



May 22, 2009

20x2020 Agency Team
Department of Water Resources
1416 Ninth Street
P.O. Box 94236
Sacramento, CA 94236-001

Re: Comments on Final Draft 20x2020 Water Conservation Plan

Dear 20x2020 Agency Team:

The East Bay Municipal Utility District (EBMUD) supports the Governor's call to reduce statewide per capita water use by 20% in the year 2020 and we appreciate the opportunity to provide additional comments on the final draft of the 20X2020 Water Conservation Plan. EBMUD applauds the efforts of the 20X2020 Agency Team to coordinate statewide data collection and reporting standards, however, we have serious reservations about the absence of supporting data in establishing the proposed reduction goals and feel the Plan lacks sufficient detail on the data and methodologies to be used in achieving equitable regional baseline and target reduction levels for efficient statewide water use.

Data Standards – Request Removal of Establishing Regional Targets in Statute

- The 20x2020 Agency Team clearly stated in Technical Memoranda Nos. 1 and 2 (TM 1 and TM 2) that the quality of data used in the analysis needs to be substantially improved before the targets are used as anything other than voluntary targets for planning purposes. “...*the analyses provided in this 20x2020 Plan should be treated as initial estimates, based on the best available information. An important step in implementing this 20x2020 Plan will be to standardize and improve the data collection process.*” (pg 11). EBMUD concurs with the Plan's emphasis on establishing data collection standards and database, and agree with the acknowledgment that current data should be treated as initial estimates and the baseline GPCD estimates should be improved and refined as new information becomes available.
- The draft Plan acknowledges a lack of even reporting among market sectors and certain years that raises the issue of potential inequity in how baseline and target GPCD levels were determined. “*Some suppliers did not provide data for certain market sectors and/or certain years. Suppliers also used different methods in measuring water production and delivery. It is also evident that water suppliers had different understandings of specific data fields.*” (pg 13) EBMUD agrees with reporting and assessing progress in implementing water conservation programs in 2015 however, such an assessment needs to recognize and account for other external market factors beyond water agency control that can affect per capita water use in meeting interim targets.

- EBMUD strongly supports the recommendation to mandate uniform data collection and establish a statewide database and recommends the state work closely (through technical and financial assistance) with the California Urban Water Conservation Council (CUWCC) or an alternative online reporting database. Standardization of data collection and creation of a centralized database for water supply and demand data should be the primary focus of the 20x2020 plan implementation. The Plan should recognize the reporting that is already prepared for the CUWCC and for urban water management plans, to avoid redundant reporting.
- One of the key obstacles and limitations of this process was lack of standardized and complete data. This has to be resolved prior to the establishment of any targets in statute to improve this process and be able to measure implementation performance. It is inappropriate and counterproductive for the 20x2020 Agency Team to call for establishing the regional targets in statute on the basis of poor quality data, as recognized by the team in TM 1, TM 2, and the Draft Plan. EBMUD requests that this recommendation be removed from the final report.

Compliance Criteria – Need Better Explanation of Data/Methodology to be Used

- The Plan contains no clear process and no methodology has been presented to adequately equate hydrologic region conservation goals with individual agency actions, and potential enforcement regimes. Criteria to guide the structure of regulation, enforcement and incentives that involves setting baselines or targets on an agency-by-agency basis can not rely on the specific values provide in the Plan, particularly on the hydrologic level, but rather should focus on the methodologies. As described above, the 20x2020 Plan acknowledges the regional targets are based on limited data on per capita water use in each region, based on assumptions on water savings due to code changes, various best management practices (BMPs), and grant funding.
- There are tremendous differences in water use within hydrologic regions, partially due to differences in the extent of conservation programs, but also due to climate, the mix of uses, housing density, etc. The basis for many savings estimates in the draft plan is not described, and savings estimates for individual measures are different in the Draft Plan than the estimates presented in TM 4 and TM 5, with no explanation of why the numbers changed. The regional targets should be viewed as preliminary estimates, and the Final Plan should contain a recommendation to revise the targets in 2015 based on higher quality data that will be collected over the next five years.
- The Final Plan should propose several alternative methods for translating regional targets to individual water agency targets. Individual water agencies would then be able to select the method that best suits their situation.

Baseline and Target GPCD Levels – Maximize Flexibility/Previous Credit to Meet Targets

- The Plan lacks specifics on how regional differences were treated and what effect they had on setting of GPCD reduction targets. *“Urban water use varies widely among regions, due to the effect of past conservation efforts, community attributes, and climate differences. A uniform statewide 20 percent reduction in water use would fail to properly account for these regional differences.”* (pg. 8) The Plan acknowledges (pg. 17) that a small error in baseline saturation estimates can have significant impacts.
- EBMUD is encouraged that the Plan recommends providing credit for past conservation program implementation and associated water savings prior to the 2005 base year, yet the Plan

is missing the metrics or proposals that are to be considered in quantifying past credit. Many of the recommendations call for mandating specific measures (landscape irrigation BMP, conservation pricing structures) or investigating requirements (total or partial conservation offsets). The Plan should avoid mandating measures that may not adequately account for local circumstances, previous conservation achievements and other market factors. "*Professional landscape and irrigation design, proper installation, careful maintenance and management of the site, and the selection of high quality irrigation equipment are some of the factors that can influence the efficient use of water in the landscape.*" (pg. 22) Methodologies should be established to set individual agency targets, and individual agencies should then be responsible for meeting those targets with conservation measures that are best suited to their service areas, rather than being required to implement measures mandated by the state.

- The 20x2020 Plan recognizes variation in per capita use and conservation across the state. "*Retail water suppliers in California have reported per capita water use remaining steady or dropping since the early 1990s in many parts of California...*" "*...other factors have been at play counteracting the effect of BMPs, codes, and ...regulatory initiatives...*" (pg. 2, 15). Suggest detailed implementation strategies include water use efficiency benchmarking and established water budgets where feasible by hydrologic region and ET zone to balance target GPCD reductions between regions (and agencies) that have a history of water conservation implementation vs. those with little experience or no active program. Savings values in Table 7 appear to be somewhat arbitrary and require substantiation. Also, it is unclear how code and BMP savings may overlap and result in double-counting.
- Successful reduction in per capita water use includes local design and implementation of appropriate and cost-effective water conservation measures. Ongoing recognition of this fact will require flexible review and setting of interim and final targets across regions and for individual water suppliers and their customers that have already reduced their conservation potential from early adoption of water efficiency practices and technologies.
- Per capita reduction measurements are not always a good measure of conservation success as it masks the reduction in "new demand" that may exceed projections. Free market forces and new water-using technologies such as pools, spas, increased landscaping, water-using appliances, etc. work against per capita measurements and need to be taken into account when establishing and reporting on achieved targets. Also, many commercial and industrial sectors have already reduced their use and further conservation investments, while possible, can be costly and have potential loss of business impacts. As a result, the GPCD metric does not capture the real impact of conservation measures, including what consumption would have been *in the absence* of such measures.
- The Plan needs more specifics on how incentives and enforcement strategies will be implemented equitably to avoid penalties and disincentives for areas that have demonstrated leadership in conservation implementation. The Performance Metric and Implementation Plan Technical Memorandums will be a key component of the Plan.
- As noted in the draft Plan, the target for Region 2, which encompasses the EBMUD service area, is very aggressive. The baseline for Region 2 is 157 and the 2020 target is 131 GPCD. The 26 GPCD regional savings is to be achieved over an 11 year period. The Plan assumes this target to be achievable, as it represents an estimate of savings from *basic measures*. The

majority of savings from basic measures correspond to savings from plumbing code and 80 percent compliance with cost-effective BMPs. The regional targets (particularly for Region 2) should be modified to reflect more realistic compliance levels recognizing past conservation efforts, relative cost-effectiveness of BMPs by evidence of most MOU signatories are not at 80 percent compliance and that only about 60% of California's population is represented by an MOU signatory.

- EBMUD concurs with the exclusion of recycled water use from the baseline urban per capita use. It is equally important to give similar credit to agencies that have promoted recycled water use as well as accelerated implementation of conservation measures. The state's legislative and regulatory framework has well established precedent to not discourage water use efficiency. Would like to see reported ranges in GPCD (Table 4) also included in Table 3 by sector.
- Suggest including high-efficiency clotheswashers into the baseline measures. Water- and energy-efficient appliances have been rebated since the mid 1990's, and the advancement in technology and development of regional programs between both water and energy suppliers (e.g. Bay Area Water Agencies and Pacific Gas & Electric partnership) has resulted in a more mature program than many other BMPs such as landscape water budgets and weather-based irrigation controllers. EBMUD supports the state's efforts to pursue a federal waiver for clotheswasher standards and other efforts to maintain and expand efficiency codes/ordinances.
- The State should help facilitate and promote flexible conservation measures including new technology development and market adoption strategies to help ensure reduction goals and ongoing conservation success. Eligible accelerated conservation measures should include alternative non-potable water supplies such as groundwater, graywater, rainwater capture, etc.

Cost-effectiveness

- Not all BMPs have been implemented and may not be cost-effective statewide. The landscape irrigation BMP is complex due to water use comprised of a "system" of irrigation technologies, equipment and management practices, most if not all of which are outside the control of the water supplier. The CUWCC MOU has been modified to recognize that landscape water budgets (BMP 5) are costly and complicated to implement. Weather-based irrigation controllers are still an emerging technology and the market has not matured to a level for established water savings estimates. These and similar issues should be acknowledged in attempting to quantify the potential conservation savings from the landscape BMP.
- Suggest the Plan list the revised CUWCC MOU and associated BMP Check List and Flex Track options as current methods to achieve baseline and accelerated coverage goals. The assumption of full implementation of BMPs as being cost-effective needs further refinement. It does not acknowledge the variation of implementation across regions and the CUWCC's own experience with modifying the BMPs to reflect more cost effective approaches such as the recently adopted Flex Track. Evidence that not all BMPs are being implemented would support this conclusion. The Flex Track option could include new conservation measures such as pre-rinse spray valves, steam sterilizers, and weather-based controllers.

The cost-effectiveness threshold for water suppliers and possibly regions is subject to the "need for water" and the relative cost of new supplies. Cost estimates typically include a variation of avoided, average and marginal costs of supply. Demand hardening (pg. 2) is a concern for

water suppliers (and regions) that have already implemented aggressive conservation measures and reflects the reality of diminishing returns on conservation investment. Compliance rates of 80% may be difficult and deemed not cost-effective for certain markets and technologies.

Urban and Agricultural Use - Targets Should Include All Statewide Water Use

- Compliance criteria should note that statewide conservation efforts must focus on both urban and agricultural efficiency to achieve an overall reduction in water use. The draft Plan acknowledges that agricultural water use must be more efficient to achieve a reduction in overall water use yet the 20x2020 Agency Team does not recommend that an agricultural conservation plan be developed. *“The focus on urban use here does not diminish the relevance of agricultural use to the state’s total water use or potential for significant reductions in overall state water use from the agricultural sector.” (pg. 2) “To achieve a reduction in overall water use while protecting the Delta’s ecosystem, it is recognized that both urban and agricultural water use must be more efficient.”*
- The Plan is noticeably silent on agricultural water use and strategies, targets for improved efficiency to help meet statewide water supply reliability goals. Previous 20x2020 Agency Team comments stated that agricultural use would be handled in a separate process/document; please provide more details and guidance on how and when the agricultural use process will be developed and enacted. Cost effective technically feasible BMPs that maintain the economic output of the agricultural sector should be identified in the agricultural water conservation plan. This recommendation should be added to the final report.
- While the 20x2020 Plan refers to reductions in urban per capita water use, it is important that the Plan acknowledge the needed support action by all water users, including residential, commercial, industrial and agricultural water users, local and regional planning agencies, state and federal agencies, chambers of commerce, and business, commercial and industrial professional and trade associations toward achieving the stated goal. A cap and trade program is an important component to a statewide water use efficiency strategy and should include both separate and combined urban and agricultural cap and trade options.

Water Metering – Installations and Funding Should be Accelerated

- The Plan recognizes that metering of water use and direct consumption information are invaluable in providing customers with necessary information to effect their individual reduction strategies. It will be difficult to conserve water in areas of the state that are not metered because customers have no knowledge of how much water they are using and no economic incentive to save water. EBMUD supports metering of all customers in the state as soon as possible and suggests that financial incentives for submeters and for installation of “smart” meters be included in the Plan.
- Advanced metering infrastructure (AMI) is a new emerging technology and platform for the water industry that mirrors what has been developed in energy markets and has been shown to reduce water (and associated embedded energy) use by approximately 20 percent. AMI can provide real time metering information in gallons as frequent as every hour which will advance the availability and integrity of water consumption data statewide. EBMUD recommends that the state help promote this new technology and retrofit/upgrade of existing meters through financial and technical assistance.

Public Goods Charge – Should not be a Mandate

- There is a fundamental flaw in attempting to “transplant” the public goods charge, as instituted in the investor-owned energy utility (IOU) sector, into the public water agency universe. IOU electrical utilities retain the funds generated by the public goods charge to finance efficiency programs that benefit their own ratepayers, who actually pay for such programs in their bills.
- By contrast, the “public goods charge” proposed in the 20x2020 Plan is a de facto tax that would redirect ratepayer funds into programs that could be implemented anywhere in the state. This would be a grave disservice to ratepayers within water agencies that have already made substantial investments in water use efficiency. DWR should devise other incentives for water agencies that have failed to plan and invest sufficiently in water conservation.

Conservation pricing – Should Remain under Local Water Agency Control

- Recognizing that water conservation pricing structures can be helpful in promoting efficiency, the setting of water rates should remain under local water supplier purview. EBMUD encourages state assistance to water agencies that wish to implement alternative conservation pricing structures and suggests the CUWCC BMP 11 be referenced as an alternative program.

State Support – Recommend Expanded Conservation Grants and Education

- The Plan references the CALFED Water Use Efficiency Comprehensive Evaluation funding scenarios of \$30 million per year between 2005-2014 and \$7.5 million thereafter until 2020. This level of funding appears insufficient to assist agencies and regions in achieving the stated 20x2020 GPCD goal. EBMUD recommends additional funding be pursued.
- In Table 7 (pg. 24) the estimated savings from grant funded measures does not appear to be evenly distributed, particularly in light of some of the large reductions from basic measures in Regions 2 and 4 that have already implemented lower cost conservation programs and face potential demand hardening impacts.
- A statewide water use efficiency public education campaign similar to Flex Your Power has long been needed and the Save our Water Campaign is a key component of the Plan.

In summary, the 20x2020 draft Plan contains a number of useful elements, but will require substantial revisions, including an agricultural water efficiency plan, before it can be issued as final. EBMUD looks forward to working with the 20x2020 Agency Team to develop the necessary improvements to achieve the Governor’s goal. If you have any questions, please contact me at (510) 287-1675.

Sincerely,



Richard W. Harris
Manager of Water Conservation