

A Political Economic Analysis of the 1982 Reclamation Act

E. Phillip LeVeen

The passage of the Reclamation Reform Act of 1982 concluded a decade-long fight over the administration of the original Reclamation Act of 1902. This paper first discusses the economic significance of the new acreage limitations and pricing provisions of the 1982 legislation and then examines some of the political economic forces that influenced the legislation.

Changes in Reclamation Law

The Reclamation Reform Act of 1982 fundamentally changes several key provisions of the 1902 Reclamation Act, especially the acreage and residency requirements that limit access to federal irrigation water, and to irrigation water pricing. The new law increases the ownership limit on land eligible for Reclamation water from 320 to 960 acres per family (husband, wife and dependent children) or for a corporation with less than 25 shareholders. Corporations with more than 25 shareholders are restricted to 640 acres.

The new legislation eliminates the residency requirement and in its place institutes a limit of 960 acres as the maximum size farm (irrespective of whether the land is owned or leased by its operator) that can receive subsidized water. Larger units

must pay the "full-cost" of water used on land in excess of 960 acres.

A less obvious, but important part of the 1982 legislation grants irrigation districts already holding long-term water contracts until 1987 to amend their contracts to be included under the new legislation. A similar option is available to any individual landowner, whether or not his water district amends its contract. Significantly, according to the regulations proposed in May (*Federal Register*, May 3, 1983), amended contracts must also conform to the 1982 pricing regulations, including a requirement that operation and maintenance costs be adjusted annually to insure their full repayment, along with repayment of the farmer's share of capital costs.

Water districts may elect not to amend their contracts and remain under the "prior" 1902 Reclamation law, paying the old fixed contract prices for the remainder of their existing 40-year contracts; only when these expire will the new pricing reforms be introduced. It is important to note, however, that the 1982 legislation does not permit a return to all of the old administrative practices of the 1902 law. Beginning in 1987, it requires that a full-cost price be charged to any farm operation with more than 160 water-eligible acres (320 acres per family). Thus, if a family owns 320 acres and leases 320 acres from another family, the full water cost must be paid on the leased land, unless the farm operator chooses to amend his contract with the government. He would then be eligible to receive a full subsidy on the leased land up to 960 acres.

Phillip LeVeen is the Director of Public Interest Economics-West, Berkeley, CA. Invited Paper presented to Western Agricultural Economics Association 1983 Annual Meetings at the University of Wyoming, Laramie July 11, 1983.

The Economic Significance of the 1982 Legislation

The relaxation of the acreage limits is generally regarded as a victory for Western landowning interests who now have increased access to substantial federal water subsidies. But this victory may be more apparent than real, especially for those landowners who have, in the past, benefitted most from these subsidies. Assuming that the law is enforced according to the proposed regulations, the subsidy available to many landowners is likely to completely disappear. This is especially true in such regions as California where farm operations now far exceed the 960 acre subsidy limit.

Higher Reclamation Water Prices and the Water Subsidy

The new legislation will raise water prices and reduce, by varying amounts, the available water subsidy. To more fully demonstrate this, I will begin by outlining the nature of the subsidy, according to the program's four components. First, irrigators are not required to repay interest on capital allocated to constructing their projects. Over a typical contract period of 50 years, the interest subsidy is large and is the most important component of the overall water subsidy. Second, repayment of irrigation costs is based on "ability to pay." If it is determined that irrigators cannot repay the entire non-interest portion of capital allocated to their project, the remainder of these costs may be repaid from profits earned by the sale of hydroelectricity. Third, because of the combination of fixed 40-year contract prices and inflation, actual water repayments are not sufficient to cover both the debt obligation and the annual operations and maintenance costs; thus only part of actual O & M costs are repaid. This aspect of the subsidy is unintended and has no justification in any legislation. Fourth, a considerable subsidy is available to projects that require large amounts of elec-

tricity for irrigation pumping. This electricity, generated by Reclamation project dams, is "sold" at a fraction of true market cost. Again, it is not clear that this subsidy was intended in any Reclamation legislation.

It should be added that these subsidies are further compounded in some districts by the practice of average cost pricing. Under this practice very high costs of new unit costs within a large project are averaged with much lower older unit costs in order to keep repayment obligations of new districts far below what would otherwise be required. Because of the fixed water prices of the old districts, the higher average costs that they should be charged are postponed until long into the future. Landowners in old, low-cost units have had little incentive to discourage the inclusion of new units, even when they do not directly benefit from additional water supplies.

The magnitude of the water subsidy also varies greatly between projects; it is especially large on the newer, higher cost developments. On average, most districts repay less than 10 to at most 30 percent of full capital (plus interest) and O & M costs; see Table 2 of Charles Moore's companion article in this volume. Moore's subsidy estimates do not include either the cheap power or the "average cost pricing" subsidies, which may be substantial in some districts. For example, the Westlands district annually requires 800 million kwhs of pumping energy, provided by the Bureau of Reclamation at a price of \$0.25/kwh; a comparable commercial rate would be closer to \$0.04/kwh and if this rate were charged the O & M cost would rise \$30/af. In this case, the power subsidy is worth almost as much as the interest subsidy.

Operation and Maintenance Prices

Amended contracts will incorporate provisions allowing full repayment of operation and maintenance costs. There is,

as yet, no data showing how much rates will increase because of this price adjustment. However, most districts have contracts that are over ten years old, with rates set before the onset of rapid inflation. It is likely, therefore, that most districts are paying less than one half to one third the total true O & M costs. The importance of O & M costs in the overall repayment structure is subject to considerable individual variation, depending on the nature of the individual project and the age of its contract. In some districts, total revenue now collected on the basis of the fixed-fee schedules is insufficient to cover O & M, let alone the capital repayment obligation. In these districts, water prices could rise substantially under amended contracts and result in the elimination of the O & M subsidy.

While it is unlikely that the "average cost" pricing policy will be eliminated in amended contracts, these contracts will contain a clause that allows rates to be adjusted upward when costs rise in the future. Such clauses will permit the higher average costs of new units to be reflected in the prices of all project beneficiaries as they accrue and not, as now, after a long postponement. Average water prices will thus rise throughout the project in response to new development. This fact may well produce resistance to new development from established water beneficiaries, whose costs will rise even if they do not benefit from additional water deliveries.

Farm Size, the Subsidy and Full-Cost Water

Water rates will also rise because the new law specifies the size of the farm operating unit and not, as under the old law, the amount of land owned, as the basis for determining access to the water subsidy. When ownership was the basis for determining the subsidy, the farm operating unit could be almost any size and still receive subsidized water. While the new law does not limit leasing, it does require that

the full-cost be paid for any water received for an operating unit in excess of 960 acres or over 320 acres, if the contract is not amended. "Full-cost" means a water price that covers all unpaid capital costs and interest thereon, plus full operation and maintenance costs. Estimates of these costs are found in Moore's companion article, Table 2.

The potential impact of eliminating the water subsidy for operations will depend on whether districts amend their contracts. Most of the land served by Reclamation projects is farmed in operations exceeding 320 acres, and more than 30 percent is farmed in operations exceeding 960 acres; see Table 1. The importance of leasing is also evident. Of the 8.5 million acres surveyed by the Bureau of Reclamation, over 3.1 million acres, or 37 percent, are now operated under lease. Most of this leased land is now in units over 320 acres; over 1.3 million acres is on units with more than 960 acres. Under the new rules, if no district amends its contract, up to 50 percent of all reclamation acreage would be subject to full-cost pricing; if all districts amend, about 16 percent will be so subject, assuming no changes in average farm size. It is clear from this that many landowners in virtually all districts will have strong reason to amend their contracts to comply with the new law, rather than to pay the full water costs on land in excess of 320 acres. That is why section 203(b) of the new law—which requires full-cost water charges on land in excess of 320 acres, if contracts are not amended by 1987—is called the "hammer clause." It forces compliance with the new law and leaves very little alternative for most districts, other than to amend their contracts.

This "hammer clause" will not threaten districts in which average farm size is now less than 960 acres (except insofar as it forces upward revisions in O & M charges), but it does threaten the status quo in districts with farms averaging more than 960 acres. While such large farms are found

TABLE I. Size of Farm Operations in All Districts.

| Size Operation | No. of Operations | % of All Operations | Mean Acres | | Total Acres | | % of All Acres |
|----------------|-------------------|---------------------|------------|----------|-------------|-----------|----------------|
| | | | Leased | Operated | Leased | Operated | |
| 1-160 | 35,498 | 74.5 | 11.4 | 54.9 | 405,158 | 1,948,320 | 23.1 |
| 161-320 | 5,810 | 12.2 | 73.0 | 231.3 | 424,423 | 1,343,859 | 15.9 |
| 321-640 | 4,494 | 9.4 | 184.2 | 448.1 | 827,905 | 2,013,683 | 23.8 |
| 641-960 | 607 | 1.3 | 306.1 | 803.1 | 185,753 | 487,420 | 5.8 |
| 961-1,280 | 399 | 0.8 | 473.0 | 1,085.8 | 188,847 | 433,463 | 5.1 |
| 1,281-1,920 | 396 | 0.8 | 515.9 | 1,529.9 | 204,115 | 605,275 | 7.2 |
| 1,921+ | 435 | 0.9 | 2,084.6 | 3,720.8 | 906,828 | 1,618,630 | 19.2 |
| Total | 47,638 | 100.0 | 66.0 | 177.4 | 3,143,029 | 8,450,651 | 100.0 |

Source: U.S. Department of the Interior, *Interim Report, Op. Cit.*

in all districts, they predominate in a relatively few, mainly in California and the Southwest; see Moore, Table 3. In particular, note the San Luis Unit of the Central Valley Project, which primarily serves the 500,000+ acres of Westlands Water District. Over 98 percent of its irrigated acreage is now farmed in operations exceeding 320 acres, 85 percent in operations exceeding 960 acres, and fully 70 percent of the land is farmed in operations averaging 6,000 acres each. If the district does not amend its contract, all but a very small portion of the district would be subject to full-cost water rates. Even if it does amend, over 80 percent will still be subject to these provisions, assuming no change in the size of farm operations. These considerations imply a substantial increase in average water costs in a district like the Westlands, assuming no change in farm size.

Moore provides some estimates of the full-costs that will be charged on water delivered to farms exceeding the 320 or 960 acre limits; see his Table 2. Since only a few districts will be forced to pay these rates, assuming that most amend their contracts, our concern is the magnitude of full costs in the districts most likely to experience them. Eight of the fifteen districts listed in Table 3 of Moore's article have potential excess land over the 960 acre limit. However, only 4 of these have more than 30 percent of their total acreage

above the limit, while 3 have less than 15 percent in this category. In the case of the four former districts, full-cost prices under the new law would lead to price increases of as little as \$1/af in the Truckee-Carson project to \$25/af in the Westlands and \$60/af in Altus-Lugert.

What do such price increases imply? Are they affordable? At the very least, such water price increases represent a relatively large reduction in net income per acre. For example, in all four of the districts with large amounts of excess land, the price increases represent at least 20 percent of total gross crop value. Rarely is net farm income much greater than 25 to 30 percent of gross sales, so such price increases would absorb most of the net income now being produced.

Further evidence that full-costs will impose substantial economic losses is found in recent testimony prepared by the Arvin-Edison irrigation district in California. Calculations are presented that show full-cost prices will increase overall production costs by \$129/acre, an amount in excess of average annual lease rates, which are currently about \$100/acre (Paulden, 1983). Even if the land could be leased for a zero cost, the farm manager would still experience a significantly lower return on his operation.

This testimony accords with other repayment capacity analysis undertaken by this author which examines the ability to

pay rising water costs in districts neighboring the Westlands, which have similar crop mix and production costs. This work concludes that prices over \$30/af absorb all of the potential profit to the grower, leaving no return to management, given the current return on land (LeVeen, 1982). Prices over \$60/af absorb the entire return on land as well, and at this point it would be more profitable to leave the land idle. These figures are in rough accord with the repayment capacity for the Westlands reported by Moore; see his Table 2. The prices that would prevail in the Westlands under full-cost rates, including repayment of the district's distribution system, will be in the neighborhood of \$60/af. (Moore's estimated full-cost for the Westlands of \$40/af leaves out the repayment of the distribution facilities.) Thus, it seems very likely that owners of most of the leased land in this district will suffer large losses in income and wealth as a result of the new legislation.¹

Full-Cost Water and the Westlands: A Case Study

As we have seen, the Westlands Water District is the most likely of all 18 districts surveyed to be forced by the new legislation to pay full water costs. Charles Moore believes that the landowners in this district will pay the higher price of water. My judgement is that farming cannot take

place under full-cost prices and therefore major changes in agrarian structure seem likely.

What are possible options for mitigating the effects of high-cost water in the Westlands? Some have suggested that agriculture will be intensified, with greater production of "high value" vegetable, fruit and nut crops, that can support higher water prices. Since such crops comprise only a small fraction of the Westlands 600,000 acres, increasing their acreage could improve repayment capacity. However, markets for these crops are limited and are not growing rapidly, and other regions of the state have more favorable conditions for their production than the Westlands. Therefore, while some intensification of production may be possible over the long-run, this strategy is of little value in meeting higher water costs. Indeed, the alternative strategy of shifting to lower value and lower water using crops, such as wheat, seems a more likely possible way to reduce the loss of income from higher water prices. This strategy, however, also implies much lower net income than under current practices.

The example of wheat raises the more general possibility that water conservation may allow sufficiently large savings to offset full-cost water rates. The logic of this argument is certainly correct; higher water costs will make more expensive water-saving technologies profitable. The potential savings, however, are at least partially offset by higher costs of the technologies and the energy required to run them. That is, while water savings may lower water costs, overall irrigation costs probably will not be lower with the adoption of water conservation technologies. Therefore, repayment capacity will remain very limited. Furthermore, a region like the Westlands is already relatively "efficient" in its use of water; for example, its distribution system is entirely covered and underground in order to eliminate evaporation.

The fact that full-cost prices are above

¹ The general conclusion that full-cost pricing will prove extremely burdensome to farmers is also supported by other studies of irrigation subsidies which have found evidence of considerable inefficiency in water project development. For example, the USDI (1981) survey of 18 irrigation districts found that only 7 of the 18 districts experienced land value increases at least as great as the irrigation investment; most of the efficient projects were the older ones. If the investment in irrigation does not produce at least a comparable increase in land value, overall economic benefits from the project are likely to be less than total costs. Similarly the GAO (1981) concluded that none of six randomly surveyed districts could repay full costs.

repayment capacity in the Westlands, and elsewhere, does not necessarily imply that individual farmers with large operations will be forced to scale back production to 960 acres or less. An analogy can be drawn to the farmer who expands his farm by purchasing very expensive land whose additional output cannot justify its price. By blending the expensive new land with the cheap land already owned, the farmer can make a profit, while a new farmer with only the expensive land could not. Similarly, if a farmer gets inexpensive, subsidized water for 960 acres, he can afford to lease some additional land with expensive full-cost water without driving his average water cost above the no-profit threshold. For example, if the average repayment capacity in the Westlands is \$35/af, the subsidized rate is \$25/af (to the farmer) and the full-cost rate is \$60/af, then the operator could lease another 392 acres and have an average water cost less than \$35/af. This option, however, would be of little value to the operators who currently farm 70 percent of the district in units averaging 6,000 acres.

Large farm operators could simply stop taking expensive project water and revert to groundwater; but groundwater is much more expensive than project water; and would become even more so if withdrawal rates increased and the water table fell. Furthermore, if the district does not raise enough revenue to repay its existing debt obligations to the Bureau of Reclamation through water sales, it will levy land taxes to raise the needed revenues. Consequently, large farms will not be able to avoid at least some of the project costs, no matter what strategy they follow.

Absent any viable strategy for paying full water costs, it may be presumed that, under the imposition of the new legislation, the large farms in the Westlands will be broken up into much smaller production units in order to remain economically viable. Landowners will have powerful incentives to lease to farm enterprises that

are less than 960 acres; otherwise they will be unable to earn any return. Alternatively, they could sell their land; but only individuals eligible for the subsidy would have any incentive to bid on the land, since without the subsidy, the land will have little value.

Because of the farm size limit on the subsidy, markets for leasing and purchasing land will be considerably changed. It appears likely that land values and lease rates may fall in response to this change. Here I also disagree with Moore, when he minimizes the possibility of a significant shift in agrarian structure. It seems to me that the economics of full-cost water insure that much of the Westlands, not to mention significant acreage throughout other Central Valley Project districts, will be forced on the market or into smaller farm units.

Some Political-Economic Speculations on the 1982 Act

For most Reclamation districts the 1982 legislation will have modest impacts, mainly through its impact on O & M cost adjustments. However, in certain regions of California, Washington, Arizona and elsewhere in the Southwest, where landownership is concentrated, leasing is widespread and large operations dominate, the new legislation will have important impacts on water prices, agricultural incomes and landownership. Ironically, while the legislation is usually portrayed as a victory of the large landowning interests in California and the Southwest, the analysis presented above suggests that the victory is a modest one. The only true "winners" from the legislation are the landowners in Imperial Valley and in the "Army Corps" districts of the San Joaquin Valley who were exempted from pricing and acreage restrictions altogether. They will be able to operate as before, with subsidized water and no limits on the scale of their operations.

Why did the Westlands Water District fight so hard for the 1982 legislation? In many ways, this district stands to lose more than any other and will have to make the largest adjustments in its agrarian structure. To understand the Westland's position, one must recognize that the 1982 legislation is the conclusion of a decade-long struggle to reform the administration of the Reclamation Act. The irrigation districts would have been very happy to leave the 1902 Reclamation Act alone, but they were forced to take action.

A Political Analysis of the New Legislation: General Considerations

Rather than retell the events leading up to the 1982 Reclamation Reform Act, we refer the reader to Moore's summary in his companion article in this volume. Here we develop the thesis that the reform of Reclamation policy represents not so much the outcome of a conflict between land reformers and government bureaucrats, as it is frequently cast, as it is a continuing struggle within the government, between "special" interests and the Executive Branch. We argue that because our important political institutions are structured to produce such irrational policy, it has become increasingly difficult to avoid fiscal crisis. Reclamation is but one instance of a much larger pattern of government. In recent years, the President and his appointees in the Executive Branch have been forced to confront the irrationality in order to maintain some degree of economic stability. This conflict forced the reform of Reclamation policy.

As Moore so well points out in his article, Reclamation policy is an excellent example of pork-barrel politics, or PEST, in the new economics jargon. Inefficient public investment is the product of mutually reinforcing the triangle of relationships (familarly, the "iron triangle") between landowners, bureaucrats and legislators. Landowners want subsidized

water to increase their incomes or land values. Since they pay only a small portion of total costs, inefficient projects are still very profitable from their perspective.

Administrators in the Bureau of Reclamation want a growing budget, and have found it most expedient to work with those in the private sector who have the greatest political influence—namely, the Western landowners. By designing and administering projects to suit these interests, the Bureau confers on them large economic benefits and thus creates a strong client group. The landowners express their support for the Bureau through their influence on key Western Congress members who sit on the relevant oversight committees which authorize and appropriate funds to the Bureau. This influence takes the form of contributions and intense lobbying. Members of Congress are sensitive to landowners, both because they need the financial support for reelection and because they cannot afford to alienate these interests and have them support potential political opponents. This sensitivity grows with the rising costs of reelection and the increasing sophistication in the use of electronic media.

The iron triangle of the Reclamation program was not very strong until the New Deal. Prior to that time it did not have access to the federal treasury and depended on land sales, mineral leases, and project repayments for its revenue. Roosevelt used the Reclamation program to put people to work; under his administration, major projects, including the Central Valley Project, the Boulder Canyon Project and the Grand Coulee Dam were initiated. In order for this expansion to take place, Reclamation was given direct access to the treasury for revenue, and the subsidy was further increased to help struggling farmers meet repayment obligations. Although the direct funding of Reclamation was justified by the crisis in the economy, the program continued to receive funds from the treasury with the return of more

prosperous times. Similarly, the water subsidy has not been reduced as farmers' "ability to pay" has risen (LeVeen, 1979).

The New Deal emergency programs provided the environment for the growth of special interest politics. Once set in motion the politics developed its own logic. During and after World War II, the Reclamation program continued to expand, even though much of the additional food production helped to worsen the nation's overall "farm problem" and contributed to the costs of maintaining price supports.

As discussed above, many of the projects built since the 1950s are economically inefficient (even excluding their adverse impact on other government policies). This raises the question of why the program was allowed to continue expanding. My speculation is that until the mid-1970s, the costs of this economic irrationality did not imply large political costs. The relatively rapid economic growth after the War provided additional revenues to government without necessitating large tax increases. From this increased revenue, inefficient Reclamation projects could be funded without significant impact on budget deficits and without forcing the curtailment of other government projects.

The era of "stagflation" and rising government deficits implies a new set of influences on the iron triangle that were not present in the 1950s and 60s. Expenditures for inefficient projects, water or otherwise, no longer have harmless political consequences. As demands on the federal budgets have grown faster than revenues, deficits have risen along with inflation. While the logic of the iron triangle relationships continues to demand more expenditure, there is an increasing counterbalance in the Executive Branch that seeks greater public control and better management as a means of insuring the broad goals of economic growth, price stability, and employment. The center of this opposition to the iron triangles is the Presidency, appointed members of the Exec-

utive Branch, such as the Secretary of the Interior, and Executive agencies such as Office of Management and Budget.

Unlike individual members of Congress, the President is elected on how well the overall economy performs, not on how well a particular economic interest is served. He sets national economic policy goals; individuals legislators do not. During periods of economic prosperity, the President has the flexibility to play special interest politics, or at least not to oppose the process. During periods of crisis, however, the President may be forced to advocate policies not favored by some powerful economic interests in order to achieve broader economic goals. This appears to be the situation with the Reclamation program.

The President, of course, may not have the necessary power to confront directly on a powerful political and economic interest. But he does have certain weapons, the most important of which is the ability to focus national attention on a particular program. Iron triangles need isolation from public scrutiny to be successful; if the general public becomes aroused because it learns of corruption or mismanagement, political support for a program may be reduced, since members of Congress will be reluctant to vote for programs clearly perceived by their constituents to be undesirable.

In the case of Reclamation, the "160-acre" provision served as an important ideological smokescreen that kept the public from understanding that the main beneficiaries of publicly subsidized irrigation were a relatively few owners of large tracts of irrigated land. Instead, the public was led to believe that the subsidy was widely distributed and would be used to promote "family farming."²

² For example, Representative Sisk, speaking for Westlands landowners, promised on the floor of the House that the Westlands project would produce 6,000 new farms (at most there are 100 new farms

The President can exploit such a potential weakness by calling attention to the difference between rhetoric and reality. In the case of Reclamation, environmentalists and land reformers had been trying for many years to focus public attention on Reclamation, so the President had natural allies. The Carter Administration found these groups useful in its efforts to reform the nation's water policy.

The Politics of Reclamation Reform

Reform of the nation's water development policy was an early goal of the Carter Administration. Changes in Reclamation fit into this overall strategy. While Carter was unable to match the power of the Reclamation iron triangle as evidenced by his failure to stop several water projects, his administration did not give up after the first losses. Secretary Andrus took much of the initiative and used his power as Secretary of the Interior in an unusual way. While most of his predecessors were sympathetic with the Western landowner interests, Andrus became their active opponent. He used the opportunity afforded by the court-ordered reform of Reclamation to spell out a set of rules he knew would be unacceptable to Reclamation interests. Similarly, he exploited the uproar over Westlands by using the Congressionally mandated investigation of the administrative abuses in this district to place strong opponents of Reclamation on the special task force. This panel selection

today, fifteen years after the first water deliveries were made in 1968). Such rhetoric helped generate Congressional support. Imagine the problems for Sisk's speech writers had they not had the 160-acre provision and, instead, were forced to report that most of the project benefits would go to a few wealthy individuals and large corporations, such as the Southern Pacific Corporation, which owns more than 100,000 acres in the District? See Representative Sisk's statement which has been reproduced in: Joint Hearing before the Committee on Small Business and Interior Committee and Insular Affairs (1976).

guaranteed a full hearing of all the issues and served to further focus public and Congressional scrutiny on the glaring discrepancies between the rhetoric and reality. Finally, Andrus made a special effort to undercut the ideological position of the Bureau and landowners by encouraging new research. As a result, a 1978 USDA publication concluded that smaller farms would be viable and would produce food as cheaply as larger farms (ERS, 1978). The Environmental Impact Study, required by the court injunction, was carried out by an independent consultant for the Department of the Interior. It further reinforced the 1978 USDA (USDI, 1981) study by extending its result to more districts, and supported land reformer claims that smaller farms would improve the economic vitality of the related rural economies. Landowners could cite no reputable literature to support their claims that large farms were in the public interest.

Andrus, thus, put the Reclamation interests on the defensive. It is true that his proposed rules served to galvanize the opposition and to stimulate pressure for changing the law, but even if landowners succeeded in modifying the law, they would still be politically weakened.

In other words, Andrus set a trap; he would win no matter what the outcome. On the one hand, if he was successful in forcing the rigorous administration of the old Reclamation Act, he would reduce political support for Reclamation, since a strict enforcement of the proposed rules would eliminate much of the economic benefits for owners of large irrigated tracts. If, on the other hand, the landowners prevailed and reformed the law to their needs, the elimination of acreage and residency requirements would strip landowners of their main ideological weapon that they needed to justify their programs to Congress. If there were no limits on the subsidy, landowners could no longer hide behind the "small farmer" to legitimate their

programs. Consequently, the Reclamation program would be weakened politically. Landowners might therefore preserve the benefits they had already won, but they would not be able to extend them. No matter what the outcome, the iron triangle would be weakened.

Secretary James Watt, Andrus' successor, "stayed the course." While his proposed Reclamation reforms (which were largely adopted) appear to accede to the interests of landowners, they will nevertheless have many of the same consequences as the policies pursued by the Carter Administration. As we have seen, by trading off expanded acreage limits for full-cost pricing, Watt's reforms carry potentially as much sting for large landowners as those of Andrus. Furthermore, lower subsidies will drive up the political costs of water projects, making them less likely candidates for the pork barrel.³

The attack on the Reclamation subsidy is part of a larger strategy of water pricing reform followed by both the Carter and Reagan Administrations. Another aspect of this strategy is making individual states pay a portion of the cost of new project development. This is rationalized in terms of granting greater local control to the states, but along with control goes financial responsibility. Most state governments now operate under stringent fiscal pressures, so finding the revenue for a water project will require taking the resources from another spending category. The advantage of having the federal government pay the entire cost was in having the financial burden distributed over all taxpayers in such small amounts that no one had much incentive to oppose a particular

project. Once costs are concentrated, there will be stronger incentives for more groups to oppose water projects.

Reclamation Policy and Future Water Development

The struggle over Reclamation policy is far from over. The new reforms are significant, but they have not yet been implemented. Much depends on how the Bureau administers the new legislation.

The Bureau has little incentive to administer the new legislation in ways that would reduce political support for new projects. Bureaucrats want larger budgets and new projects, just as private interests want more business and greater profits. The Bureau found many ways to modify the original Reclamation Act to insure that powerful constituents could live with the results. It is not surprising, then, to find the Bureau of Reclamation now proposing new legislation to amend the 1982 Act by eliminating Section 203(b), the "hammer clause." Without this section, there will be no reason for most districts to amend their contracts, since they can continue receiving the subsidy under the old preferred administrative practices until their contracts run out.

If Congress approves such a change, the Western land interests will indeed win an important victory, and in so doing, they will undo the basic quid pro quo (i.e., less restrictive acreage limits in return for a lower rate of subsidy) embodied in the 1982 legislation. However, the victory will not be complete, for no matter what the outcome of this struggle, the full-cost pricing and acreage limits will apply to all new projects and contracts. Therefore, while present beneficiaries may be successful in protecting their existing subsidy benefits, such benefits will still be much more limited for future beneficiaries. Thus the political impetus for continued expansion of the Reclamation program will still be very much reduced.

³ For example, in California new water cannot be developed for less than \$100/af, and the Auburn Dam project, the construction of which was halted under the Carter Administration, will produce water costing over \$200/af. (See Engelbert and Foley, 1982). If farmers are required to repay as little as 15 percent of this cost, they will be unable to afford the project.

The Bureau may attempt to reduce the adverse effects pricing reforms have on the political viability of future projects by manipulating other provisions of Reclamation policy to extend the subsidy. The new law allows for an "equivalency" test whereby larger amounts of inferior land can be substituted for the acreage and pricing limits. Equivalency is poorly defined and could become a loophole for extending the subsidy. Similarly, the new law does not prevent the Bureau from using "ability to pay" criteria in the determination of long-term repayment rates. This criteria is vague and easily manipulated to lower water rates. Finally, the share of project costs allocated to recreation, wildlife protection and flood control, which is paid by the public, can be increased to keep irrigation costs below their true level.

The 1982 law contains no clear definition of what constitutes an individual farm "operating unit," which is the basis for allocating subsidies. What if a 5,000 acre farm decides to call itself 5 separate farms, but continues farming as one large farm? The Bureau may choose to look the other way, as it has with the manipulation of ownership and land sales, allowing the large, absentee owners continued access to the subsidy.

The landowners will also attempt to subvert the new legislation through lengthy court battles. One area of possible litigation concerns the right of the Federal government to change a contract after it has been negotiated. Landowners contend that the government has no right to change their fixed-fees until the end of the 40-year contract period. Even if they are eventually unsuccessful, such court proceedings could substantially delay implementing the new law and grant many more years of subsidized water to large farm operators. Perhaps this is the ultimate strategy of the Westlands farmers. The costs of such litigation are small in comparison to the continued benefits of cheap water.

Conclusion

There is little doubt that the rising competition for increasingly scarce water supplies throughout the arid West has created a new imperative to use available water supplies more efficiently. Unfortunately, the important water development institutions, designed in an era of surplus water supplies, are not well suited to this new task and generally resist the necessary changes.

The costs of this inefficiency are growing, but the political logic of the iron triangle that has driven Reclamation policy since the New Deal has not shifted. What has changed in Federal water policy is the role of the Executive Branch. Often utilizing the reform efforts of land reformers, environmentalists and fiscal conservatives, the Executive has attempted to break the power of the pork barrel in an effort to reduce fiscal strains that increasingly threaten overall political and economic stability. The outcome of this growing struggle between the "special interests" and the Executive is far from clear. In this sense, the reform of Reclamation policy is but one piece of a much larger picture.

References

- Englebert, E. A. and A. F. Foley Scheuring. *Competition for California Water*. University of California Press, Berkeley, 1982.
- Federal Register. "Acreage Limitation: U.S. Bureau of Reclamation U.S. Department of the Interior, Rules and Regulations." Government Printing Office, Washington, D.C., 48(May 3, 1983): 86 900-19.
- LeVeen, E. P. "Financing SB200—Is Proposition 9 Affordable?" *Public Interest Economics—West*, Berkeley, CA, May, 1982.
- LeVeen, E. P. "Natural Resource Development and State Policy: Origins and Significance of the Crisis in Reclamation." *Antipode*, II(1979): 2.
- Paulden, A. C. "Legal Authority for Recommenda-

- tions on Rules for Implementation of Section 203(b) of the Reclamation Reform Act of 1982, Title II, Public Law No. 97-293." Arvin Edison Water Storage District, July 17, 1983.
- U.S. Department of Agriculture, ESCS. *The U.S. Department of the Interior's Proposed Rules for Enforcement of the Reclamation Act of 1902: An Economic Impact Analysis*. Staff Report, Washington, D.C., 1978.
- Environmental Impact Statement, Westlands Case Study*. Washington, D.C., Vols. 1 and 2, 1980.
- U.S. Department of the Interior, Water and Power Resources Service. *Interim Report, Acreage Limitation*. Washington, D.C., March, 1980.
- U.S. General Accounting Office. *Federal Charges for Irrigation Projects Reviewed Do Not Cover Costs*. PAD-81-07, Washington, D.C., 1981.
- U.S. Senate. "Will the Family Farm Survive in America?" Joint Hearing before the Committee on Small Business and Interior Committee and Insular Affairs, 94th Congress, First Session, Vol. 1, 22-3.