



Plan to Tap Groundwater for Profit Shows Need for Better State Policy

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Imagine a lake half as large as Lake Tahoe, containing 17 million to 34 million acre-feet of water. That is what lies under the Cadiz and Bristol valleys in the Eastern Mojave Desert in San Bernardino County. Cadiz Inc., a privately held company, owns 34,000 acres that overlie this vast groundwater basin. The company plans to extract 2.5 million acre-feet of the water, a public good, over the next 50 years and sell it back to the public at a profit.

This project raises several concerns, some of which are directly related to the project while others point to the need for a public debate and discussion about California's groundwater laws.

Here are some facts about the project: Cadiz is proposing to extract on average 50,000 acre-feet of groundwater from the basin each year for 50 years. The intended rate of extraction of groundwater is significantly greater than the estimated natural recharge rate (the speed that groundwater is refilled naturally by rain and snow) of 5,000-32,000 acre-feet a year, which will lead to unsustainable mining of groundwater during the life of the project. The groundwater will go into a 43-mile-long pipeline to transport it to the Colorado River Aqueduct, where it will be distributed to several water utilities in Southern California.

Cadiz claims that the project will facilitate the beneficial use of groundwater that would otherwise naturally drain toward Bristol and Cadiz dry lakes (ephemeral lakes) and be "lost" to evaporation at the lakes and to transpiration by plants in the adjoining valleys. But the project proponents' characterization of the water lost to evaporation and transpiration as non-beneficial is inaccurate. Some of the water that flows to the dry lakes and evaporates from the basin supports survival of local desert ecosystems, which depend upon the ability of groundwater reaching the surface; therefore, removal of this water would adversely affect these ecosystems.

The bottom line is that the project relies on unsustainable mining of groundwater, designed to extract groundwater at a rate exceeding natural recharge. In other words, it uses water in excess of the estimates of the water lost to evaporation, which is both a nonrenewable use of water and unsustainable in the long term.

According to the draft environmental impact report, the project will deplete groundwater storage in the valleys by 1 million to 2 million acre-feet. It will take from 50 to several hundred years for the basin to recover and refill after the project is terminated. If in that period the recharge rate decreases considerably or the evaporation rate increases under a long-term drought or more permanent climatic changes, then the long-term deleterious effects of the project might be even

more significant and the recovery period much longer, if ever. Cadiz will make its profit for 50 years, and the public will be left to handle possible negative environmental and ecological consequences of this project for years to come.

Beyond the unsustainable nature of the Cadiz proposition, this project highlights serious shortcomings with California's groundwater law. Imagine if one of the landowners adjacent to Lake Tahoe decided to take water from the lake and sell it for personal, short-term economic gain. That may sound crazy, and yet the state's groundwater is the same resource.

The Cadiz project, if approved by San Bernardino County, would set a precedent for future privatization of groundwater in other desert basins. This calls for a broader public policy debate and discussion of state groundwater policy – or lack thereof.

We question that mining groundwater for short-term private gain is what an informed public would like to do with precious groundwater stored in the desert. The fact that the decision is left to San Bernardino County indicates the broader need for clear state policy to manage groundwater resources and a revision of groundwater laws.

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