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Governor Gavin Newsom
State Capitol
Sacramento, CA 95814

Re: Developing an Effective Water Resilience Portfolio

Dear Governor Newsom:

The Wheeler Water Institute at the Center for Law, Energy & the Environment (CLEE), along with our collaborators, respectfully submits the following comments regarding developing an effective Water Resilience Portfolio in accordance with Executive Order N-10-19 (the EO). We applaud your continued attention to California's water issues, which are among the state's central challenges.

As you noted in the EO, California needs a portfolio of collaborative strategies to meet current and future needs. We face complex water management challenges that will grow as we experience more frequent and intense hydrologic extremes—droughts and flooding—as a result of climate change. In this letter, we highlight three tenets we believe should guide development and implementation of a Water Resilience Portfolio. These tenets are consistent with the principles set out in the EO, and we believe explicitly recognizing them will maximize the Water Resilience Portfolio's effectiveness.

1. *Governance infrastructure, not specific physical water projects, will be the key to a successful Water Resilience Portfolio*

Improving governance, not pouring concrete, will enable the long-term, systemic change California water management needs. A crucial foundational element is currently missing from California's water governance: the ability to make informed, rational, transparent decisions in real time that balance the range of human and environmental water needs. Effective decision making recognizes and addresses interdependencies across time (from very wet years to critically dry years), space, and decision-making context (e.g., drinking water regulation, groundwater management, surface water rights administration, environmental protection). A legacy of more effective water decision making by state agencies and other stakeholders will be more impactful than any physical change.

If the Water Resilience Portfolio is to enhance California's resilience under changing and highly variable conditions, it must therefore be more than a collection of physical infrastructure projects that tick the boxes for each of the principles the EO outlines. Instead, it should emphasize developing what we term "governance infrastructure" to ensure that California's water decision makers have the context and tools they need to make thoughtful choices. This governance infrastructure includes an arsenal of complementary, coordinated, and mutually supportive water management strategies coupled with a framework to guide implementation. Building out this infrastructure will help to clarify the state's water management priorities, and lay the groundwork for effective state, regional, and local implementation efforts. Its goals should be more effective, flexible, and accountable water decision making.

Effective governance infrastructure cannot be fully realized overnight, but the Water Resilience Portfolio can articulate a commitment to strengthening the state's water decision frameworks and begin to build out critical aspects of governance infrastructure, as described below.

2. Fulfilling the promise of existing water management institutions will be crucial to achieving resilience

The low-hanging fruit for increasing California's water resilience lies not in developing new water management agencies or laws but in making the ones we already have more effective. The following examples illustrate this idea, and identify immediate actions that can be part of the Water Resilience Portfolio.

Supporting the Sustainable Groundwater Management Act (SGMA) — Achieving SGMA's goal of sustainable groundwater management throughout California should be a clear priority for any effort to increase the resilience of California's water systems. Equally significant, SGMA has the potential to drive more effective integration of surface and groundwater management—addressing the longstanding legal fiction that they are separate resources, which has resulted in immense social, economic, infrastructure, and environmental fallout throughout the state. Therefore, the Water Resilience Portfolio should reaffirm the state's commitment to SGMA's successful implementation. SGMA's governance structure is groundbreaking, creative, and viable.[1] The Water Resilience Portfolio should send a clear signal that the State Water Resources Control Board (Board) will perform an active, decisive, and serious backstop role if and when needed. In addition, the Portfolio should emphasize developing needed capacity among local groundwater sustainability agencies through direct funding, technical assistance, building collaborations with other agencies and non-governmental entities, and the development of rigorous best practices by third parties.

Supporting Effective Water Rights Administration and Oversight — California's water supplies should be allocated among different human and environmental uses transparently, efficiently, and predictably, in accordance with the priorities that flow from state and federal law. During past droughts, the State Water Resources Control Board often needed to improvise its drought response strategies in the midst of drought crises, and these responses were sometimes less effective—and less well received—than they could have been.[2] Although some in-drought innovation and improvisation will always be necessary, the Board can, and should, do its best to prepare for future droughts by proactively deciding how it will reconcile potentially competing priorities and goals, developing strategies to protect and achieve them, and improving the information and tools that will guide its decision making during drought emergencies. The Water Resilience Portfolio should prioritize this difficult but important work.

3. Resilience Requires Improving Data for Water Decision Making

Data are crucial to California's next generation of integrated water management, and data systems should be recognized as critical governance infrastructure. For example, California's existing Electronic Water Rights Information System (eWRIMS) is incompletely populated and lacks the functionality and interoperability with other platforms needed to support water decision making. As a result, stakeholders and state agencies alike have trouble understanding how much water is available to particular water users at particular times—information that is central to basic water allocation and curtailment decisions and to planning for changes in future water availability. CLEE and its collaborators are currently developing a pilot for a modern Water

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[1] *See* Anita Milman and Michael Kiparsky, Integrating Governance Frameworks under California's Sustainable Groundwater Management Act (in review), available at https://cwc.ca.gov/-/media/CWC-Website/Files/Documents/2019/08_August/Milman_Kiparsky_2019_SGMA_Governance_Draft.pdf.

[2] *See* Nell Green Nylen, Michael Kiparsky, Dave Owen, Holly Doremus, and Michael Hanemann. (University of California, Berkeley). 2018. Addressing Institutional Vulnerabilities in California's Drought Water Allocation, Part 1: Water Rights Administration and Oversight During Major Statewide Droughts, 1976–2016. California's Fourth Climate Change Assessment, California Natural Resources Agency. Publication number: CCCA4-CNRA-2018-009. *See also* Nell Green Nylen, Michael Kiparsky, Dave Owen, Holly Doremus, Michael Hanemann. (University of California, Berkeley). 2018. Addressing Institutional Vulnerabilities in California's Drought Water Allocation, Part 2: Improving Water Rights Administration and Oversight for Future Droughts. California's Fourth Climate Change Assessment, California Natural Resources Agency. Publication number: CCCA4-CNRA-2018-010. Both reports are available at https://www.law.berkeley.edu/research/clee/research/wheeler/drought-water-allocation/.

Rights Information System (WRIS) that would address critical data gaps by digitizing and putting into useful form key information about water rights and use that currently resides only in paper files.[3] The Water Resilience Portfolio should prioritize next steps on the WRIS and other efforts designed to provide decision makers with more timely, accurate, and readily useable data[4] about water rights, water use, water supply, drinking water, and ecosystem needs.[5]

Conclusion

The Water Resilience Portfolio offers a golden opportunity for major and lasting progress towards a stronger future for California's water system. The promise of enabling California to weather projected extremes, including but not limited to climate-induced changes, would answer a crucial need for the state's present and future. But this opportunity could easily be squandered, even with the best of intentions, if its implementation comes from a dated mindset focused on physical infrastructure projects developed without clear, system-wide goals. Therefore, we believe the Water Resilience Portfolio should emphasize (a) building the state's governance infrastructure, (b) fulfilling the promise of existing institutions, and (c) improving data to support more effective decision making.

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[3] *See* Imagine H2O Announces Winners of CA Water Policy Challenge, CISION PR Newswire, Apr. 3, 2017, https://www.prnewswire.com/news-releases/imagine-h2o-announces-winners-of-ca-water-policy-challenge-300433280.html.

[4] *See* Alida Cantor, Michael Kiparsky, Rónán Kennedy, Susan Hubbard, Roger Bales, Lidia Cano Pecharroman, Kamyar Guivetchi, Christina McCready, and Gary Darling. 2018. Data for Water Decision Making: Informing the Implementation of California's Open and Transparent Water Data Act through Research and Engagement. Center for Law, Energy & the Environment, UC Berkeley School of Law, Berkeley, CA, available at: https://www.law.berkeley.edu/research/clee/research/wheeler/data/.

[5] *See* Kathleen Miller, Nell Green Nylen, Holly Doremus, Andrew Fisher, Graham Fogg, Dave Owen, Samuel Sandoval Solis, Joshua Viers, and Michael Kiparsky. 2018. Issue Brief: California's Stream Flow Monitoring System is Essential for Water Decision Making. Center for Law, Energy & the Environment, University of California, Berkeley. Berkeley, *available at* https://www.law.berkeley.edu/research/clee/research/wheeler/stream-monitoring/. *See also* Senate Bill 19 (enrolled Sept. 11, 2019).