The Conservation Reserve Program: An Economic Perspective

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Editor's Note: Readers might be interested in obtaining further information on this program at the Conservation Reserve Program Symposium "Sociological, Ecological, and Economic Impact of the Conservation Reserve Program on Land Owners and Professional Managers" being held at The Regency Hotel, Denver, 16-18 September 1987.

Title XII of the Food Security Act of 1985 (1985 Farm Bill) initiated several conservation policies and programs including Sudbuster (Subtitle B), Swampbuster (Subtitle C), and Conservation Reserve (Subtitle D). Conservation benefits from the Conservation Reserve Program (CRP) include a reduction in erosion and sedimentation, improvement in water quality, and improvement in wildlife habitat. Other projected benefits are a reduction in commodity production, and, thereby, a reduction of ongoing commodity programs and an increase in commodity prices.

Land owners enter a ten-year contract with the government to convert highly erodible cropland to permanent vegetative cover. The government will make annual rental payments, in cash or commodities, for the life of the contract; will cover half of the expense to establish permanent cover; and will provide technical assistance. The amount of the annual rental payment per acre is determined by a bid submitted by the land owner, which may be accepted or rejected. The total goal for CRP is to enroll 45 million acres of highly erodible cropland over a five-year period. Land under contract may not be harvested or grazed although fee hunting is permitted.

Nineteen eighty-six was the first year of the program, and 8.9 million acres were accepted in the Conservation Reserve Program. Accepted bids went as high as \$90; the average rental rate was \$45.52. Most of the acreage was in the Great Plains with Texas and Colorado each enrolling more than 1 million acres each.

There are nine acceptable practices, which include (1) establishment of introduced grasses and legumes, (2) establishment of native species, (3) tree planting, (4) permanent wildlife habitat, (5) field windbreak establishment, (6) diversions, (7) erosion control structures, (8) grass waterways, and (9) shallow areas for wildlife. The majority of land presently in the program will be planted to introduced or native grasses and legumes, wildlife habitat, and trees (except Christmas trees are prohibited). Most bids that have included tree plantings have been in the southern states. Proposals accepted for tree planting in 1986 included 582 thousand acres of cropland. Economics has had an influence on the Conservation Reserve Program from the beginning. Low prices and costs of other USDA programs were major reasons for CRP. From the first sign-up in March of 1986, farmers and ranchers were concerned with estimating bids that would at least breakeven with alternative uses of the land. Factors that influenced the bid amount were the cost of establishing permanent cover, cost sharing with USDA, the value of crops formerly grown on the land, and the payments from participating in other agricultural programs. Establishment costs included cost of establishing a cover crop, cost of seedbeed preparation, cost of seed and planting, cost of weed control, and cost of maintenance.

Actual requirements for permanent cover establishment has varied by states with a committee in each state determining minimum standards. Cost sharing is limited to those costs incurred in the establishment of permanent cover and does not include annual maintenance costs. Original estimates of establishment costs were based on seed prices of late 1985 and early 1986. However, there was a limited reserve of seed supplies, and 1986 seed harvest was the major source of seed for the program. The original goal of 1986 was 5 million acres, which was exceeded by approximately 4 million acres. The resulting seed demand increased seed price dramatically. The seed mixes were specified in the spring without knowledge of what species would be available in what quantities. Thus, the original bids may have been low in many cases.

There are numerous opinions on the economic impacts that the program will have over its 15-year life and beyond. A positive impact within any community is the initial expenditure for establishing permanent cover on CRP lands. Also important will be the annual rental payments to farmers and ranchers. For example, 273,000 acres have been accepted into CRP in Baca County, Colorado. At an average cost of \$50 per acre for cover establishment, over \$13 million will be spent in the initial establishment efforts. Rental payments, paid over a 10-year period, will be \$110 million (\$11 million per year for the period).

A significant negative impact will be the reduced sales by agribusinesses as farmers' needs for chemicals, equipment, fuels and other factors used in crop production. To minimize this impact, not more than 25% of the cropland in a county can be enrolled in CRP "except that the Secretary may exceed the limitation established ... in a county to the extent that the Secretary determines that such action would not adversely affect the local economy of such county." This limit has been exceeded in some counties. It should be pointed out that the \$40 annual rental is a net return to the individual, which may exceed the net realized from cropping highly erodible lands. Also the bid rental is a constant

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amount for 10 years, while returns from crops are highly variable depending on weather and market prices. There is incentive for enrollment of considerable acreage.

The reduced payments from other farm programs is also mentioned as a negative impact on local communities. Currently, these payments are significant in counties where production of wheat and feed grains is important. Reduced deficiency payments, for exmple, should be recognized in the impact estimates.

CRP has also had an impact on land prices. Again in Baca County, rental under CRP for summer-fallow wheat land was almost 3 times cash rent, and for row-crop land 1.5 times cash rent (Reichenberger 1987). Thus, a market has been created for highly erodible land that is eligible for or enrolled in CRP. The higher rental rates have resulted in higher land prices.

There is uncertainty as to what will happen after the 10year contracts expire. Many remember the Soil Bank in which lands that were in the program were again plowed in the 1970's when crop prices increased. In fact, much of the acreage that is in CRP was in the Soil Bank. So these same erodible acres may again be plowed in the future if a profit can be made.

Maintenance of eligibility for government programs depends on conservative use of plowed CRP lands. An approved conservation system must be in place so that the program benefits are not lost.

Supporters of the CRP argue that there were no requirements on land entered in the Soil Bank regarding erodibility, so that not just highly erodible lands were enrolled. However, basic economic theory suggests that only the marginal land would be enrolled in either the Soil Bank or CRP as the more productive land would still earn more in crop production.

There are other factors that have been included in Title XII that may impact plowing of CRP lands. The Sodbuster subtitle provides that if highly erodible land is plowed for annual crops without an approved conservation plan, producers are ineligible to participate in USDA programs including CRP. Thus, plowing these lands may be economically unfavorable for many producers. Similarly, the Swampbuster provides for loss of program benefits if wetlands are plowed for crop production.

The Conservation Compliance subtitle provides that lands cultivated prior to enactment of the 1985 Act which are found

to be highly erodible must be protected by an approved conservation system by 1995, if eligibility for benefits is to be continued. There are no guarantees that conservation compliance will be in force in 1996 or that there will be farm programs that would significantly impact producers currently participating in CRP. As Reichenberger (1987) pointed, "Economic climate a decade from now may not warrant participation in a farm program, if indeed one even exists at that time."

Land can be used in livestock production after expiration of the contract period. But there are questions about what the condition of the permanent cover might be after 10 years of nonuse; and there is concern about the impact of use on livestock numbers and productivity. Protection of newly established vegetation is provided by the prohibition against grazing during the contract period. But subsequent use in livestock production is not regulated.

Use of established cover by wildlife is permitted, even encouraged, by agencies concerned with fish and wildlife habitat. New plants, e.g., trees, must be protected from damage by rodents; but grass, trees, and water may be used by birds and animals for food and cover without restriction. Fee recreation, using CRP lands, may become a valuable source of income on some farms and ranches.

Obviously, there are uncertainties with this program. Only those that enter the program before Oct. 1, 1987, will be assured of funding. After that date, funding becomes a part of the regular USDA budget appropriations process. Also, as less marginal land is entered to meet the 45 million acres target, higher rental bids will most likely be accepted.

Because of the uncertainties, it will be beneficial to monitor the CRP program and study the actual impacts on erosion and sedimentation, crop production, farm operations, and economic viability of rural communities. Like many government programs, the actual results may be far from the intended results. If problems can be detected early, it may be possible to make midcourse corrections that will facilitate desired outcomes.

Literature Cited

Reichenberger, Larry. 1987. Reeling from the reserve. Farm Journal 111(3):16-19.

See SRM Notes with this issue for additional information on the Symposium and registration forms.
