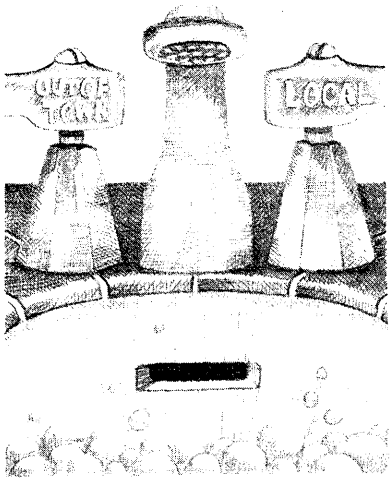
POLICY DIRECTIONS



Project Helps Farms, but at What Cost?

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Water allocation policy in California's Central Valley needs reform. Farmers use government-subsidized water to grow crops that require government price supports and then require more federal dollars to clean up the environment polluted by their wastewater.

The Central Valley Project (CVP) is among the world's largest water projects. Authorized by Congress in 1935, it includes 23 dams and reservoirs and hundreds of miles of canals (see Figure 1). In 1988, CVP supplied about seven million acre-feet of water to 2.8 million irrigated acres. Availability of this water at below market prices has been the key to success for much of the California farming industry.

The original intent of Congress was to promote family farms and the settlement of the West. Today, the recipients of massive federal subsidies to CVP are mostly agribusinesses owned by absentee corporations or wealthy individuals. Using loopholes in the Reclamation Reform Act of 1982, San Joaquin Valley land barons continue to receive federally subsidized water on farms much larger than the 960-acre limit imposed by Congress. Unfortunately, rural counties receiving this federal water at a small fraction of its actual cost number among those with the highest rates of unemployment and Aid to Families with Dependent Children.

Although Congress originally endorsed an interest subsidy on CVP construction costs, the Bureau of Reclamation has dramatically increased the subsidy over that intended by Congress by adopting unauthorized practices. These practices include average-cost pricing, rollover pricing (extending the repayment period, and thus the subsidy, each time a new facility is built), long-term contracts at fixed rates far below cost, and "ability-to-pay" policies (which forgive water users of their obligation to pay back even the construction costs of the project). Recent reforms in reclamation law curtail some of the subsidies, but the bureau has continued to allow major loopholes in the implementation of those reforms.

Another major unintended subsidy is the low-cost power used to pump the water from the reservoirs to the water districts. Until 1983, the average charge was about 2.9 mills per kilowatt-hour; this has been raised to 4.5 mills. Actual government cost is approximately 25 mills per kilowatt-hour. For further comparison, Pacific Gas and Electric Company residential rates range from 70 to 120 mills. Commercial and industrial rates are comparable or higher. This is a huge subsidy that encourages inefficiency and waste in power and water usage.

The Bureau of Reclamation, operator of CVP, has adopted a role of representing the interests of agricultural districts against those of other CVP water users and the U.S. taxpayer. Without federal subsidies, many agribusinesses would not survive. In many cases, their per-acre profits are less than the per-acre federal subsidies they receive. U.S. taxpayers are not encouraging or assisting small farms. Rather, they are providing agribusiness with

the wherewithal to realize rapacious profits.

Volumes have been written about the environmental consequences of the bureau's policies. Problems include selenium pollution at Kesterson National Wildlife Refuge, declining water quality in the Sacramento/San Joaquin Delta, and poor water temperature and flow management for fisheries throughout the system.

To add to this situation, much of the Central Valley crop production is in water-intensive, price-supported commodities that are in surplus and for which there are poor or inaccessible markets in the United States and abroad. Examples include cotton and rice.

There is a bright side to this giveaway of water, power, and money at great environmental cost. The huge size of this problem means we can make the necessary changes without damage to any constructive interest. Subsidized agricultural water users presently consume more than 80 percent of the three trillion gallons of water stored in a good year by the Central Valley and state water projects. Current capacities of the two projects are seven and 2.5 million acre-feet per year, respectively.

Elimination of unneeded and uneconomical use of subsidized agricultural water can be accomplished quickly and simply by raising the price to what it costs to produce and deliver it. This would still be substantially less than what it is worth to urban water districts. A 25-percent reduction in deliveries of subsidized agricultural water would double the amount available for municipal and industrial uses and benefit water quality, fisheries, and other environmental uses. Moreover, curtailing the subsidies would force operations to become more efficient in their use of water or to change to crops that can economically justify high water usage.

FIGURE 1
The Central Valley Project

Other Water Uses

California has a wealth of water for uses that could pay their own way without government subsidies. However, taxpayers must first put a stop to bureau policies that benefit only bureau client water districts to the detriment of taxpayers, the environment, and all other users of CVP water and power.

Who are these other users? Consider the case of Shasta County in northcentral California. CVP, with Shasta Dam as its keystone, is operated by the bureau for flood control, power generation, and primarily agricultural water supply. The Shasta Lake resort and Sacramento River recreational fishing industries, so important to Shasta County's economy, have no priority in the bureau's scheme.

The bureau has never attempted to compensate for the devastating impact of Shasta Dam on the fisheries. The dam sealed off access for anadromous (sea-run) fish to more than half the spawning grounds of the Sacramento River watershed, yet the bureau and its water-user clients have never been held responsible for even token mitigation. Coleman National Fish Hatchery is supposed to compensate for lost spawning habitat but only in 1989 instituted a program to attempt to do so for the two runs whose spawning grounds were eliminated by Shasta Dam: the winter- and spring-run chinook (king) salmon. Coleman Hatchery is not even funded by the bureau but operates at the mercy of congressional appropriations that have never been adequate to meet even minimal CVP mitigation needs.

During the drought of 1989, the bureau attempted to sell an additional 1.5 million acre-feet of "surplus" water to San Joaquin Valley agribusiness. This is equal to one-third the total volume of Shasta, California's largest man-made lake. The bureau projected a $34-million loss to the lake's resorts but inexplicably proposed no specific mitigation of the economic destruction to be wrought by the proposed action. The environmental impact statement was withdrawn for redrafting after the bureau was buried in an avalanche of protest, including the threat of lawsuits from Shasta, Trinity, and Humboldt counties.

Fish Loss

With the advent of CVP, the Sacramento River's anadromous fisheries have declined precipitously. Where salmon and steelhead were once (still within the memory of today's old-timers) so plentiful during their annual upstream migrations that "you could walk across the river on their backs," we are now left with a remnant of perhaps 10 percent of their historic populations, and these continue to decline rapidly. The existence of the natural stocks of these fish may soon be gone forever.

The Sacramento's hardest hit species—the steelhead trout and winter- and spring-run chinook salmon—have reached the brink of extinction. In 1989, the California Fish and Game Commission listed the winter-run as an endangered species after its numbers declined from hundreds of thousands of fish only 20 years ago to fewer than 600 in 1989.

Listing of the winter-run has led to required consultation with the Department of Fish and Game regarding all actions affecting the species, including present and future State Water Project and CVP contracts. This, in turn, is likely to lead to significant reductions in the amounts of water that are made available to powerful agricultural interests in the Central Valley.

Shasta Dam does not have a dependable multi-level outlet to release cold water to the river when it is needed by fisheries. Therefore, the summertime export of additional water on a schedule determined primarily by the needs of agriculture will continue to exacerbate existing problems with dwindling anadromous fish populations.

Sales of wet-year flows to corporate farmers will destroy what remains of the fisheries. California's offshore sport and commercial chinook salmon industries, valued at $17 million and $100 million a year respectively, depend on Sacramento River spawners for two-thirds of their catch. In Shasta and Tehama counties, the value of the recreational chinook catch is estimated at $8 million a year. We can no longer afford to stand by and watch the decimation of fish and wildlife resources while agribusiness continues to receive below-cost water.

The bureau must release sufficient water at Shasta and Keswick dams to restore and maintain the aquatic resources of the Sacramento River. This requires flow stability during salmon spawning and incubation periods. When 1989 spring rains allowed the bureau to meet water quality standards in the Delta with downstream accretions, the Keswick release was cut back to an all-time low of 2,300 cubic feet per second. The effects of this in the 13 river-miles below Keswick, the stretch containing the Sacramento's most productive spawning beds, were devastating. Adults, eggs, fry, and juveniles of the river's four distinct salmon races were left stranded, dead, and dying in large number. Hundreds of late fall-run redds were dewatered, their recently fertilized eggs hung out to dry. Flow reductions are justified at

times, but salmon should not be allowed to spawn during high flows only to have the water level dropped as a result of the vagaries of weather, shifting agricultural needs, and computer-aided bureaucratic bumbling.

An additional problem caused by low flows is the quicker build-up of the sulfuric acid and heavy metals stored in solution behind Spring Creek Debris Dam, located on a tributary of Keswick Lake about seven miles below Shasta Dam. Spring Creek drains Iron Mountain Mine, a Superfund site. The build-up occurs more rapidly under a low-flow regime because there is less clean water in the river to accept the toxic waste without causing major damage. The waste received at Spring Creek Dam is eventually dumped into the Sacramento River; however, there is not always enough clean water to properly dilute the waste, especially when Spring Creek Reservoir is filled and water must be released. As has happened during some 30 previous episodes, fish kills in the spring of 1989 were estimated in the hundreds of thousands.

The bureau's ongoing rationale? Due to the need to conserve storage in Shasta Lake for the irrigation season, dilution flows cannot be counted on for the preservation of aquatic life. What would such critical releases do to the level of Shasta Lake during the time they are needed? They would represent a drop in the bucket, a few hundredths of a foot per day, certainly not enough to make any difference to houseboaters on the lake in summer.

A Sensible Response

To preserve the endangered salmon runs and the Sacramento River/Shasta Lake tourism and recreation industries, the bureau must stop selling "surplus" water. With the mitigation needed to offset the fisheries damage caused by Shasta Dam still not in place, it is premature to consider contracting out additional water which would have even greater adverse impacts on the fisheries.

Current water contracts should be renegotiated to provide more water for uses so beneficial in the area of origin. These contracts should require enforceable agricultural water-conservation programs and reduce allocations to agriculture where wasteful uses are occurring. The bureau must encourage irrigation improvements such as the installation of water-return or recirculation systems. This will not only conserve a significant amount of the water currently being used, but it could reduce the need for costly cleanup of agricultural wastewater laden with pesticides, herbicides, and poisonous minerals such as selenium.

It can no longer be "business as usual" in supplying water to the California agricultural industry. If growers want more water, they should pay for its true costs. Why should Shasta County be singled out to mortgage its local economic well-being to bear more than its fair share of the burden in helping the federal government pay off the national debt? Why should Americans assist the bureau in giving away tax money to increase the productivity of subsidized crops that the market cannot use without further support subsidies?

The bureau delivers more than 80 percent of available CVP water to agriculture, compressing water export into the irrigation season and leaving less carryover storage for next year. This reduced carryover storage also diminishes the probability of refilling Shasta Lake to a desirable level. Low lake levels leave only warm top waters for release to the river, resulting in a poor survival rate of incubating salmon eggs. Shasta County is concerned about the increasingly lethal impacts of the bureau's policies on the natural resources and the outstanding recreation industries so dependent upon them. The time has arrived to reassess and redefine CVP water-allocation policies before it is too late.

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