



December 8, 2008

Via email: 2020comments@ccp.csus.edu

*Re: 20X2020 Public Draft Technical Memoranda, Task 4 and Task 5*

Dear Members of the 20x2020 Agency Team:

On behalf of the Natural Resources Defense Council (NRDC), I appreciate the opportunity to review and comment on the recent work products of the 20x2020 Agency Team:

- *Conceptual Draft Technical Memorandum Task 4 – Potential Conservation Savings From Current Actions (TM 4)*, and
- *Conceptual Draft Technical Memorandum Task 5 – Potential Conservation Savings From New Actions (TM 5)*

I recognize that the Agency Team is wrestling with tremendous amounts of information, large data gaps, and high levels of uncertainty, and commend the Agency Team for its efforts to think comprehensively about how to reduce California's per capita water use 20 percent by 2020, despite these challenges.

NRDC agrees with the general conclusion reached in TM 4 and TM 5, that the existing codes and standards and BMP implementation are unlikely to get us to the stated goal of reducing per capita water use 20 percent by 2020. We also agree with the implicit findings that there are a large number of tools, measures, and policies that can help California reach or surpass that goal, and that some of these tools may require legislative and/or regulatory actions.

We would like to offer several overarching comments about the Technical Memoranda, and then provide some specific questions and comments about potential new actions.

## **I. General Comments**

**Data gaps.** As has been pointed out in each of the team's technical memorandum, data on water use, and other factors required for this analysis is inexcusably poor. For example, TM 4 notes that "[d]evice turnover rates, BMP implementation rates, the negative interaction between the two due to free ridership, device specific savings, all suffer from varying levels of uncertainty." (TM 4, p.15). This hampers not just these efforts to identify

and target additional efficiency opportunities, but will impede the state's efforts to monitor and verify savings. Some of the measures discussed in TM 5, such as advanced meter reading, remote sensing, and other approaches should be deployed to the fullest extent possible to improve program design, implementation, and evaluation.

***Compliance.*** TM 5 does not discuss consequences or penalties for non-compliance with conservation requirements, other than the discussion of a certification program for water supplier efficiency performance. Enforcement is a key element to achieving the program's goals. We urge the Agency Team to address this issue more fully in a future memorandum.

***Decision-making process and timeline.*** TM 5 discusses a large number of measures and policies, but does not specify what the state will do. We understand that it may be premature for such specificity, but we would appreciate a clearer understanding of when, where, and how such decisions will be made. Also, while TM 4 and TM 5 identify areas where additional questions or uncertainties remain, it does not identify the process or path to resolve those questions.

## II. Specific Measures

Below are our comments on some of the specific measures reviewed by the Agency Team, as well as some suggestions for additional measures that we suggest the Agency Team evaluate. These include:

- ***Smart controllers in the non-residential sector.*** It appears that TM 5 evaluates potential savings from smart controllers only in the residential sector. If this is true, we urge an expanded consideration of this measure. Landscape irrigation represents approximately one third of commercial/industrial/institutional water use, or approximately one million acre-feet of water, and should also be considered as a target for this technology.
- ***Residential graywater systems.*** These systems should be assessed for their potential savings. The governor signed SB 1258 (Lowenthal) earlier this year, requiring the Department of Housing and Community Development, at the next triennial building standards rulemaking cycle, to adopt and submit to the California Building Standards Commission for approval, building standards for the construction, installation, and alteration of graywater systems for indoor and outdoor use. Thus, there may be the potential to promote their increased use in California.
- ***Point of use hot water systems.*** These on-demand systems may provide cost effective conservation savings by avoiding the need for customers to keep faucets and showers running while water heats up.

- **Showerheads.** TM 4 and TM 5 should evaluate the savings potential of showerheads with flow rates below the current 2.5 gallons per minute (gpm) standard. The CEC Public Interest Energy Research (PIER) program is evaluating the potential for upgrading this standard. Also, EPA's WaterSense Program is preparing a voluntary standard with a preliminary maximum flow rate of 2.0 gpm at 20-80 psi. TM 5 should evaluate the potential reduction in per capita water use from a change to a 2.0 gpm standard, as well as from a voluntary standard and incentive programs for showerheads with flow rates of 2.0 and 1.5 gpm.
- **Water loss control beyond BMP 3.** As TM 5 notes, "leak detection and repair in California is still in its infancy." (TM 5, p.2). California, along with the rest of the United States, lags far behind many other countries in putting into place modern standards and procedures to minimize these water losses. And as the TM 5 analysis shows, improving water loss controls has enormous potential to reduce per capita water use. We strongly support inclusion of a water loss program in the final 20x2020 plan.

### III. Qualitative Assessment

**Loading Order.** We greatly appreciate inclusion of the loading order and the team's assessment that the idea "deserves to be studied and developed further." (TM 5, p.12). We would welcome the opportunity to work with the Agency Team to do so. While no specific GPCD targets can be assigned to this policy, it would create the foundation upon which the other measures and policies included in this memo could be built.

**Decoupling.** We are pleased that TM 5 includes a discussion of decoupling, which has been foundational to the energy efficiency advances in California, and which has now been adopted by many other states as well. However, TM 5 implies that decoupling is only applicable to investor-owned utilities. The basic premise of decoupling, that water agencies should not need to rely on water sales to assure their fiscal stability, is also applicable in the public sector. The Los Angeles Department of Water and Power, for example, has a rate structure that allows them to recover additional money from customers if sales are significantly below projections. This type of revenue adjustment mechanism will enable water agencies to aggressively promote efficiency without having to rely on a high fixed charge component in water bills, thereby allowing them to maximize the conservation pricing signal to customers.

**Volumetric pricing for sewer services.** The Agency Team notes that volumetric pricing for sewer services could potentially double the strength of the price signal for water use. This approach, which rewards customers who conserve water, would provide a tremendous boost to water efficiency. The TM-5 discussion of more aggressive pricing structures points out that a ten percent increase in price results in a two to three percent reduction in demand. (TM 5, p.13). Thus, by nearly doubling the price signal, volumetric rates for

sewer service potentially could reduce demand for indoor water use by twenty percent or more.

#### **IV. Conclusion**

Once again, we commend the Agency Team for its efforts and urge that you develop a plan to rapidly accelerate water efficiency, while retaining the flexibility to adjust as some of these uncertainties and data gaps are resolved. We look forward to continuing to work with you in this ambitious and critical effort. Thank you for considering our comments.

Sincerely,

A handwritten signature in cursive script that reads "Ronnie Cohen".

Ronnie Cohen  
Director, Water Efficiency Policy