6. Agriculture Efficiency**

The Plan specifically states that it is not considering demand reductions in agricultural water use stating that the Governor's charge was to achieve a twenty (20) percent reduction in per capita use, implying urban water use only. The Delta Vision Strategic Plan Goal 4, however, specifically includes industrial and agricultural, in addition to residential demands, in its goal to reduce per capita demand by twenty (20) percent by 2020. This comment does not promote one goal over the other, but suggests that the various planning agencies and task forces within the State should develop and promote a consistent message on these and other issues.

## **7. Water Budgets**

The District recommends that goals be set using water budgets instead of the regional approach. While this may require more effort, it will be made easier by the improved data collection recommended in the Plan. The tracking and reporting will simply be another element added to the UWMP (for those required), annual DWR reports, and/or CUWCC reporting (for members). Water budgets will be assigned to various residential customers based on lot size and number of residents. Existing use will be used as the base line, and the goal would be for each customer group to be within their assigned water budget. The process will also separate CII accounts from the residential accounts to de-couple the highly variable affects of CII on gpcd values. Note that using a water budget as opposed to the gpcd method is only a different accounting method. Both methods still would require the same amount of conservation program efforts. The water budget method is simply a more equitable and valid accounting method for each individual agency.

Implementing water budgets will be a longer process for those agencies not yet fully metered. Those agencies could use a parallel process, assigning water budgets to customers already metered, and using the general gpcd

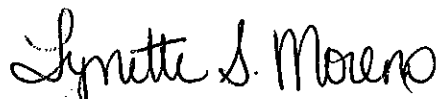
approach for those not yet metered. All accounts will be metered by 2020, so the water budget process could be fully implemented within the Plan's timeframe.

**8. Plan Not Ready for Legislation**

The Plan lists several caveats and recommendations for implementation to create a fair and equitable goal for each water agency; however, the Plan should go further to state that its findings are not suitable to develop legislation and that more effort should be spent on implementation details prior to creating legislation mandating conservation. Each water agency serves a unique customer base with varied water requirements and applying regional requirements may result in an inefficient use of resources, unequal treatment, and failure to reach the desired water demand reductions.

Thank you for your attention and consideration of the District's viewpoint.

Sincerely,



Lynette S. Moreno  
Assistant General Manager