

## Giannini Conference Brings Water Stakeholders Together to Discuss the Future of the West Side

by  
**David Sunding**

*State-wide interests grapple with hard choices of land retirement, water supply expansion and better management of existing water supplies as possible solutions needed to keep the West Side farming community economically and environmentally sound. Ê*

About 125 farmers, policy makers, environmentalists and UC researchers met to discuss the future of the San Joaquin Valley's "West Side" in a conference at the University of California's Kearney Agricultural Center on March 22, 2002. Sponsored by the Giannini Foundation and UC Berkeley's Center for Sustainable Resource Development, the conference brought stakeholders together to share opinions on policy decisions that must be made to keep the area economically viable and environmentally sound.

### Issues Facing the West Side Today

The West Side is a geographic region bounded by Tracy in the north to Kettleman City in the south, and running up to several dozen miles east of I-5. The region is primarily agricultural, and receives a large part of its water supply from the Central Valley Project. While large portions of the West Side are exceptionally productive, the twin problems of unreliable water supply and the buildup of saline drain water plague the area's farmers.

Because much of the West Side has been put into production relatively recently, many farms there have "junior" water rights that are highly likely to be cut back in the event of a shortfall. Exacerbating this problem is the fact that in the past ten years, increasing amounts of California's water have been dedicated to the environment. For example, the Central Valley Project Improvement Act of

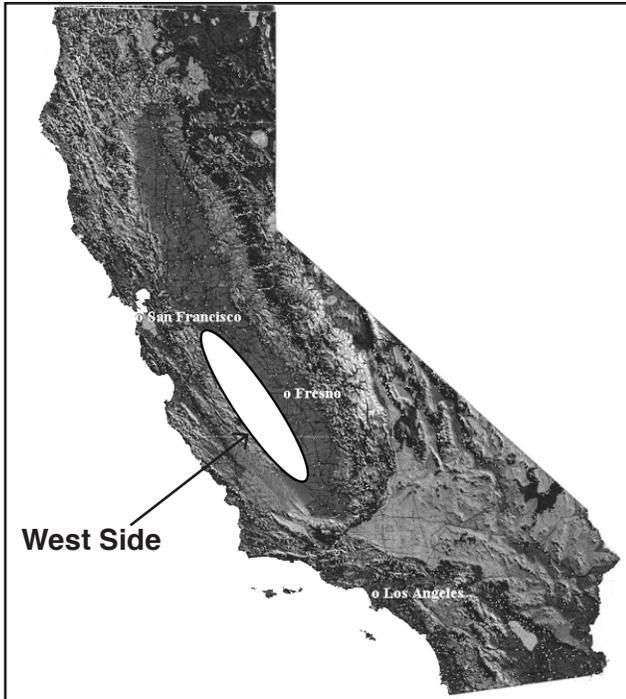
1992 reallocated 800,000-acre feet of water from agriculture to the environment for the purpose of rehabilitating the San Francisco Bay-Delta estuary. Because West Side farmers are at the end of the water queue, most of the burden of restoring the aquatic environment has fallen upon them.

Salinity is another long-term problem facing farmers in the region. Water imported from the Delta to West Side farms contains salt, and without an outlet for drain water, salt will accumulate in the region. The logical conclusion of this process is for farmland to go out of production as it becomes unproductive. West Side farmers have been pursuing a lawsuit against the Department of the Interior alleging that the Bureau of Reclamation is obligated to provide drainage service that was promised at the time the water delivery contract was signed. The U.S. District Court in Fresno recently handed these farmers a victory when it agreed that the federal government was indeed obligated to provide some form of drainage service.

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*Professionals from several fields of expertise were represented on the first conference panel. Members include, in order from left to right, Michael Hanemann of UC Berkeley, Tom Birmingham, general manager of Westlands Water District, Sarge Green, president of I-5 Development Corridor, Tom Graff, senior attorney of Environmental Defense, and Wes Wallender of UC Davis.*



### The Pros and Cons of Land Retirement

One impetus for the conference was a recent proposal floated by Westlands Water District (the single largest water district in California and the dominant West Side water interest) to settle the lawsuit. Tom Birmingham, manager of Westlands Water District, explained at the conference that Westlands has proposed that the government buy up to 200,000 acres of its farmland, thereby removing much of the need for drainage service. In exchange, Westlands would drop its drainage suit against the government (and other legal actions as well) and would keep all of its current water supply for use on the 400,000 acres of its farmland remaining in production.

One difficult problem with such a land retirement program, as was noted at the conference, is determining exactly which land to retire. The main goal of land retirement is to combat drainage. Another goal is to create upland habitat for the area's numerous endangered species. Wes Wallender of UC Davis described the choice between retiring "upland" and "bottom" land. Most retirement proposals call for the purchase of bottom land. Wallender noted that if bottom land is retired and upslope land remains in production, subsurface flows of saline drain water will impair the productivity of bottom lands and degrade their suitability as habitat for plants and animals, particularly endangered species.

Socioeconomic dimensions of land retirement are complex as well. Sarge Green, manager of the Tranquillity Irrigation District and president of the I-5 Development Corridor, noted that many towns in western Fresno County are among California's poorest. While these towns are in poor shape even with abundant water supplies to West Side farms, retiring several hundred thousand acres of farmland will certainly not help matters as there would be many lost jobs as a consequence of retirement. Green argued that if retirement is to occur, a share of the money paid by the government should go directly to these communities to compensate for adverse impacts.

### Unreliability of Water Supplies

The other major issue discussed at the conference was water supply reliability, or the lack of it. Most West Side farmers have never enjoyed abundant water supplies, and in recent years this situation has only grown worse. In fact, the Bureau of Reclamation now forecasts that West Side interests can only expect around half of their maximum deliveries in an average rainfall year, reported Dan Nelson, manager of the San Luis & Delta-Mendota Water Authority.

Given the unreliability of their water supplies, West Side farmers have expressed interest recently in expanding the state's water supplies, to include the construction of surface storage facilities. Environmental interests strongly oppose construction of more dams in California, arguing that diversion from streams and rivers has already decimated important resources, most notably the Bay/Delta estuary and once-abundant salmon runs in the Sacramento and San Joaquin Valleys.

### Expand Supply or Improve Management of Water Sources?

Giannini Foundation economists including David Zilberman and myself from UC Berkeley, Richard Howitt of UC Davis and Henry Vaux of UC Riverside have a long history of studying the policy and efficiency aspects of water supply in California, and have contributed to the debate about the need for expanding water supply in California. We have examined the relative efficiency of expanding supply versus reducing demand through water conservation. Our collective work has identified several conclusions that bear directly on the West

Side debate and which were presented at the conference by myself and David Zilberman.

California farmers can cope with reduced deliveries by reallocating water within agriculture. Water markets are an especially important way to accomplish this reallocation. In fact, Westlands farmers have already demonstrated the usefulness of water markets by actively adopting a trading program within the district. The four aforementioned UC economists have written that this water trading concept should be expanded well beyond the West Side. Expanding the scope of the active water market to, say, the East Side, or to the Sacramento Valley would help relieve pressure on West Side farms who bear a disproportionate share of the burden of protecting the environment. Farmers reducing water use in other areas would do so voluntarily, and would receive monetary compensation for their conservation.

Farmers can achieve even higher rates of water use efficiency by improving irrigation systems. In particular, they can invest in more modern irrigation systems and reduce their water application (and reduce drainage outflow in the process). West Side farmers have achieved much in this regard, but there is still some room for improvement.

Even if the state's water supply is expanded, Giannini Foundation economists have argued that the least expensive water supply projects should be selected first. It is unlikely that surface storage is among this set of projects. In fact, it is highly likely that the cost of water from new dams exceeds the willingness of farmers to pay for it. The state and federal governments have concluded, for example, that the average cost of water from a new dam in the Sacramento Valley would be over \$400 per acre foot at the source. West Side farmers would be hesitant to pay much more than \$200 per acre foot, meaning that the water would have to be massively subsidized to be affordable. More promising alternatives for supply enhancement include groundwater banking (also around \$200 per acre foot for many projects), which also poses less of a threat to the environment. But it is important to note that water transfers are a much cheaper means of replenishing West Side water supplies than either of these alternatives. This past year, for example, Sacramento Valley rice farmers sold water to a government transfer program for \$75 per acre foot.

## Envisioning the Future

At this point, the conference made clear that there is little agreement among California's water stakeholders on how to deal with the problem of water supply reliability for West Side agriculture. Surface storage is the most polarizing issue. Many in the agricultural community argue that the West Side is entitled by its contract with the federal government to a more reliable water supply, and that new dams are the only realistic means of assuring reliability. Environmentalists point out that new dams are not affordable at current water rates, and that they would require a massive new subsidy to agriculture from the federal and state governments. Further, they note that dams are environmentally damaging.

Giannini Foundation economists have found some merit in both positions, and have pressed for a middle path. By reallocating agricultural water use through trading, the West Side can be empowered to increase its water supply reliability while avoiding unnecessary burdens on state and federal taxpayers. That is, Foundation economists have emphasized improving the management of existing agricultural water supplies rather than expanding them through new storage projects.

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