Committee on Resources
Subcommittee on Water & Power

Testimony

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Testimony by

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Introduction

On the President's recent trip to Africa, we were reminded of the importance for a country to have an effective food production and distribution infrastructure. Today in many developing countries, leaders and policy-makers are faced with major obstacles, all-too-often related to the inability of a nation to feed itself.

Each U.S. farmer today produces enough food to feed 97 people in the U.S. and 32 people abroad. Here in Fresno County, the number one agricultural county in the United States, we have an agricultural resource and productivity level that is the envy of the world. Imagine what developing countries would give to have that productivity and our available resources -- the fertile soil, long growing season, and a water delivery system that makes year-round irrigation a reality.

The Central Valley Project Improvement Act of 1992 has significantly changed the landscape upon which San Joaquin Valley agriculture must operate. We are all aware of the reduced reliability of CVP agricultural water supplies resulting from the reallocation of agricultural water to address refuge and fish habitat requirements and the increased cost of CVP water supplies resulting from the creation of the Environmental Restoration Fund. Those who supported these changes touted water markets as the way to deal with water supply uncertainty, and increased water prices, cropping changes and water conservation practices as ways to increase the efficient use of water. Water markets, water prices, cropping changes, water conservation, and land retirement were the stated "cures" for coping with CVPIA. In fact, these coping mechanisms are occurring. However, the consequences of these actions threaten the sustainability of the great agricultural resource in the San Joaquin Valley and, in at least one instance, are inconsistent with other federal programs.

Consequences of Reduced Water Supply Reliability and Water Markets

Implementation of the CVPIA has significantly changed the operation of the CVP water delivery system, resulting in the annual reallocation of over one-million acre-feet of water from human use to fish and wildlife purposes. Refuge supplies and reduced pumping from the Delta for fish doubling efforts have diverted contracted supplies away from CVP farmers. Future decisions regarding Trinity River flows and

export operations further threaten the remaining agricultural water supplies.

Prior to 1990, CVP water contractors received full allocations of contractual entitlement for over 30 years. Only the severe drought in 1976-77 caused a reduction in these reliable supplies. In 1992, the landscape significantly changed. An extended drought, endangered species actions, and CVPIA have resulted in water supply reductions to CVP ag contractors, ranging from 35 to 95 percent over the past six-year period. Our estimated long-term reliable CVP supply is now 65 to 75 percent of entitlement. This year, despite El Nino and record precipitation, our CVP supply is only 85 percent of our contract entitlement. It is mid-April, and our farmers still do not know exactly how much CVP water they will receive.

The impacts from major water supply reductions are significant and far-reaching. Unlike water agencies with more abundant water supplies, Westlands allocates water to its farmers even in the wettest years. The financial impacts resulting from cuts in allocations can be severe. For example, based on 1991 data, a year in which the CVP allocation was 25 percent, almost 125,000 acres or 21 percent of the District's gross area were idled. The resulting loss of gross farm income was estimated at $175 million, not including impacts from unemployment and reductions in the local taxes and regional economies.

As a result of the uncertain water supplies, Westlands and its water users are pursuing water transfers from other districts both within and outside of the CVP to help stabilize water supply. We have been blessed with above-normal, wet conditions in each of the past four years, thus creating a water market that has adequate supply to meet demand. This abundance will not be available in normal and dry water years.

We have purchased over 1.4-million acre-feet of short-term water transfers and exchanges since 1989-90; however, these supplemental water supplies come at an increased cost, ranging from $45 per acre foot in 1995 to $110 per acre foot in 1994, and are very uncertain from year to year. At these price levels, farmers look to alternative actions, including cropping changes and increased use of groundwater.

Reduced CVP water supply and the higher cost of replacement supplies have forced farmers to re-evaluate groundwater as a resource. In some areas of the District, the cost to pump groundwater is now less than the cost of CVP surface water deliveries. Increased groundwater pumping results in a return to overdraft conditions of the basin and increased subsidence. The CVP's San Luis Unit originally was designed to provide low-cost, high quality surface water so farmers could reduce groundwater pumping to within the margins of safe yield.

Reduced water supplies and ongoing uncertainty from one year to the next have resulted in social and economic adversities for our farmers, their employees and the communities, whose foundations are based on a viable agricultural industry. While the rest of the state and nation are at one of the lowest unemployment rates in history, this area remains plagued by double-digit unemployment, in part due to water supply impacts on Fresno County agriculture.

As a direct result of reduced water supplies and higher water costs, our farmers have had to make difficult decisions, with some experiencing bankruptcies and many going through major reorganizations. When a farmer "closes shop," it's not just the individual farmer who is affected. Agriculture is one of a few industries that produces a raw product that supplies other industries with materials that create jobs. It is not a service industry that feeds off others.

Mr. Villarejo's study on the city of Mendota, titled "93640 at Risk: Farmers, Workers and Townspeople in an Era of Water Uncertainty," accurately presents the facts about on-farm water reductions and the trickle-down impacts that occurred during the early 1990s, resulting in an 11-percent drop in retail sales at a time when county-wide retail sales showed a four-percent gain. Ag land values dropped 30 percent compared to increases in land values in other Fresno County areas. Cropping changes resulted in a net decrease of 362,000 hours of agricultural field labor, or about $2.2 million in lost wages. Measured in terms of jobs, up to 720 farm workers were affected. As we have seen, if agriculture continues to run short of water, people

will continue to run short of jobs.

Consequences of Increased Water Prices

The CVPIA has resulted in a significant increase in the cost of water paid by Valley farmers. In 1998, water rates in Westlands range from $35 to $105 per acre-foot, depending upon the reclamation law status of the farmer. Water rates in 1998 are 50 percent higher than last year's costs and approximately 65 percent higher than rates in effect just 10 years ago.

A major reason for the dramatic increase in water rates is the binding agreement rate component. The CVPIA's contract renewal "hammer," a purely punitive provision aimed squarely at Westlands and the few other CVP water service contractors whose current contracts don't expire until 2007 or later, forced a commitment to early renewal of existing water contracts. The law requires these district's to pay an additional 1-1/2-times the current restoration fund rate to the Bureau unless that district signed by September 30, 1997, a binding agreement to enter into negotiations to renew of their contracts early.

Despite the lack of a final PEIS, which was supposed to be completed by September 30, 1995, the binding agreement requirements of CVPIA were enforced last year, without contracting rules and regulations or a form of the draft renewal contract. Westlands signed the binding agreement to negotiate early renewal of its contract; however, in the event Westlands and the United States are unable to come to agreement on the terms of the early renewal contract, Westlands will be forced to pay the "hammer" retroactive to September 30, 1997. The liability created by this process is estimated to be as much as $40 million depending upon how long environmental review and contract negotiations take. This huge liability will undoubtedly influence contract negotiations and must be properly managed by each affected water service contractor to maintain the financial viability of the district and its water users.

The Environmental Restoration Fund also increases water rates to CVP users. The Environmental Restoration Fund has been funded by CVP water users during the last three years with a total of over $165-million to be used for environmental improvements in the Delta ecosystem. Westlands farmers alone have paid over $23-million into the fund. Water users are paying for environmental fixes, yet few, if any, have been done. There's been minimal planning on how to spend the money and very little accountability for where the funds are going.

Westlands and other CVP water service contractors have taken significant steps towards cost containment since CVPIA. In addition to organizational and programmatic adjustments within our district, we also have taken an increased role in controlling the costs associated with operation and maintenance (o&m) of CVP export facilities. In response to elimination of federal appropriations for these costs, we are now finalizing negotiations with the Bureau of Reclamation to self-fund o&m expenses. This effort is intended to establish a more direct relationship between the costs paid by water users and the use of the money collected for o&m activities. Despite our every effort to control expenses through this transition and our assumption of o&m responsibilities, the Bureau's water rates have not decreased correspondingly. In fact, the Bureau's remaining water rate components for 1998 are approximately $3 per acre-foot higher than rates charged for these components last year and include funding for environmental programs related to CVPIA implementation.

Higher water rates on the farm create a more fragile relationship between profit and failure, which for some farmers may mean the difference between planting another crop or planting a For Sale sign on the property. Because farmers don't set the prices they receive for their products, they do not have a way to pass on these higher production costs. By and large, supply and demand establish the prices farmers receive no matter how much more it costs to produce a crop. Any higher production costs -- be it water rates, equipment costs or minimum wage increases -- is typically absorbed by the farmer and his razor-thin profit margin.

Consequences of Cropping Changes and Production

How have farmers coped with higher water rates and uncertain water supplies? By and large, most farmers are survivors, and as such, many have shifted to the higher value vegetable, fruit and nut crops. During the past 16 years, we've seen a 174 percent increase in vegetable crops and a 132 percent increase in tree and vine acreage throughout the District. In fact, the combined acreage of fruit, nut and vegetable crops in Westlands in 1996 outnumbered the Acala cotton acreage -- a notable fact given the history of premium quality cotton production in our district. During the same period, there's been an 81 percent drop in plantings of cereal grain crops like barley, field corn, oats, sorghum and wheat.

The transition from cereal grains -- an annual crop -- to permanent crops like trees and vines, requires a significant investment at a higher risk and increases the need for a more reliable and adequate water supply, placing yet more demand on the CVP and its contractors. With orchards and vineyards, the crop planting schedule cannot be changed during a water short year to accommodate a reduced water supply. The year-round water needs for permanent crops tend to be higher than the water requirement for shorter-season vegetable or row crops. For example, almonds in Westlands used 3.8 acre-feet per acre in 1997, while cantaloupes used 1.3 acre-feet per acre during its four-month cycle. Likewise, pistachios used 3.70 acre-feet per acre, compared to tomatoes -- a five-month crop -- which used 2.0 acre-feet. Obviously, the shortness of the season for the annual crops has much to do with the amount of water required.

Consequences of Water Conservation

Westlands farmers -- already some of the most efficient in the world -- have made major changes in their irrigation programs, reflecting the uncertain supply and higher costs. Since 1972, Westlands has had an aggressive water management program providing farmers with current crop water use data, assistance with irrigation scheduling, use of computer scheduling and record-keeping, water measurement techniques, and pump efficiency programs. The District has spent almost $2.5-million in water conservation and management programs since 1994.

Today, Westlands farmers continue to have one of the highest seasonal application efficiency ratings in the nation -- almost 80 percent District-wide. In fact, the Draft Bulletin 160-98 prepared by the CA Department of Water Resources cites recent DWR studies that target theoretical on-farm irrigation efficiencies of up to 80 percent -- an optimal irrigation efficiency -- through improved irrigation equipment and irrigation management practices. The Report acknowledges Westlands, Kern County Water Agency and Imperial Irrigation District as having on-farm efficiencies ranging from 75 to more than 80 percent.

Many argue that additional water conservation will address water supply issues resulting from CVPIA implementation. Suggested levels of on-farm irrigation efficiency fail to acknowledge the issue of salt build-up. Application of water above that which is required by the crop is necessary to leach these salts, accumulating from the application of surface water supplies, from the root zone in order to maintain the productivity of the land. Failure to apply this leaching component will destroy the land and thus wipe out agriculture in the San Joaquin Valley.

Farmers have modified their irrigation programs to maximize their limited supplies, recognizing that a diversified crop mix depends on equally-as-diversified and flexible irrigation systems. In 1985, 63 percent of the land in the District was irrigated exclusively by surface irrigation using furrow or border strip. In 1996, 36 percent was in furrow or border strip irrigation, while the percentage irrigated by a combination of sprinklers for preirrigation and furrow for mid-and late season irrigations nearly tripled, from 15 to 43 percent.

Drip and micro-irrigation systems have increased five-fold, to six percent of the total irrigated acreage in Westlands. Eleven years ago, only one percent of the acres in Westlands was using drip systems. Certainly the switch to more permanent crops can be attributed to a large part of the increase, but a limited number of farmers are implementing surface and subsurface drip -- at costs of up to $1,000 per acre -- on certain higher value vegetable and row crops. The high-costs of the equipment compared to the crop return typically

preclude more farmers from switching to drip or more expensive systems.

To help off-set the large capital needs, Westlands continues to facilitate the availability of low-interest loans for purchase of sprinkler and drip equipment. In the last two years, the District has facilitated over $1.18-million in low-interest loans from the State Water Resources Control Board for irrigation equipment. The District has applied for a second low-interest loan totaling $5.0 million which, if approved, will be implemented in 1999.

Consequences of Land Retirement

The CVPIA provides authority to voluntarily retire lands in the CVP service area that are affected by shallow groundwater and drainage. The Bureau of Reclamation is prepared to retire the first block of approximately 2,000 acres in the next several months, followed by continued negotiations with other interested landowners over the next year. It is notable that all of these lands fall within the Westlands Water District service area.

Our water users have had no other choice but "voluntarily" sell their land to the United States due to reduced water supply reliability, water costs, and failure of the United States to provide the drainage service provided for by contract. Westlands must also participate in the land retirement program to protect our remaining water users and landowners. We have offered our financial support to the Bureau to accomplish land retirement objectives provided the water supply remains in our District, the lands are properly managed so that neighboring farmers are not adversely impacted, and the United States compensates for the lost assessment and tax base resulting from federal ownership.

Land retirement cannot be viewed as the only component of a drainage solution in the San Joaquin Valley, nor can it be viewed as an alternative to restore water supply reliability to Valley farmers. As we proceed with this "voluntary" program, we must acknowledge that every acre of retired agricultural land reduces gross farm income by $500 to $1,500 per acre, eliminates up to three times that dollar amount from the State economy due to lost ag-related purchases and services, reduces jobs, and impacts assessment and tax base upon which local governments rely to fund educational and social services programs. Retirement of large blocks of agricultural land will further threaten the agricultural economy and do little to accomplish environmental objectives.

Consequences of Reclamation Law Objectives

The federal Reclamation Law program, initiated in 1902 and amended by Congress in 1982, was designed to break-up large land-holdings in federal water contractor districts. Farmers would receive their water allocation at a certain rate if they agreed to limit the acreage they farm -- 160-acres before the reform; 960-acres after the 1982 reform.

In Westlands we have seen the successes of this program. Since 1968, the total number of landowners has nearly tripled. The farming patterns has changed also, with the average farm size in Westlands at just over 900 acres. These numbers are audited each year by the Bureau, and the District is in compliance with the Reclamation program.

On the other hand, the CVPIA, also passed by Congress, has undone some of the progress made by the Reclamation Law and has the potential to do much more. Chronic water shortages and ever-increasing water costs will hit hardest those smaller family farms in Westlands. When they can no longer afford to farm, their property will undoubtedly be sold. Only the larger farming entities can afford to purchase the property. These larger, more vertically integrated farming operations can spread out the increased costs of doing business because of their size, diversity and financial lenders. This year, with our water rate increasing at least $10 per AF solely because of the CVPIA, we can expect to see even more of a shake-out, especially with other increases in farming costs like the minimum wage, record-low cotton prices and continued crop

delays from El-Nino influenced weather patterns.

Summary

Westlands and its farmers have coped with CVPIA implementation by relying on uncertain water markets, changing cropping patterns, and continuing our pursuit of innovative, expensive water conservation practices. These farmers have experienced higher water costs and reduced water supply reliability that threatens the long-term viability of agriculture in the San Joaquin Valley. These farmers continue to suffer from the disproportionate reduction in CVP supplies to south-of-Delta water users. Without question, the CVPIA has placed our farmers closer to that precarious financial edge. When we talk about the financial uncertainties of our farmers, we're not just talking of the impacts to a single person or entity. We are talking about the resulting job reductions and lay-offs for his employees, and less economic activity from the related and ag-dependent industries from the necessary "belt-tightening."

We strongly support the goal of a healthy Delta. Our commitments under the CVPIA and involvement in the CALFED Bay-Delta Program are testaments to that goal. We only hope that the concepts of balance, underlined by the premise that "we all get better together," carries over into the federal administration's implementation of the CVPIA. This balance is essential to protect the long-term viability of one of this nation's greatest resources - agriculture in the San Joaquin Valley.

Your efforts to focus attention on our issues are appreciated, and we stand ready to work with you toward resolving them.

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