

California's Fourth Climate Change Assessment – Technical Reports

TITLE

ADDRESSING INSTITUTIONAL VULNERABILITIES IN CALIFORNIA'S DROUGHT WATER ALLOCATION Part 2: Improving Water Rights Administration and Oversight for Future Droughts

CITATION

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ABSTRACT

In California, droughts are likely to become more frequent, longer, and more intense in the future, posing increasing challenges for water management, and raising the stakes for effective drought response. This project aims to help state water governance and decision-making structures adapt to the changing climatic reality. In a companion report in this volume, we analyzed the strategies the State Water Resources Control Board (Board) used for water rights administration and oversight during the last four major statewide droughts. Our findings suggest that more proactive planning and preparation, enabling reduced reliance on in-drought improvisation, would improve the Board's future drought responses. This report builds on that retrospective analysis with specific recommendations.

Our vision is simple: During droughts, California's limited water supplies should be allocated among different human and environmental water uses transparently, efficiently, and predictably, in accordance with the priorities that flow from state and federal law.

We suggest a structured means of implementing this vision that emphasizes proactive drought preparations. At the core is a contingency-based framework designed to support more timely and effective drought decision making. A suite of complementary actions aims to reduce uncertainty and lay the groundwork for improved water rights administration and oversight in future droughts. These actions include making key policy decisions that affect drought response in advance, strategically improving decision-related information, maximizing learning from droughts, prioritizing water rights enforcement between droughts, and capitalizing on the many synergies that exist between the Board's drought and non-drought work to achieve better water management outcomes, greater clarity for water users, and more efficient use of state resources. We view these actions as crucial components of effective climate adaptation for California and encourage the Board to begin implementing them now, so that it is better prepared to face the challenges the next drought brings.