WATER-TRADING RESTRICTIONS

ISSUE

When it comes to water in the West, drought, population growth, and economic development are just a few of the factors that have contributed to recent shortages. In times of drought, less water is available for plants and wildlife. Once-planted fields have dried up, animals have been left without the shelter and food sources of forage crops and fruit trees, and dry soil blows away for good.

Traditional regulatory solutions, such as water-use restrictions, have not proven to be sustainable approaches to conserve water and allocate the scarce resource efficiently. Markets that allow for water to be traded, however, would reward conservation. By trading water, those who conserve it can receive a financial return for their actions and diversify their income. Fields that otherwise would not have had irrigation can be planted, preventing erosion and leaving more water instream for plants and wildlife. Unfortunately, many government regulations restrict water trading and impede the process to sell the resource. As a result, farmers have very little incentive to conserve water, and water cannot be allocated to its highest-valued uses, whether irrigating fallow fields, filling dry trout streams, or any other purpose.

California is a prime example of this predicament.[14] Agriculture accounts for nearly half of all water use in the state, which recently suffered five years of severe drought.[15] With low water levels, California's $50 billion agricultural industry suffers as croplands go fallow. In January 2014, Governor Jerry Brown declared a drought state of emergency. He directed state officials to assist farmers and communities affected by the dry conditions, directed state agencies to use less water and hire more firefighters, and initiated a water conservation public awareness campaign. When the drought persisted into 2015, Governor Brown issued an executive order that forced cities and towns to reduce their water consumption by 25 percent.[16]

Some water districts had already decided to take matters into their own hands to conserve water and ensure their crops could flourish. In 2012, the South San Joaquin Irrigation District in the Central Valley modernized its irrigation system, transforming it from a gravity system into a pressurized one that uses moisture-sensing technology to ensure the optimal amount of water is delivered to crops. Since then, farmers connected to the pressurized irrigation system have grown 30 percent more crops with 30 percent less water, leaving more water available for other farmers and wildlife.

To finance additional infrastructure projects that could conserve water, the irrigation district now wants to lease its surplus water to districts downstream that currently face shortages. The South San Joaquin district would then be able to use the profits to convert the rest of its system from gravity to pressurized. But its efforts have so far been stymied by water-trading regulations in California that make it difficult and costly for interested parties to buy and sell water rights.

An incredible amount of time and money have to be spent navigating government regulations before water can actually change hands in California. For example, a single, simple lease by Scott River Water Trust—an organization that sought to lease water from farmers and leave it instream for fish—took two years and $30,000 to obtain.[17]

The authority to approve any change to a water right, including those related to a water lease or

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Restrictions on trading water can make it difficult to transfer the resource from one use to another, even when such trades would result in more efficient water use and improved environmental outcomes.

purchase, rests with the State Water Resources Control Board. To trade water, a California water rights holder is required to file a notice of intent with the board. The notice must include the specifics of the transfer, including a description of the environmental conditions that will protect fish and wildlife and an agreement that specifies how environmental protection requirements will be accomplished for the duration of the lease. The party applying for a water-trade permit is subject to a 30-day public notice period, a 45-day administrative review period, and depending on the duration of the proposed transfer, a months- or years-long environmental review. In addition, it is up to the permit applicant to prove that the proposed transfer will not damage another water user or the environment. The lengthy approval process can undermine the original motivation for the transfer if the water lessor or purchaser's demand is seasonal or short-term. In some cases, the process can add such significant costs to water trading that the benefits of a transfer may be completely nullified.

After all the requisite steps, if the transfer is approved, the two parties still have sufficient water reserves to trade, and both are still interested in trading, the State Water Board monitors the lease to ensure it does not "unreasonably" affect fish, wildlife, or other beneficial instream uses. This means that even after a trade arrangement has been reached, the water board can step in and restrict a trade if they deem it harmful to other instream uses—creating a great deal of uncertainty and making parties more reluctant to enter into agreements.

The approval process for water trading is so complex that the South San Joaquin Irrigation District has not yet found a cost-effective trade arrangement for its surplus water. While all the requirements placed on parties interested in leasing water aim to ensure that transfers do not impose costs on the environment or other water users, they can often prevent—or at least significantly raise the cost of—mutually beneficial exchanges that would lead to more efficient water use and improved environmental outcomes. Rather than create excessive red tape, government policies should instead open the door for more water conservation through markets.

REFORM

A straightforward way to promote water conservation in California would be to streamline the administrative review of transfers that have been previously approved by the Water Board and implemented without adverse impacts to other water users or the environment. An expedited review process for short-term transfers for environmental purposes would also help lighten the unnecessarily burdensome review procedures. Previously approved transfers have already gone through extensive review by experts during their initial applications to the agency, so a full-length review is unnecessary. Furthermore, because any substantive issues with a water transfer would likely have surfaced during the board's initial review, shortening the public comment and objection period to 15 days would reduce unnecessary delays. If no comments are received, the Water Board's review period could be shortened from 45 days to 7 days; if there are public comments, the period could still reasonably be cut to 15 days.

In addition, in cases of transfers previously approved by the Water Board, the burden of proof should be shifted to the party claiming injury. The first time a transfer is reviewed, the applicant has to bear the burden of proving that a project will not harm any other water user or the environment. If the same conditions apply for the transfer's renewal, it should fall on the objector to prove how the transfer might adversely affect a water user or environmental resource.

Short-term water transfers that preserve or enhance wetland habitat, fish and wildlife resources, or recreation should also have a streamlined approval process. Environmental water transfers are usually aimed at getting more water in a certain stream area during a very specific time frame. If a transfer aimed at preserving the environment is bogged down in review criteria or appeals processes, the fish and wildlife that depend on that potential water transfer will suffer. Provisional approval while the transfer is reviewed, particularly if fish and wildlife agencies testify to the natural resource need, would keep streams wet after a brief initial review that determines the transfer would cause no injury to other users.

These reviews of transfers for environmental outcomes should also distinguish between small in-basin transfers and large out-of-basin transfers and be evaluated accordingly. If a project proposes to move a large amount of water into a completely different basin, it will likely have a more complex impact—and need a more intensive review—than a small project that only moves water within a single watershed. One approach to differentiating review criteria would be to set a threshold on the amount of water or number of basins involved. For example, if a project would transfer more than 100 acre-feet of water or transfer water out of a basin, then it could qualify for a more rigorous review.

Similar to the proposal for previously reviewed transfers, in instances of water transfers that preserve or enhance environmental factors, the burden of evidence should be shifted from the party seeking the water transfer to the party claiming liability. Fish, wildlife, and other natural resources are owned by the State of California and are held in trust for the benefit of residents. The burden of evidence during the appeals process should be shifted to the parties that object to the improvement of communal environmental resources.

Contracts such as water sales and leases that move water rights between lower- and higher-value uses are crucial tools for reallocating scarce water to the places it is most needed. In some areas, these reforms might be the sole remedy that can keep crops healthy and protect fish from dwindling stream flows.

Streamlining the approval process for water transfers that serve environmental ends, such as a lease that leaves water instream for salmon during dry periods, would promote conservation.