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Under Water: Monitoring and Regulating Groundwater in California

By M. Rhead Enion

Executive Summary The security of California's water supply is under increasing threat. Experts predict that, without serious changes to its water management, the State could face a future of dwindling water availability.

Together, groundwater and surface water make up a single functional natural system. All water, but particularly groundwater, is a public good. If its use is not appropriately valued and regulated, California will see groundwater unnecessarily depleted. Any overuse of groundwater can result in other difficulties too, such as land subsidence and the contamination of water supplies by pollutants. To encourage efficient, responsible water use, California must better account for the benefits of water availability and the costs of overuse. Valuing water appropriately will help Californians protect their water supply from pollutants and from overuse so that California enjoys sufficient, clean water into the future.

Among Western states, only California and Texas still allow the use of groundwater without a permit or other means of tracking and regulating users. And only California law continues to treat groundwater separately from surface water, despite our growing understanding of the physical connections between the two. Many have argued for better integration of surface water and groundwater policy in California. The California Legislative Ana-

lysis Office (LAO) recently recommended that California "realign the water rights system" and "establish a state-administered water rights system for groundwater." According to the LAO, "reevaluating how groundwater is managed is necessary if it is to achieve its full potential as a reliable source of water."

This paper describes the importance of groundwater to California and re-imagines groundwater management. It recommends a series of steps that California should undertake to achieve the goal of healing the water rights system for groundwater. Managing California's limited water supply requires first effectively managing California's groundwater. This paper recommends that the State establish an enforceable framework for groundwater monitoring and regulation that will be implemented by regional and local entities, modeled after cooperative federalism models often used for federal-state regulation.

To that end, California should prioritize the following goals:
(a) Establish comprehensive monitoring of groundwater use, groundwater levels and groundwater quality.
California should establish clear guidelines and standards for, and coordinate the collection of groundwater data from, regional and local entities. Monitoring should include surface water and groundwater policy in accurate modeling of all groundwater use. California, with assistance from regional

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It's still the wild west in California when it comes to groundwater management.

California depends heavily on groundwater as a source of water supply, but is one of only two western states—the other being Texas—that allows for the withdrawal of groundwater without a permit or any other means of tracking and regulating users. Perhaps not surprisingly, the overuse of groundwater in California threatens the reliability of the State's future water supply. A new report by UCLA School of Law's Emmett Center on Climate Change and the Environment recommends improvements in groundwater monitoring and regulation to help secure California's water future.

["Under Water: Monitoring and Regulating Groundwater in California,"](#) the Emmett Center's inaugural Anthony Pritzker Environmental Law and Policy Brief, discusses the importance of groundwater and its management, as well as the advantages of realigning California's water rights system.

In [Under Water](#), fellow blogger [Rhead Enion](#) recommends that California establish enforceable standards and goals for monitoring, data reporting and management of groundwater basins, to be implemented by regional and local entities.

The [Anthony Pritzker Environmental Law and Policy Briefs](#) are published by UCLA School of Law in conjunction with researchers from a wide range of academic disciplines as well as the broader environmental law community. The papers provide expert analysis to engage further public dialogue on important issues impacting the environment. Look for more from the series in the coming months and years, and we'd love your thoughts.