



March 11, 2014

Edie Chang, Deputy Executive Officer
California Air Resources Board
1001 I Street
Sacramento CA 95814

Dear Ms. Chang:

On behalf of the California Water Foundation (CWF), I appreciate the opportunity to comment on the Draft AB32 Scoping Plan Update (Draft Update). The Draft Update offers an important opportunity to assess California's progress in meeting the goals of AB32 and to lay out policy directives and initiatives that will help the state continue to address this most critical issue of our day.

As California contends with the current drought, we are reminded yet again that water resources management is inexorably linked to climate change, and that more sustainable water management will be a necessary element of reducing greenhouse gas emissions (GHG) and adapting to climate disruption. CWF assists state leaders and interest groups to develop new approaches, technologies, and policies to meet the needs of California's farms, cities, and environment. Clearly these needs will include preventing catastrophic climate change and adapting to the water supply disruptions that we are already seeing. We have supported the development of several tools, described below, that may be of assistance to the State and local communities in developing and implementing policies and programs to address climate change.

CWF supports the key water policies proposed in the Draft Update. Specifically, we agree that the State will need to play a key role in:

- Prioritizing investments in conservation
- Adopting rate structures and pricing that maximize conservation
- Promoting less energy-intensive water management, such as a comprehensive groundwater policy

Below we offer our thoughts on these policies and key recommended actions for the water sector, and suggest modifications and additions. Specifically, we suggest that 1) ARB consider adding policies to ensure that regional planning agencies evaluate the water and associated energy and GHG impacts of land use planning decisions in Sustainable Communities Strategy/Regional Transportation Plan development, and 2) the state further explore a Public Goods Charge for water.

Investments in Conservation

The Draft Update calls for establishing a conservation first policy for water-sector investment, and suggests that this policy would be similar to the State's "loading order" for energy, which prioritizes investments in energy efficiency ahead of developing new power supplies. Water efficiency is the best way to reduce the embedded energy associated with water use, and cost-effective conservation and efficiency measures should be the highest priority for investment. We support the proposed key recommended actions that would 1) give priority to funding integrated management plans that include robust existing or proposed water and energy conservation and efficiency measures that achieve GHG emissions reductions, and 2) direct CEC to implement new water-related energy conservation measures and efficiency standards. These actions will improve water supply reliability while saving energy and reducing GHG emissions. They may also help limit, delay or avoid investment in new, more energy intensive sources of supply, such as desalination.

The state should also look for opportunities to promote new approaches to advancing water efficiency. One such promising new approach is the use of behavioral water efficiency. This approach provides information to consumers comparing their household's water use to the average use by similar homes. Behavioral efficiency programs have been used successfully by energy utilities in the past, and a CWF-funded pilot program with EBMUD provided the first large-scale implementation of the technology by a large, urban water utility. A recent independent study of that pilot found that participants reduced their water use by 5% and were more than twice as likely to participate in other EBMUD water conservation programs.¹ The cost of the saved water was around \$400/acre foot, which is less than half the cost of most new supply side alternatives.

Rate Structures & Pricing to Maximize Conservation

The Draft Update calls for "use of financial and regulatory incentives to promote widespread adoption of strong and equitable price signals to maximize conservation." CWF has supported development of a water rates handbook by the Alliance for Water Efficiency (AWE) that will help utility managers pursue adoption of efficiency-oriented rate structures, while maintaining revenue stability. The Handbook, which will be completed later this year, will incorporate the latest thinking in ratemaking, provide vetted rate models that can be adapted quickly by

¹ Mitchell, David L. and Thomas W. Chesnutt, "Evaluation of East Bay Municipal Utility District's Pilot of WaterSmart Home Water Reports," report prepared for the California Water Foundation and East Bay Municipal Utility District, December 2013.

managers, and provide resources to allow confident use of efficiency-oriented rate tools. The tools will be available online, and AWE will promote the handbook throughout the country through conferences, webinars, and meetings with water utility managers and CFOs, including in California. It will provide a useful tool for implementation of the water rates policy delineated in the Draft Update.

Less Energy-Intensive Water Management

The Draft Update calls for promoting less energy-intensive water management, such as a comprehensive groundwater policy. As noted in the Draft Update, CPUC is in the process of developing a methodology for evaluating the embedded energy savings from water management, and has initiated a new water-energy rulemaking. CWF is a party to that proceeding and is a member of the CPUC Project Coordination Group (PCG) that had done foundational work prior to the new proceeding. The ability to calculate the embedded energy savings is a critical piece to advancing investment in the water-energy programs. Additional work will be needed to develop tools for evaluation, measurement, and verification of these savings.

CWF particularly supports the Draft Update call for a comprehensive groundwater management strategy, as outlined in the California Water Action Plan. Decades of declining groundwater levels have resulted in groundwater becoming an increasingly energy-intensive source of water supply. Improved groundwater management will be key to reversing this trend, thereby reducing the energy requirements and associated GHGs from groundwater pumping, and also ensuring that groundwater can continue to serve as a source of water supply when surface supplies are limited.

Land Use Planning & Public Goods Charge

In addition to the excellent policies and initiatives already laid out in the Draft Update, CWF would like to see inclusion of two additional topics added before the Update is finalized: the land use, water and energy connection, as well as a Public Goods Charge for water.

1) Evaluate the Water and Associated GHG Impacts of Land Use Planning

The Draft Scoping Plan Update refers to climate change as the “great unifier,” and correctly points out that we will need to transcend current programmatic, political and policy boundaries in order for the state to be successful in reducing its GHG reduction goals. Nowhere is this more true than in the water sector. Reducing greenhouse gas emissions from the water sector requires coordination between water agencies and energy utilities, and the regulatory bodies that oversee both sectors.

It requires greater attention to the water-related impacts of land use and development, a topic not currently addressed in the Scoping Plan Update. We urge the Air Resources Board to more explicitly include policies in the water section of the Draft Update that link water, energy, and land use.

More compact development will reduce outdoor landscaping and associated water use, thereby reducing GHG emissions associated with water productions. CWF helped fund development of UrbanFootprint, a land use model that can evaluate the GHG emissions impacts from alternative land use scenarios and policies. The Southern California Area Governments and other regions are already using this model as they develop second round Sustainable Community Strategies, pursuant to SB 375. Recent funding from CWF has enabled UrbanFootprint to evaluate the water demand associated with alternative land use scenarios and the related energy and GHG impacts. Regional planning agencies should be encouraged to use UrbanFootprint to evaluate the water and GHG savings from alternative policies and land use strategies. The State could also have an important role in promoting and supporting the use of UrbanFootprint, and other water/energy modeling tools.

2) Further Explore a Public Goods Charge for Water

In addition to the policies discussed above, the Draft Update makes no mention of a policy included in the original scoping Plan: Implementation of a Public Goods Charge for water. This approach has been tremendously successful in creating a source of funding for energy efficiency and should be further explored as a potential means of increasing investment in water efficiency and achieving the associated energy and GHG savings.

Thank you for considering our comments. We look forward to active engagement as ARB continues to refine it's plans to achieve the state's climate change goals and objectives.

Sincerely,



Lester Snow
Executive Director
California Water Foundation