

September 17, 2021

California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

RE: Draft Cap-and-Trade Auction Proceeds Fourth Investment Plan

On behalf of the Pacific Institute, Mono Lake Committee, Dr. Frank Loge (University of California Davis), and Dr. Robert C. Wilkinson (University of California Santa Barbara), we are writing to provide comments on the Draft Cap-and-Trade Auction proceeds Fourth Investment Plan for Fiscal Years 2022-23 through 2024-25.

We concur with the overarching policy direction that forms the foundation for the Fourth Investment Plan's recommendations. It is essential to recognize the deep interconnection of climate mitigation, adaptation, and resiliency strategies with California's policy priorities. California's priority investments should focus on achieving multiple benefits while advancing the state's goals.

From this perspective, the draft Investment Plan fails to appropriately evaluate urban and agricultural water efficiency as a key integration strategy that will help achieve the state's mitigation, adaptation and equity policies. We request an opportunity to meet with you to discuss how water efficiency could be better addressed through the Plan. Below is a brief overview of the issues that we would like to discuss:

### **Water Efficiency is a State Policy Priority**

Governor Gavin Newsom has issued several key climate-related Executive Orders, including EO N-19-19. In response, the California Natural Resources Agency issued the 2020 Water Resilience Portfolio which provides policy guidance on priority actions to implement the Governor's Order. The Portfolio calls for "greater water use efficiency in all sectors" (#2) and specifies implementation of the existing "Make Conservation a Way of Life" laws (SB 606 and AB 1668, 2018), which create new efficiency standards for residential use.

### **Water Efficiency Advances Equity and Environmental Justice**

In their June 2021 letter (attached) to the California Department of Water Efficiency regarding implementation of the "Make Conservation a Way of Life" laws, several organizations, including the Community Water Center, the Los Angeles Alliance for a New Economy (LAANE), Clean Water Action, and SPUR, offered compelling arguments for how water efficiency is key to improving affordability and meeting the Human Right to Water.

Low-income customers can least afford to waste water but are most likely to have leaky and inefficient devices. Further, there is an urgent need for water efficiency improvements to address water affordability. These actions include modifying water rate structures to provide lowest rates to customers who use water most efficiently. Finally, they write that "while access to safe and affordable water is of paramount concern, there are also other water equity concerns that can be better met with improved

efficiency,” such as supporting tribal water needs for fish and stream protections and the way in which greater efficiency supports the state’s actions to address housing and the homelessness crisis.

### **Water Efficiency Supports a Climate-Resilient and Prosperous Economic Future**

The water-energy nexus was first recognized by the California Energy Commission in the 2005 Integrated Energy Policy Report. A key finding of this report was that 19 percent of California’s total statewide electricity use, a third of non-power plant natural gas consumption, and 88 billion gallons of diesel consumption are related to water—from collection and treatment to use and wastewater management. It is well documented that better water management can play a key role in reducing energy demand -- and the need for polluting fossil fuels -- and is thereby part of the suite of solutions needed to help drive the clean energy transition forward. Recent studies quantify how greater levels of water use efficiency can significantly reduce greenhouse gas emissions and contribute to slowing the climate crisis.

1. Significant and cost-effective energy savings: A recent [UC Davis study](#) found that water conservation efforts implemented in 2015 during the previous drought effectively curtailed electricity demand, reducing greenhouse gas emissions at rates up to 11% higher than the savings from investor-owned utilities’ energy efficiency programs at similar costs.<sup>1</sup>
2. Improved water efficiency essential to reduce future spikes in energy use: A [Pacific Institute and Next 10 study](#) released in September 2021 concluded that “without urgent water efficiency measures, carbon emissions associated with water usage in California are likely to spike in coming years, as changing sources of water supply and population growth drive up energy-intensive urban and agricultural water needs. Climate change-fueled droughts are likely to further increase water-related energy use and carbon emissions.”<sup>2</sup>
3. Water efficiency complements and offers an opportunity to maximize the broader set of climate change investments advanced by the Plan: [California’s Fourth Climate Change Assessment](#) identifies the interrelated impacts that the earth’s rising temperature are causing California.<sup>3</sup> Extreme heat is one example of a pressing impact that creates feedback challenges for both energy and water management and is also a growing threat to lives and livelihoods across the state, especially for priority communities. Longer periods of extreme heat, which often coincide with drought, could lead to increases in water and energy consumption in both urban and rural communities, especially those that are dependent on energy-intensive groundwater pumping for agricultural purposes. For example, an increase in pumping due to warmer temperatures, which both reduce water supply and make crops thirstier, could threaten grid reliability as people are trying to keep their homes cool. Water efficiency is a key mitigation and adaptation strategy that integrates water, energy, climate, and equity.

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<sup>1</sup> Spang, E. S., Holguin, A. J., & Loge, F. J. (2018). The estimated impact of California’s urban water conservation mandate on electricity consumption and greenhouse gas emissions. *Environmental Research Letters*, 13(1), 014016.

<sup>2</sup> Szinai, J., Abraham, S., H. Cooley, & Gleick, P.H. (2021). The Future of California’s Water-Energy-Climate Nexus. Pacific Institute and Next 10.

<sup>3</sup> California Natural Resources Agency (2018). California’s Fourth Climate Change Assessment.

4. Water efficiency also supports nature-based climate solutions and community adaptation strategies, including a host of outdoor efficiency practices that enhance success of tree planting and maintenance, contribute to soil health and its water retention capacities, and integrate with green infrastructure to promote a holistic approach to water management.

Water efficiency needs to be more strongly reflected in the Investment Plan's priorities to reflect its importance to California as a mitigation and adaptation measure as well as a priority means to integrate adaptation actions in vulnerable communities to minimize the considerable economic losses associated with water-and energy-specific climate change impacts.<sup>4</sup>

The draft Plan recommendations could not come at a more urgent time as California now faces the most severe drought in its history. Increased water efficiency is one of the few actions that remain to most urban and agricultural water agencies as they cope with the immediate dire water shortages. With scientists predicting continued severe drought conditions into 2022, a coordinated approach to state funding to improve urban and agricultural water efficiency is imperative as California continues to adapt to our current climate conditions while working to further reduce greenhouse gas emissions.

We would like to ask for an opportunity to meet with you as soon as possible to discuss our comments and the opportunity to work with you to more fully integrate water efficiency as a key strategy and action to address California's climate change challenges. We will reach out to you next week to schedule this a meeting.

Thank you for considering our comments.

*/S/ Martha Davis*

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<sup>4</sup> Fernandez-Bou, Angel Santiago et. al. (2021). 3 Challenges, 3 Errors, and 3 Solutions to Integrate Frontline Communities in Climate Change Policy and Research: Lessons from California. *Frontiers in Climate*.  
<https://www.frontiersin.org/articles/10.3389/fclim.2021.717554/ful>