Reporting Reform for Water Rights Allocations

STATE TEAM POLICY BRIEF

This brief focuses on reforming the water allocation and water permits trading system in the state of California, addressing how water rights are inequally distributed due to the system in place that emphasizes water rights seniority and appropriative water rights. It has a goal of ensuring equal water distribution given limited water supply and reforming the water rights system in order to promote efficient allocation of water.

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I. Executive Summary

California has a limited water supply, so strategic allocation plans are more important than ever. However, California's water supply is currently being over-reported due to a lack of stringent reporting criteria. Due to cases of water use overreporting, double-counting, and biases towards senior rights holders, trading efforts can be inefficient and inaccurate. The policy brief proposes revising reporting criteria to improve reporting accuracy, thereby enabling more efficient allocation of water.

In particular, water use reporting protocols should include greater transparency and a measure accounting for wildfire risk and frequency. Funding for enforcement and water user engagement efforts can be pulled from existing climate bonds and authorized by the Water Resources Control Board.

II. Background

The California State Water Resources Control Board (a.k.a 'Water Board') lacks critical control of major reporting issues surrounding water allocations.

Due to litigation surrounding water rights allocation, groundwater, riparian, and pre-1914 appropriations are excluded from the Water Board's authority (Grantham and Viers, 2014). Therefore, the primary method of appropriation concerns appropriative rights, derived from the Doctrine of Prior Appropriation. These allocations are on a first-come, first-served basis and require documentation demonstrating the beneficial use of the water itself. Appropriative rights account for the majority of claims and the largest volumes of water allocated. Although claims are mitigated by an application process to determine beneficial use, current rights allocation volumes make more than five times the amount of the state's average annual supply. They do this by incentivizing parties to over-report water use to protect their permit estimates and by downstream appropriators double-counting return flows from irrigation runoff or canal leakage, leading to larger reported amounts of water per party relative to the actual supply (Grantham & Viers, 2014).

III. Problem Statement

Although a current trading system exists, several issues surrounding the Water Board's management/measurement efforts, including underfunding as well as a lack of review over different forms of allocations, incentivize instances of private miscounting, which greatly exacerbates the problem of increasing water scarcity to communities that face severe environmental risk.

IV. Policy Analysis

The water use reporting system in California highlights significant inefficiencies in the Water Board's monitoring and reporting. These inefficiencies can be demonstrated through loopholes that water users can exploit, including inaccuracies in self-reporting and the Water Board's limited resources to hold those who overuse water accountable (Bellinger, 2013). This can create infrastructure bottlenecks, making it difficult to accurately allocate emergency water during wildfires, as the supply on which state and local governments depend is dwindling faster than reported.

V. Policy Recommendations

To relieve this issue, we propose a more efficient way to measure water use and acquire accurate data for the reporting system. This would involve establishing a need-based water supply allocation policy for areas most affected by or at risk of wildfires, and providing increased funding to the Water Board to improve measurement efforts. Expansion of California's existing permits-trading system would enable a flexible, need-based water supply that accounts for a variable climate. In particular, the flexible nature of permits-trading removes the reliance on permanent land-based rights to determine water supply, which are often too rigid to respond to environmental changes that affect water demand in real time (Ayres, 2021). Additionally, we seek additional funding for measurement, protection, and accountability efforts to help researchers more accurately estimate existing allocations and determine where to focus protectionist policies (e.g., Water Board counting, reducing instances of over-reporting/double-counting, etc.). The Water Board lacks the critical support to handle these issues, and by accurately defining instances of abuse in the allocation system and providing the necessary resources, we believe that allocations can be controlled relative to community needs and actual supply. Introducing limits on allocation amounts and reducing the risk of regional inequity by preventing wealthier communities from absorbing the majority of available rights, thereby creating substantial environmental risk for those less wealthy. Additionally, we

propose specific allocations for rights holders in regions at higher risk of wildfires or droughts to ensure the safety of California citizens, implementing specific allocations for rights holders in regions at higher risk of wildfires or droughts.

VI. Implementation Plan

Our proposed implementation plan will prioritize mutual transparency between the Water Board and rights holders, as well as regional equity. It involves five phases:

Research and identify new reporting metrics: Abolish loopholes that double-count, and include fire hazard safety data in reporting criteria.

Stakeholder Engagement: Inform water users of upcoming changes and provide them with the necessary resources for accurate reporting. Give the Water Board authority to enforce reporting policies and engage water users.

Pilot Implementation: Measure how the reformation of allocation loopholes has promoted regional equity, and compare benefits to initial inequities.

Analysis and Revision: Revise reporting standards and enforcement protocols to maximize regional equity.

Formal Implementation: Implement new reporting standards, adjusting allocations to changing drought and wildfire conditions.

VII. Conclusion

The interlinked conflict between California's limited water supply and Water Rights Allocation can be addressed by more stringent, climate-considerate reporting criteria enforced by the Water Board. This revised reporting plan will help mitigate water supply oversourcing, encouraging conservation and increased efficiency in both water allocation for communities in need and wildfire prevention.

References

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