

Managing California's Water Market: Issues and Prospects

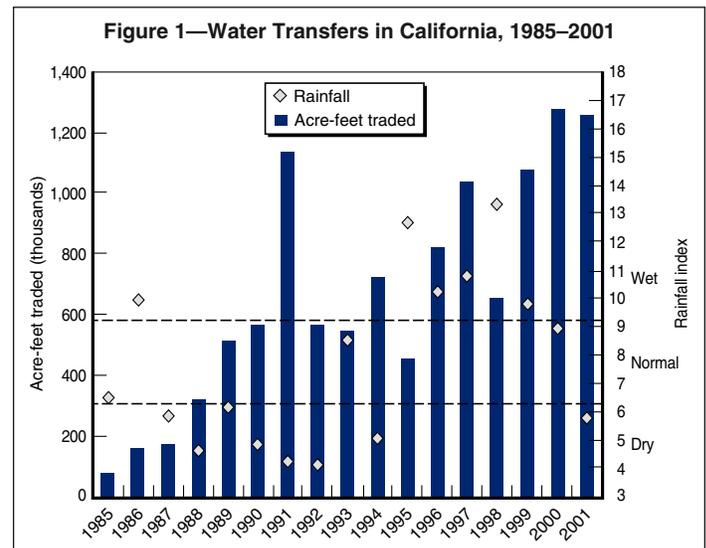
Under current patterns of water use, California faces the prospect of chronic water shortages by 2020. Among the measures that can alleviate supply and demand imbalances is the development of a water market. A market enables the historical holders of water rights—mainly farmers in the agricultural heartland—to transfer water to other users willing to pay for it. Potential buyers include urban and industrial users, farmers with higher-value crops, and environmental programs to support fish and wildlife habitats.

Although significant water trading has occurred since the state began promoting it in the late 1970s, obstacles remain. In particular, rural communities have raised concerns over the potential adverse effects of water transfers on other groundwater users and the local economy, and some have passed local ordinances to restrict water transfers. In *Who Should Be Allowed to Sell Water in California? Third-Party Issues and the Water Market*, Ellen Hanak examines water transfers in California, local resistance to them, and various approaches to resolving water disputes. Drawing on a new database of water transfers as well as interviews with state, county, and water district officials, the report calls for a more comprehensive approach to groundwater management at the local or regional level.

The Growth of California's Water Market

Spurred by drought in the late 1980s and early 1990s, the volumes traded in California's water market now account for roughly 3 percent of the state's water use (see Figure 1). Agricultural water districts are the main suppliers, with Central Valley farmers typically accounting for three-fourths of all sales. In the San Joaquin Valley, where environmental mitigation programs have reduced water deliveries, farmers have turned to the market for replacement water. Their purchases account for over half of the water market's expansion since 1995. The state has also been a major player, running drought-year water banks and buying water for environmental programs. Direct purchases for instream uses and wildlife

reserves account for over one-third of the market expansion. Municipal agencies are the major buyers of long-term and permanent contracts, which account for roughly 20 percent of all sales. Recent legislation requires that local governments demonstrate adequate water supplies for development, and this policy should increase urban demand for long-term water transfers.



Aided by several dry years, California's water market was established when the state began purchasing water and launching water banks in the late 1980s and early 1990s.

Two issues loom large in the state's rural areas, the source regions for most water transfers. The first is a reduction in the quantity or quality of water available to others. California law protects surface water users, including fish and wildlife, from the effects of water transfers under the "no injury" statutes of the Water Code. Because groundwater is not regulated by the state, however, these protections do not extend to groundwater users. With the rise of groundwater transfers during the 1990s drought, the fear of uncontrolled "mining" of the aquifers became widespread in many rural counties.

