

Arizona farm survey helps preview effects of federal 160-acre limitation enforcement

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More than 30 percent of the irrigated farmland in Arizona receives water from federally financed reclamation projects. In an attempt to distribute the benefits of such projects more widely, in 1977 the U.S. Bureau of Reclamation proposed stronger enforcement of 160-acre ownership limits first set in 1902.

The limits apply to land irrigated with water from a reclamation project. The agency also proposed new rules for the sale of land in excess of those limits, and new residency requirements and leasing restrictions.

More than two years of controversy about the 160-acre limitation issue have raised questions both about what goals the federal government should pursue with reclamation projects, and what effects the 1977 proposals would produce if enacted. A recent survey of Arizona farms may shed some light on the second question. The

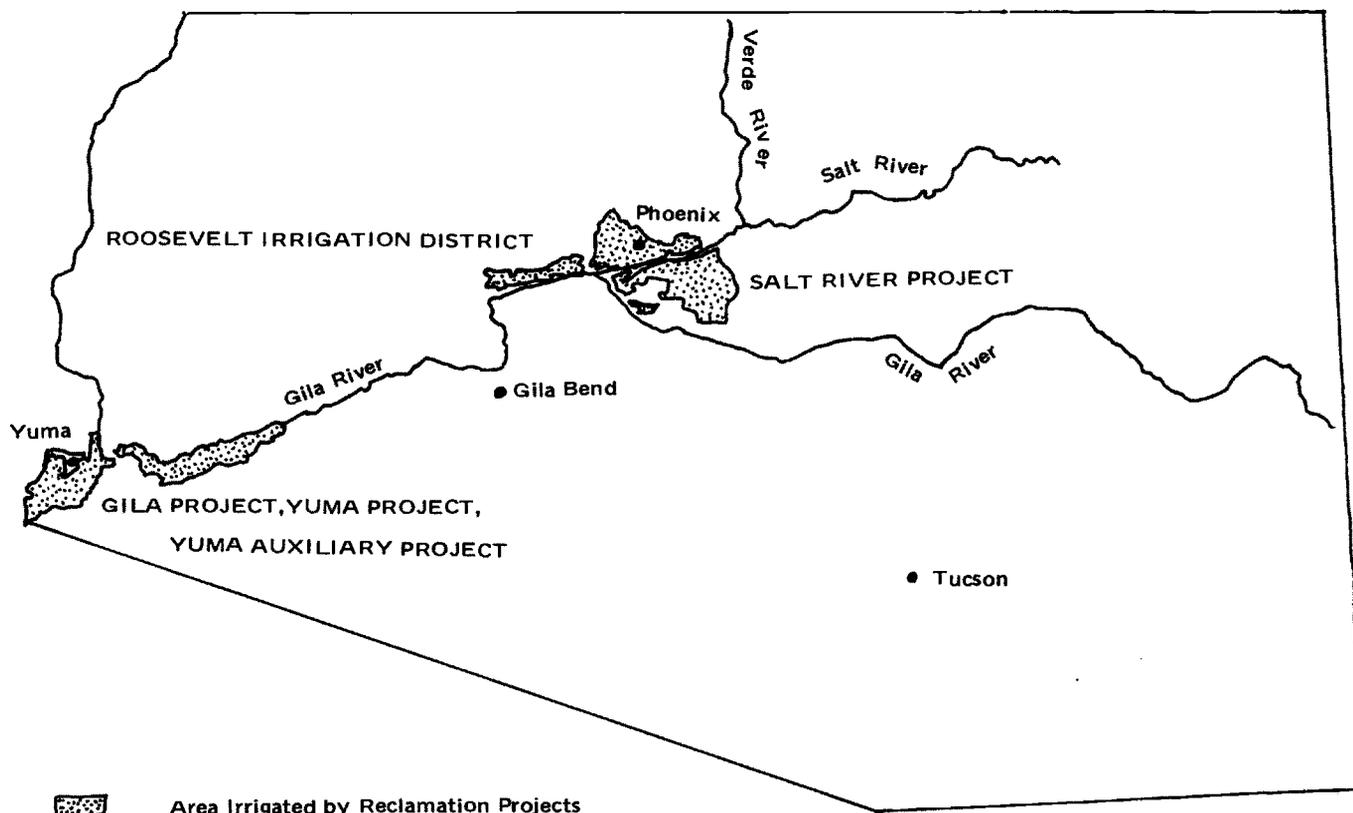
survey data suggests that small farmers require substantial investment capital for growing citrus, or the ability to bear the risks of high-value crops, or a source of non-farm income to supplement farm income.

Proposed limits

The rules proposed by the Bureau of Reclamation (recently renamed the Water and Power Resources Service) would limit project water use to 160 acres of land owned per qualified family member. Owners would have to stop irrigating any excess land with water from the project, or sell the excess land. The sale price would not include the value added to the land by the presence of the federal project. That added value is, in many cases, almost all of the land's total worth.

Under the proposed rules, farmers would be allowed to lease 160 acres of project-irrigated land per family member in addition to what they own. Thus, a couple with two children could operate a 1,280-acre farm, half

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Nearly 350,000 of the approximately 1,150,000 irrigated agricultural acres in Arizona get at least some of their water from federal reclamation projects. (Map adapted from WPRS Map X-300-738)

owned and half leased. Currently, no significant restrictions apply to the leasing of project land.

Alternatives that have been suggested since the 1977 proposals include larger acreage limits, variable acreage limits and alternative procedures for the transfer of land that is in excess of the limits.

The Water and Power Resources Service also proposes to establish residency requirements for buyers of project-irrigated land. Buyers would have to live within 50 miles of the land. Similar rules in the 1902 Reclamation Act were suspended in 1926.

Arizona Impact

The 160-acre limitation issue has been most hotly debated in California. More than four-fifths of the country's project-irrigated land that is owned in excess of the acreage limits is in that state. But the issue is important to Arizona, too. The Bureau of Reclamation's first irrigation project was the Roosevelt Dam on the Salt River. Nearly 350,000 of the approximately 1,150,000 irrigated agricultural acres in the state get at least a portion of their water from federal reclamation projects. (Indian water projects, such as the San Carlos irrigation system in Pinal County, are not included in this figure, nor in the proposals for acreage limits.) The completion of the Central Arizona Project could increase that fraction in this decade.

Table One shows which reclamation projects in the state serve land that is owned in excess of the proposed acreage limitations. About 20,000 acres, or 6 percent of the Arizona land irrigated with reclamation-project water, are owned in excess of these limits. All but 3,874 of those acres, however, may be eligible through various exemptions to receive project water even if the proposals are enacted. The 3,874 acres are owned by 38 people. Residency requirements and restrictions on leasing could affect many more acres. Most of the excess land that does not qualify for an exemption is in the Salt River Project. Additional amounts are in the Wellton-Mohawk Irrigation District, the North Gila Valley Unit of the Gila Project, and the Yuma Project.

The number of acres that would be affected by the proposed leasing restrictions has not been determined. Residency requirements, if enacted, could have a larger impact than either the ownership or leasing rules.

The possible effect of acreage limitations is complicated by the fact that farm boundaries do not necessarily coincide with project boundaries. Some farms include both project land and non-project land, so a large farm may include only a few project acres. Also, control of a farm is often not by an individual or a married couple. Many farms include leased land or land owned by groups. The proposed rules would allow group ownership only when the owners share a direct lineal family

TABLE ONE

Project	Project Contract Acres	Irrigated Acres	Land Owned in Excess of Acreage Limitations, Ineligible for Water				Excess Acres Eligible Due to Exemptions	
			Not Receiving Water		Receiving Water		Owners	Acres
			Owners	Acres	Owners	Acres		
Salt River Project	238,266	131,496	0	0	21	2,665	0	0
Roosevelt Irrigation Dist.	38,152	32,995	0	0	0	0	25	6,634 ^b
Roosevelt Water Cons. Dist.	37,508	31,329	0	0	0	0	39	6,629 ^b
Gila Project:								
Wellton-Mohawk Dist.	75,000 ^a	64,684	6	52	6	648	1	23
Yuma-Mesa Unit	20,388	18,452	0	0	0	0	1	140
North Gila Valley Unit	6,231	6,065	0	0	4	408	1	1
South Gila Valley Unit	10,898	9,912	0	0	0	0	4	1,099 ^c
Yuma Project (Arizona part)	53,415	45,800	0	0	1	41	15	2,755
Yuma Auxiliary Unit B	3,406	3,301	0	0	0	0	0	0
Brown Canal Company	979	874	0	0	0	0	0	0
Totals	416,743	344,908	6	52	32	3,822	86	17,281

- Notes: a. Excludes 9,125 acres owned by federal and state governments.
 b. Exempt because irrigation districts are paying interest on the federal funds borrowed under the Small Reclamation Project Act.
 c. Exempt because owner has recorded contract to sell excess land within specified period.

Source: Water and Power Resources Service, U.S. Department of Interior. 1976 figures.

relationship. That includes grandparents and grandchildren, but would not permit two brothers to be sole owners, for example. All owners would be required to meet the residency requirement.

Central Questions

Policy aspects of the 160-acre limitation issue have centered on two questions:

1. Should government policy for use of water from federal projects encourage small family farms, or farms that produce crops at as low a cost as possible, if the two are different?

2. Should the amount of federal subsidy any individual or corporation receives through Bureau of Reclamation projects be limited? If so, how much and how?

Many supporters of strict enforcement of an acreage limitation seek development of more family farms, and some seek land to farm themselves. Thomas Jefferson's ideal of a nation of small landowners still appeals to many Americans. Limitation supporters also reason that subsidies resulting from federal projects should be distributed as widely as possible. Many agree, though, that the 160-acre figure may not fit all situations.

Most of the opponents of enforcing the 160-acre limitation express a need for farms larger than that in order to effectively use modern equipment and minimize production costs. They include many farmers who now receive or expect to receive water from federal projects. They say that 160 acres is rarely enough land in Arizona or other parts of the West to provide a farm family with an acceptable income.

The amount of subsidy for farmers using project water is debated. Each reclamation project is set up on different terms, so the cost breaks to farmers vary in amount and form. They usually have included low-interest terms on the federal loan for the project. Projects may serve other purposes besides collecting irrigation water: flood control and hydroelectricity, for example. Sales of electricity and municipal water help pay project costs that irrigation-users would otherwise bear. The allocation of many costs to various users is arbitrary, however. Also, the interest-rate subsidies were purposely built into these projects to encourage settlement of these lands.

Besides those whose land or water is directly affected by the 160-acre limitation issue, the general public has a stake in the decisions to be made. The policy eventually chosen by legislators, courts and administrators could affect food prices, public service requirements and tax rates.

Small Farms

To allow better prediction of the effects of policies favoring specified farm sizes, information about production and income was collected from a sample of Arizona farms of various sizes.

Operators of 355 farms in Yuma, Maricopa, and Pinal counties completed usable survey questionnaires with

information from the 1977 production year. The information received covers one-fourth of the farmland in those three counties, or one-fifth of the farmland in the whole state.

Farms in the sample group range from 5 to 8,650 acres, with an average of 768 acres (see Table Two). Twenty-three percent of them are 160 acres or less (30 percent in Maricopa, 9 percent in Pinal and 21 percent in Yuma).

Not surprisingly, the survey indicates that large farms dominate Arizona's irrigated agriculture. These farms depend primarily on cotton as a long-term, stable crop, and produce other, riskier crops to bolster income. The small farms depend either on supplemental non-farm income or on growing tree crops. These small farms accounted for almost three-fourths of the farms that produced only tree crops. None of the farms with more than 35 percent of their production in vegetables or turfgrass were 160 acres or less.

If new small farms result from regulated breakup of larger farms, they may not fit the existing pattern. Families trying to make a living on 160 acres without outside income may try high-value, high-risk vegetables instead of alfalfa or cotton. Two or three bad years for marketing or yields could jeopardize the survival of such a farm.

A breakup of a few larger farms into smaller ones, as would result from a strict 160-acre limitation, would affect consumer prices for farm products if the land use pattern changes.

A switch from large farms to small farms could also affect the rural communities near the farms. A 1977 study by the State of California found that a small-farm area town had a larger local business community; more schools, parks, and social and civic organizations; and less dependence on outside capital than a comparable large-farm area town. On the other hand, costs of providing rural public services such as fire protection, roads and education could increase if more farm families move into an area.

TABLE TWO

	Total Farms in Sample	Farms of 160 Acres or Less
Number	355	83
Average acreage	768	80
Percent of income from on-farm sources	78.4	44.3
Percent of acres in:		
cotton	54	49
alfalfa	16	31
other field crops	19	11
trees	2	3
grass	2	2
oil crops	2	1
vegetables	4	0
other	1	3



In Arizona, agriculture depends upon irrigation.

Land Lottery

The proposals of the Water and Power Resources Service would limit but not eliminate subsidies to farmers. They would add a new class of subsidies by making owners of excess acres sell the excess well below actual value. To the buyers, the artificially low price would be a subsidy. Under the proposals, the seller's family members would have preference as buyers. If none buy, the government would choose among the prospective buyers by a lottery.

The lottery is designed to prevent the seller from making an advance deal with a buyer. It would attempt to counter loopholes that might allow a landowner with good legal advice to control acreage in excess of the limitation. The rules would also prohibit the seller from leasing the land back from the buyer.

Lottery winners who buy project land at non-project prices would gain a substantial windfall. The estimated subsidy to water users in the Westlands Water District of central California exceeds \$1,500 per acre. Thus, anyone selected by a lottery to receive 160 acres of land in this project would pick up a windfall of \$240,000. The new owners' use of the land would be restricted by the requirement that they set up residency within 50 miles within three years and by the regulation of resale price for 10 years. However, the buyer could still be a land speculator from a nearby city instead of a family planning to farm for a living. One alternative proposal would do away with this subsidy altogether by obliging the land buyer to pay the government in full for the value that the reclamation project adds to the land.

The rules proposed by the Water and Power Resources Service, and the various alternative proposals, await action by Congress and courts. In the meantime, studies of the proposals continue to permit better predictions of the effects of policy changes.

Postscript: The U.S. Supreme Court on June 16 overturned a lower court's ruling that upheld the 160-acre limitation in much of California's Imperial Valley. The Supreme Court decision did not directly affect the limitation question in other areas, including Arizona.