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California Water Plan Update 2018
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RE: Comments on the California Water Plan Update 2018 Public Review Draft

We appreciate the opportunity to provide comments to the Department of Water Resources (DWR). We also want to thank DWR staff, particularly the Water Plan team, for their efforts in developing a more focused, action-oriented Water Plan that reflects consultation and engagement with a wide range of stakeholders.

We applaud DWR’s emphasis in this plan on action, data-driven decision-making, and performance tracking. We believe that the inclusion of explicit recommended actions and the exploration of the Sustainability Outlook for tracking progress are positive steps forward.

Our comments focus on completeness of information and factual accuracy in chapters two through four.

Chapter 2: Challenges to Sustainability

I. Remove demand hardening language

The Public Review Draft asserts that “Improving conservation and water use efficiency, along with shifts in agriculture to permanent crops, will also make it more difficult to reduce water use during droughts and periods of low supply (i.e., ‘demand hardening’).” The assertion that water conservation and efficiency leads to demand hardening is unsubstantiated and should be removed from the Water Plan. Indeed, a recent Alliance for Water Efficiency report found “no clear relationship between average per-capita demand just prior to the shortage and the percent reduction in demand that is achieved as a result of the shortage declaration.” Rather, customer

response depended on the perceived severity of the shortage and the vigor with which mandatory restrictions were enforced. Cooley et al. (2007) finds that the demand hardening argument ignores several key points:

- Most providers can use a significant portion of water they conserve to serve new customers without harming reliability, provided that the overall demand does not increase during a shortage.
- Customers who participate in long-term conservation measures and reduce their demand through technological improvements, such as high-efficiency toilets and efficient clothes washers, can still reduce their water use through behavioral changes during a shortage.
- The technologies and economics of water-use efficiency are constantly changing. New, more efficient technologies are coming on to the market, and the price of those that are already on the market is dropping, thereby continuing to expand the cost-effective conservation savings potential of existing and new customers.
- For many water providers, conservation allows more water to be kept in storage (either in reservoirs or in aquifers underground), thereby reducing the risk and potential impacts of drought.

II. Elevate and refine the Sustainability Outlook

Elevate: The Pacific Institute is supportive of DWR’s efforts to develop a consistent method for tracking the outcomes of water management investments using the Sustainability Outlook. This is a forward-thinking approach that should be highlighted more prominently in the Water Plan. The description of the Sustainability Outlook within the plan should be expanded, at the very least to include the four societal values that underpin it. This section may also be more appropriately placed entirely in Chapter 3, under “Recommended Action 6.3: Improve Performance Tracking.”

Refine: Additional work is needed to refine the outcomes and indicators used in the Sustainability Outlook. In particular, the Healthy Economy indicators should be revised to better align with the private sector’s understanding of water and the economy. Pacific Institute’s guidance for refining the Outlook based on a corporate water stewardship perspective was laid out in a report to DWR in July 2018.3 This included specific suggestions for new and amended indicators. It also included six general recommendations for the structure of the Outlook, including:

1) Improve alignment with the United Nations Sustainable Development Goals, especially SDG 6;
2) Incorporate water governance indicators;
3) Include a composite water stress indicator;
4) Consider the use of indexes when possible;
5) Develop a mechanism for benchmarking progress; and
6) Maintain clear and consistent directionality across indicators.

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3 Corporate Water Stewardship Metrics and the DWR Sustainability Outlook: A Comparative Assessment. Prepared July 2018 for the California Department of Water Resources by Pacific Institute in its role as co-secretariat of the UN Global Compact CEO Water Mandate.
There is also a need to refine the Public Health and Safety indicators, especially as they pertain to safe, affordable, accessible drinking water and sanitation. Several state agencies, including the State Water Board and the Office of Environmental Health Hazards Assessment, are developing indicators to measure implementation of the Human Right to Water, and, as noted in Feinstein (2018), these efforts should be coordinated and the resulting indicators included within the Sustainability Outlook.\(^4\)

**Chapter 3: Actions for Sustainability**

I. Include Salton Sea commitments in ecosystem restoration actions

The Water Plan fails to reference California’s Salton Sea obligations. This is a glaring omission that must be addressed. Table 4-1 “State Funds Needed to Implement the Recommended Actions” lists the capital costs of ‘Goal 3: Restore Critical Ecosystem Functions’ as $957 million through 2028.\(^5\) DWR’s own estimated cost for Salton Sea projects in that time period is $420 million (2017$) – almost half of the total listed in the table. Given the costs associated with WaterFix/EcoRestore, this suggests that the current calculations ignore Salton Sea costs. This budget should be reassessed and revised to include Salton Sea investments to which the State has already committed. More broadly, the State of California, the Natural Resources Agency, and DWR have all publicly made the Salton Sea a priority, and that needs to be reflected in the Water Plan.

II. Include instream flows in ecosystem restoration actions

Improving instream flow for key aquatic species (including endangered fishes) should be an explicit recommended action under “Goal 3: Restore Ecosystem Functions.” This recommended action should include reference to the recent San Joaquin River flow restoration decision.\(^6\)

III. Include natural infrastructure in infrastructure actions

A singularly gray infrastructure approach is not sufficient for the state’s water management needs. In addition, the vast majority of gray infrastructure solutions that could be implemented now or in the future directly conflict with ‘Goal 3: Restore Critical Ecosystem Functions.’ Given this reality, it is essential that the plan include natural infrastructure. In 2016, California Assembly Bill 2480 recognized source watersheds as “defined as integral components of California’s water infrastructure.”\(^7\) To align with this legislation and to support the transition to 21st-century water infrastructure approaches, ‘Goal 2: Strengthen Resiliency and Operational Flexibility of Existing and Future Infrastructure’ should be amended to incorporate natural infrastructure solutions for water supply and flood management.

IV. Include reference to the Human Right to Water

‘Recommended Action 1.1: Address the Water Management Needs of California’s Most Vulnerable Communities’ should be moved under ‘Goal 4: Empower California’s Under-Represented or Vulnerable

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Communities’ and should be revised to explicitly address the human right to safe, affordable, accessible drinking water and sanitation.8

V. Specify which groups should be taking which actions

Chapter 3 should include, in addition to recommended actions, a clarification of who is responsible for implementing each of the recommendations. Some recommended actions identify State agencies as the actors, but others do not specify. Each recommended action should have a clear ‘actor’ or ‘actors’ for whom the recommendation is intended (e.g., water agencies, local governments, individual water users, etc.)

Chapter 4: Investing in Water Resource Sustainability

I. Connect funding sources to funding needs

The Water Plan examines multiple funding sources in Chapter but does not link them to specific actions. The potential funding sources for a particular action or project depends on the nature of that project. In addition to the variable facets of different funding sources, as identified in Table 4-3 “Attributes of Current Funding Mechanisms for State Investments,” project attributes should also be considered in the funding discussion. Factors to consider include project size and scope, the beneficiaries of the project and their ability to pay, and more. For example, the funding source for a project providing a public benefit may differ from that for a project providing a private benefit. Additionally, ability to pay should be considered. The nexus between funding source and the funding need identified should be acknowledged and explained in Chapter 4.

II. Expand on novel funding approaches

We support the inclusion and exploration of novel funding approaches in this chapter. This section should be expanded to include discussion of what approaches fit best for which types of projects (see above comment). In addition, the novel approaches should be incorporated into the funding scenario analysis. Examples of how each funding approach might be implemented, including cost estimates (e.g., how much would a water transfer charge need to be, how would insurance premium prices change, etc.) would be also useful, even if hypothetical.

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Thank you again for the opportunity to provide comments on the Public Review Draft.

Sincerely,

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