

Lessons from 1991 for a new era of water management



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Following six years of drought and facing a possible seventh, there can no longer be any doubt that California is entering a new era in water resource management — or that water marketing will be a key component of that new era. The fact that transfers of developed water within the state would make sense even in non-drought years simply adds to the inevitability.

This is an important issue for agriculture, and it is important that agriculture play a leading role in resolving it. California farm interests need to develop procedures ensuring that the economic benefits of water sales are equitably shared between buyers and sellers over the long term.

Agriculture also needs to take an active role in protecting third-party interests. There are two reasons for this. First, in one way or another, those “third parties” include many people in agriculture; and, second, if third-party interests are not provided reasonable protection, the new water-marketing system will operate slowly and erratically, if at all. Water transfers cannot be treated simply as an issue between buyers and sellers. Third parties have legitimate interests at stake and they likely will marshal forces to protect those interests.

When entering such uncharted territory in the public decision-making process, it is crucial to assess new systems as they go into operation. This issue of *California Agriculture* provides one example of that process, with two articles examining aspects of the new water-transfer arrangement between the Metropolitan Water District and the Imperial Irrigation District.

Another example with even wider implications is a two-year research project on water transfers being conducted by the Division’s Agricultural Issues Center and the Water Resources Center. During a November 4 conference in Sacramento, researchers described the impacts of historic 1991 water transfers on Solano and Yolo Counties.

Such agricultural counties are increasingly seen as sources of water for urban and environmental needs. Yolo and Solano exported about one-fourth of all the water transferred during 1991. UC researchers analyzed economic, environmental and social impacts. Their findings provide a basis for future public policy decisions on water transfers, as well as a pattern for future investigations of potentially impacted regions of Northern California.

The three UC study teams were headed by Richard Howitt of the UCD Agricultural Economics Department; Ed McBean of the UCD Land, Air and Water Resources Department; and Brian Gray and Richard Berk of the UC Hastings College of Law and the UCLA Sociology Department, respectively. Here, we would like to point out some of their major conclusions.

First, the 1991 water transfers had significant but not disastrous impact on the two agricultural counties. Forces other than water transfers were also at work — particularly the drought and the recession — and their effects must be distinguished from those of the transfers. Changes in the hydrologic system as well as some environmental and social impacts have many causes; one year’s water transfers probably played a limited role.

However, researchers cautioned that continued water marketing over the long term should be carefully monitored to avoid substantial damage to local economies and environments. They found that water transfers cost the two counties about 595 farm and ag-related jobs, or 5 percent of ag-dependent employment.

Second, the researchers found that water transfers do have significant impacts on local ground water resources. During 1991, the two counties pumped 140,000 acre-feet of ground water above the average annual draft. About one-third of that pumping was caused by water transfers; the rest, by drought. Furthermore, land subsidence may be a problem if large-scale pumping of ground water continues.

It is important to remember that the Drought Water Bank was partly designed to substitute ground water resources for scarce surface supplies; however, continued water marketing could result in premature exploitation of ground water. Reasonable policies should be developed in any case; but the prospect of heavier reliance on water transfers adds urgency to this issue.

Another major finding relates to the economic and social impacts of water transfers on local economies. Clearly, some jobs were eliminated and some agriculture-related industries lost business. These results suggest that any comprehensive policy governing water transfers should recognize that adverse effects may occur in areas of origin and that criteria are required to judge whether those impacts are so severe that transfers should be barred, or whether they can be compensated for in some way.

The conclusions of the UC water transfer study project relate only to the short-term impacts of water transfers in a single year. They cannot and should not be extrapolated to anticipate effects of long-term arrangements that permanently remove water from an area of origin. However, it’s likely that most of the water transfers in California during the next decade or two will be temporary in nature. Thus, the results of the study project and the November conference can help guide the development of rules and policies which will permit water transfers to be used more widely in combating California’s frequent droughts.

The UC water transfer study was unique in that, in addition to direct factual analysis, scientific opinion surveys tested the perceptions, opinions and attitudes of all those involved—farmers who sold water, farmers who didn’t, allied businesses, and local leaders and decision-makers.

Significantly, the opinions of these people who have most at stake in the water-exporting counties coincide with the other research findings. They insist that:

—Transfers involving ground water put the ground water resource very much at risk.

—Long-term impacts of continued transfers are likely to be much more severe than short-term.

Clearly, these voices, as well as the detailed research findings of the UC study teams, deserve attention as California faces historic policy decisions on water resource allocation.