In the spring of 1992, after six years of below-average rainfall, the perennial struggle over California's water reached a boiling point. Each of the three major groups of water interests in the state -- farmers, cities and environmentalists -- found themselves vying with the other two. At the center of this three-way tug of war was the biggest water hose in the state, the Central Valley Project (CVP), a massive set of dams, pumps, and canals built and run by the federal government.

In February, CVP managers announced they could deliver less than 25 percent of the water normally used for agriculture. Farmers on about 1 million acres of land would get no water in 1992, and the rest were cut back to between 50 and 75 percent of their usual allocations. For the first time in 52 years, the CVP had completely failed some of its irrigators.

The period of low precipitation beginning in 1987 received most of the blame for this drastic step. But the Bureau of Reclamation, the federal agency in charge of the CVP, had also been forced to limit its agricultural deliveries in favor of other water users -- most notably, the Sacramento River's winter-run Chinook salmon.

In 1981, 20,000 winter-run Chinook, listed as "threatened" under the federal Endangered Species Act and "endangered" under the state's act, made the journey from the Pacific Ocean to the spawning grounds upriver. By 1991, the number had dropped to only 191, and scientists at the National Marine Fisheries Service declared the run "extremely precarious." The agency demanded that the Bureau of Reclamation set aside enough water to ensure the fish would survive.

As the battle developed between environmentalists and agricultural interests over the CVP's water, a state task force released a report stating that residential, business, and municipal users might have only half the water they would need by the year 2010. The report suggested that the water-rationing urban users had grown used to as an emergency measure during the five-year "drought" might not be temporary. Media reports and editorials pointed out again and again that agriculture uses about 85 percent of the state's developed water supply while cities consume only about 15 percent. Urban interests began to eye cheap irrigation water, like that carried by the CVP, with growing interest.

And in Washington, Congress focused national attention on the project with its debate over legislation to repair and decrease the environmental damage caused by the project. The handling of the measure, signed by President Bush in October as part of a huge omnibus water bill affecting water projects throughout the West, angered many farmers in the southern part of the San Joaquin Valley and the administration of Governor Pete Wilson. "This bill...will serve none of the interests of the state it purports to serve," said Douglas Wheeler, secretary of The Resources Agency, as he watched a large and crucial portion of California's water being tossed around as a political football by a distant Congress.

In the midst of these controversies, the Wilson administration announced a plan that it promised would bring an end to the "decades-long water wars that have resulted in polarization and paralysis among urban, agriculture, and environmental sectors." As a "key part" of that plan, Wilson revived an old idea -- that the state should buy this huge project, the biggest irrigation system in the West, and run it for itself. "The Central Valley Project should be
managed in California, by Californians and for Californians," declared one cotton grower. "Our future shouldn't be in the hands of a bunch of politicians in New York or New Jersey or Washington D.C." Some environmentalists, however, saw the takeover more as a means to forestall Congressional reform than a genuine effort to solve the state's water problems.

This article examines the proposed transfer of the CVP from the federal government to the state. It includes a history of state and federal involvement in the project, an overview of the steps necessary to complete the transfer and a discussion of two central issues: the protection of fish, wildlife and plants dependent on CVP water, and the financial responsibility for the project's continuing environmental impact.

A State Project that Became a Federal Project

Ironically, in the beginning, the CVP was a state project. Between 1920 and 1930, California spent over $1 million on a plan to develop its water resources, culminating in a proposal to build a project very much like the CVP. In 1933, the state legislature, "succumbing to heavy lobbying by the growers," passed the Central Valley Project Act. Approved by voters later that year in a referendum, the act gave the state the authority to sell up to $170 million in bonds to build the project, authorization which is still part of the state's water code. Even at this point, however, the state expected financial assistance from the federal government. The act provided that the level of bond sales would be reduced by the amount of money contributed by the federal government. Still, the project was to be firmly in the control of the state.

But selling these bonds in the depths of the depression proved impossible for California. At the state's request, the Bureau of Reclamation contributed $12 million to the project in 1935 and took it over completely in 1937. Between the early 1940s and the mid-1960s, the bureau built 20 dams, including Shasta, New Melones and Folsom, and hundreds of miles of canals and aqueducts to carry water from one end of the Central Valley to the other. Altogether, the project controls between 7 and 8 million acre-feet of water in an average year, about 20 percent of all the developed water in the state.

When it was built, the CVP was unlike most previous Bureau of Reclamation projects. The mission of the bureau, originally authorized as the Reclamation Service by the 1902 Newlands Act, had been to carve farms from the desert for "homeless urban masses" by bringing water to the West's uninhabited public land. In contrast, the CVP was built to save existing farmers who faced ruin as they overpumped the groundwater and to bring water to 3 million acres of unirrigated private land. As one historian writes: "The CVP marked the virtual abandonment by the Bureau of its original self-justification....From this point on, the Bureau was in the more pressing business of saving a big, multi-billion-dollar private agricultural investment." Despite this shift, the bureau still had to provide water under the rules of the Newlands Act and subsequent reclamation legislation. These rules, designed to insure that federal money would be spread to the family farmers Congress was trying to help, determined how the water...
and power provided by the CVP were to be used and paid for. In California, they have created a continual tension between the Bureau of Reclamation and the state.

One of these restrictions, the acreage limitation, became a major public issue in the state in 1944. The Newlands act and later measures allowed a farmer to use subsidized water from the project on up to 160 acres of land. When applied to the projects envisioned by reclamation architects, projects designed to bring water to farmers settling vacant public land, the limitation made sense as a cap on how much a homesteader could benefit from publicly subsidized water. It was designed to ensure irrigable land was distributed fairly to the largest possible number of people. But when applied to existing California land holdings, many of which were much larger than 160 acres, the requirement appeared to farmers and farm groups as a device by which the federal government hoped to redistribute private landholdings. They protested the acreage limitation as an attempt to "turn the Central Valley area into a Federal colonization project" and "set up a socialistic or communistic form of agriculture..."

By 1945, this resentment "crystallized into definite proposals for project acquisition by the State of California." These proposals, "characteristically...vague as to project financing by the state," were frowned upon by the Federal government. But the state persisted, and after a feasibility study in 1952, it made an offer. The offer was refused and, rebuffed by the federal government, the state turned to building its own set of dams and canals in 1959. The State Water Project, including Lake Oroville and the California Aqueduct winding through the San Joaquin Valley next to Interstate 5, controls about 2.5 million acre feet a year --none of it subject to acreage limitations.

The issue of acreage limitations has largely disappeared from the debate over the CVP for two reasons: the Bureau of Reclamation enforced the provision only reluctantly; and Congress has been increasingly generous with the project's water, raising the limit to 960 acres per owner and allowing large farms to continue operating as long as they were technically divided up through trusts and other legal devices. Now the key issue from the state's perspective, as the events of February, 1992, illustrate, is who will make the hard decisions on how California's water is divided between its agricultural interests, growing metropolises and increasing fragile populations of fish and wildlife. Behind the state's move to acquire the project is the idea that "the state, rather than the Federal Government, [should have] authority for planning and allocation of the state's water resource...."

The State's Current Bid for the CVP

The process of transferring the project began in April, 1992, when the state's negotiating team, Resources Secretary Douglas Wheeler and Water Resources Director Director David Kennedy, began to meet with officials from the Bureau of Reclamation and the Department of the Interior. By October, the negotiations had produced a Memorandum of Agreement setting out the steps needed to transfer the project. The agreement, however, was carefully designed so that no specific terms of a contract between the state and federal governments are included and either party retains the ability to back out at will. Under the draft Memorandum, the terms and conditions of the transfer contract will be negotiated and a public scoping process will take place in 1993. In 1994, a draft environmental impact statement and report will be finished. The state must then seek approval from Congress and the White House on legislation authorizing the
transfer of the CVP.

The reform bill, known as Title 34 of H.R. 429 or the Central Valley Improvement Act and passed in October, will have a major impact on the transfer process. For Governor Wilson, the act’s passage has made the proposed transfer even more urgent. In a letter to President Bush in early November, Wilson pushed for rapid action on the "Memorandum of Agreement." Emphasizing that negotiations between the state and the Bureau of Reclamation had been going on for six months and that an agreement had almost been reached, he sharply criticized the reform legislation as giving the federal government a "more rather than less intrusive role in administration of the CVP...." Resources Secretary Douglas Wheeler called the bill an "unwelcome intervention by Congress" that slowed down negotiations over the transfer. Arguing that "the transfer is the most comprehensive reform that we can make," the Wilson administration wants a firm commitment from the Bureau of Reclamation to go ahead with the transfer before the administration of Bill Clinton arrives in January.24

Even if the transfer agreement is signed by January, the reform bill will change the nature of the negotiations between the state and federal governments. The Bush administration had encouraged the transfer of the project, saying that it was firmly committed to the policy position that "the Federal Government must respect the primary role that individual States have in shaping and controlling their own policies regarding water use and allocation."25 But, as Governor Wilson points out, Congress has now reaffirmed federal responsibility for control of the project on the Secretary of the Interior. Most of the bill’s provisions will take years to carry out or to have their intended effect. And Congress may be reluctant to turn over the project until it is confident that its reforms have been firmly established, thus extending significantly the timetable for the transfer.

On the other hand, from the federal government’s perspective, the CVP has become a "thorn in the side."26 The project, imposing acreage limitations and bestowing subsidies on some of the richest farms in the country, has always been a political headache for the bureau. And as the environmental impact of diverting California’s water becomes increasingly obvious, the project exposes the bureau to enormous potential liability. The reform legislation may ultimately smooth Congress’ approval of the transfer if it reassures federal legislators that by ending federal responsibility for the project, they will not turn it over to the complete control of the state’s agricultural interests.

Finally, the reform will have a crucial effect on perhaps the most important factor in the negotiations between the state and federal governments: the CVP’s financial status. According to the bureau’s estimates, the project cost taxpayers about $3 billion to build, has a depreciated value of $1.9 billion, and would cost about $7 billion to replace.27 The bureau considers $1.9 billion to be the lowest offer it could accept. But that number has little to do with the CVP’s value to the state. Ravaged by recession, California cannot afford to spend millions on a money-losing project, even if the purchase price were only a fraction of its replacement cost. So the price of the project to the state will be a major issue in the transfer talks. And to consider what price the state may be willing to pay, we must consider the rules governing the CVP’s operation.

Using Project Water to Protect the Environment

The recently passed reform bill will have an important effect on the financial status of the project. One provision sets aside 800,000 acre-feet, more than 10 percent of the project’s water, to be used specifically for protecting fish and wildlife, the Sacramento-San Joaquin Delta and San Francisco Bay. In addition, the act requires the project to increase its "firm" supplies of water to wildlife refuges in the Central Valley from about 150,000 acre-feet a year to 460,000.28 And, aside from giving more water to the environment, the reform creates a $50 million restoration
fund from fees and a three-tiered pricing system. The fund will be used to buy more water and build fish screens and other structures that will help meet the law's goal of doubling the population of salmon, steelhead and striped bass populations.

These new rules will directly affect the project's value because they change its "revenue stream," the amount of money paid to the project for the water it produces. To understand why, we need to look at how CVP water is sold. Under reclamation law, irrigators using project water only pay enough so that the government will eventually be reimbursed for the cost of building, operating and maintaining the project. (In fact, payments amount to less than that cost. In 1992, they had only amounted to 11 percent of the projects capital costs.2) Farmers do not have to pay interest on the government's original capital investment. As a result, the price of water to irrigators is currently far below not only the value of the water in an open market but also below its cost to the government. The difference is the federal government subsidy of the water.

In thinking about the financial situation of the CVP, it may help to compare it to a more familiar situation. A person buying an apartment complex, for example, would not be willing to pay anything for a building that cost more to maintain than the building's tenants could pay in rent. Purchasing the building would only make sense if the new owner could either raise the rents or bring in new tenants. If the rent is controlled or the tenants have long-term leases, the building's "revenue stream" would remain negative.

For the CVP, the 40-year contracts held by the irrigators for project water operate like rent control, limiting both the price the bureau can charge for project water and who it can sell the water to. (Under the reform bill, contracts have been limited to 25 years, and no renewals will be authorized until specific environmental goals and review requirements are met.) If, in taking over the project, the state can renegotiate the contracts, the project may be put on sounder financial footing. The state could also increase the revenue from the project if it were able to sell water to urban users, who can afford higher rates. Under such conditions, the CVP would command a higher price.

Similarly, demands for environmental protection also significantly affect the revenue generated by the project. The water used to maintain sufficient flows in the Sacramento River at just the right time of year to protect a salmon run cannot be sold to farmers. It is as if a landlord, to return to our earlier analogy, were required to provide 10 percent of the apartments in a building to the homeless free of charge.

Comparing the CVP to an apartment building, however, obscures one important fact: The CVP's supply of water, unlike the number of apartments, can fluctuate widely from one year to the next. Because the reform bill requires the project to provide a specific quantity of water to the environment rather than just a percentage of its water, it could mean severe cutbacks to municipal and agricultural users during a time of below-normal precipitation. The Department of the Interior examined the effect the provisions of the reform would have had on water deliveries if they had been in place between 1986 and 1991, and concluded that the reform will impose "an extraordinary burden on the operation of the CVP."3 If the CVP had been run under the rules in the reform legislation, according to the department's analysis, the project would not have been able to deliver any water at all to agricultural or municipal and industrial water users in 1990 or 1991. The revenue stream from water deliveries would have been zero.

The state claims that its acquisition of the project would solve some of these problems because it would allow water to be allocated more efficiently. When the same bureaucracy
controls both the State Water Project and the CVP, the state argues, water can be shuttled around the state with less waste. The state refuses, however, to estimate how much water might be saved if the projects were completely integrated. Critics question whether the savings would amount to much since the projects are already operated under joint agreements and even more cooperation is planned in the next several years whether or not the transfer takes place. And the reform bill, by encouraging water transfers and other practices, will also encourage more efficient allocation.

But the state does not assume that it would have to follow H.R. 429 under a transfer agreement. A major issue in the negotiations will be which federal laws will continue to apply to the project. Undoubtedly, the state will seek as much freedom from the constraints of federal reclamation law -- from acreage limitations and contract renewals to environmental obligations -- as it can. The fewer rules carried over from federal operation, the higher the price the state will be willing to pay. But here again the state will have to satisfy the Congress, which must pass legislation authorizing the transfer, that the reform law will not be undermined. Congressman George Miller (D-Cal.), the reform bill's chief author and chairman of the House Interior Committee, and many environmentalists will only support the transfer if it does not weaken the protections imposed by H.R. 429.

The state also faces another obstacle in the conflicting demands of two groups of agricultural interests. Farmers supplied with water from the CVP will use their considerable political clout to protect the terms of their long-standing contracts and prevent the state from seeking to change those contracts as a condition of the transfer. But if the state doesn't attempt to increase the cost of CVP water, farmers who receive more expensive water from the State Water Project may object to the transfer on the grounds that it's not fair they should have to pay a higher price than their competitors.

Who Will Pay for the Environmental Impact?

Aside from its ability to produce revenue, the value of the project to the state also depends on its financial liabilities. Who will pay to mitigate the project's immense environmental consequences (or "future obligations," as the bureau calls them)? If the state takes over the project, should it also have to answer for the impacts of the federal government's design and management?

The drainage problem is one such impact. In 1982, biologists discovered that water fowl in Kesterson Reservoir, a series of twelve ponds in the San Joaquin valley, were dying of selenium poisoning. The water in the ponds had been brought to the west side of the valley by the CVP, used to irrigate fields and then allowed to gather in Kesterson to evaporate and to serve as a wildlife refuge. The water picks up selenium (a toxic mineral which occurs naturally in that area) as it percolates through the soil. One solution to the drainage problem, a gigantic drain to dump the polluted water in San Francisco Bay, would cost hundreds of millions to build and still leave the problem only partially solved. Since the bureau estimates the CVP revenue for the next 40 years is only $870 million (in present value), the state does not want the federal obligation to provide the drainage (or any litigation that might come with it) to transfer along with the project.

Conclusion

California's attempt to acquire the CVP is fraught with uncertainty. While the government and water users thirst for control of the project's water, the responsibility for running, maintaining and cleaning up after the CVP may prove to be a too costly a burden for the financially strapped state to bear. And any of the three major groups of water interests --
environmental, agricultural or urban -- may find that their interests are better protected if the project remains in federal hands.

Some farmers, for instance, might benefit from the transfer because they could have more direct control over the state legislature's decisions than those of Congress. But, depending on the deal worked out by the state, farmers may prefer to keep their federal subsidies rather than take a chance on a state government eager to encourage water transfers to rapidly growing cities or under pressure to raise the price of their water. And environmentalists, who have finally succeeded in passing reform legislation for the project, may be reluctant to give up that protection if the state succeeds in negotiating a transfer which would free it from some of the environmental commitments required by federal law. In addition, they may feel more secure with the federal government's promises to mitigate the CVP's environmental impact than with the state's.

Whether the state or federal government controls the CVP, the project will continue to be the center of controversy. Based on faulty assumptions and environmental ignorance, the project has come to play a crucial part in California's economy even as it has wreaked havoc on its ecology. Far from helping to end the state's history of water wars, as Governor Wilson claimed it would, the most a proposed transfer can be expected to do is change the location of the battles and a few of the outcomes.

NOTES
2. The winter-run Chinook is one of four distinct runs of salmon that swim from the Pacific Ocean, where they spend most of their lives, up the Sacramento River, where they reproduce in spawning grounds.
5. Press release from the office of Gov. Pete Wilson (Apr. 6, 1992)
6. Interview with Mark Borba, farmer and president of the California Cotton Growers Association (Sept. 29, 1992)
10. Montgomery, supra at 5.
11. Donald Worster, Rivers of Empire, (Pantheon Books, 1985)
13. Worster, supra at 171.
15. Worster, supra at 240
17. Id., at 110
18. Id., at 110
19. Id., at 117
20. Id., at 117
22. Reiner, supra at 353
24. Interview with Douglas P. Wheeler, Secretary of the California Resources Agency (Nov. 5, 1992)
25. Statement by the President, George Bush (Oct. 30, 1992)
27. U.S. Bureau of Reclamation, Draft Baseline Data for Asset Valuation, Central Valley Project (Sept. 9, 1992)
28. Interview with Dan Chapin, vice president of the California Waterfowl Association (Nov. 5, 1992)
29. U.S. Bureau of Reclamation, supra.
31. Id.
32. Douglas P. Wheeler, Why the State Should Control the Central Valley Project, Sacramento Bee, Sept. 6, 1992, at FO1
34. Interview with Douglas P. Wheeler, Secretary of the California Resources Agency (Nov. 5, 1992)
35. California Resources Agency, Draft List of Issues to be Considered in Drafting Terms and Conditions for CVP Acquisition for NEPA and CEQA Scoping Purposes, (Oct. 29, 1992)
36. Reiner, supra at 487.
37. U.S. Bureau of Reclamation, supra.